Perceptions of Text and Pictorial Health Warning Labels for Smokeless Tobacco Packages in Navi Mumbai, India, and Dhaka, Bangladesh: Findings From an Experimental Study

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Health Studies and Gerontology

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# **AUTHOR'S DECLARATION**

I hereby declare that I am the sole author of this thesis. This is a true copy of the thesis, including any required final revisions, as accepted by my examiners. I understand that my thesis may be made electronically available to the public.

### ABSTRACT

**Background:** Globally, smokeless tobacco use is disproportionately concentrated in low-and-middle income countries like India and Bangladesh. Despite the growing evidence base linking smokeless tobacco use with adverse health outcomes, knowledge of the health effects of smokeless tobacco remains low. Health warnings are a cost-effective population-level tobacco control strategy, and represent an excellent medium for communicating health information given their reach and frequency of exposure. Pictorial warnings have been shown to promote smoking cessation, and increase health knowledge and perceptions of risk, compared to text-only warnings. Much of this research, however, is largely based in high-income countries and is specific to cigarette health warnings. The current study was among the first to experimentally evaluate text and pictorial health warning labels in India and Bangladesh.

**Objectives:** This study examined: 1) Patterns of use and perceptions of harm for different smokeless tobacco products; 2) Awareness of current health warning labeling on smokeless tobacco, as well as the extent to which respondents supported stronger health warning labeling; 3) Perceived effectiveness of text and pictorial smokeless tobacco health warnings, and a potential mediator (negative affect) and moderator (message credibility) of this association; and lastly 4) The impact of viewing health warnings on attitudes and beliefs about smokeless tobacco.

**Methods:** An experimental study was conducted in India (n=1,002) and Bangladesh (n=1,081), with adult (19+ years) smokeless tobacco users, and youth (16 to 18 years) users and non-users. Respondents were randomly assigned to view smokeless tobacco health warnings according to one of four experimental conditions: (1) Text-only,

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(2) Pictorial warning with symbolic imagery, (3) Pictorial warning with a graphic health effect, or (4) Pictorial warning with a personalized graphic health effect and a personal testimonial. Each respondent viewed five warnings within that condition for the following health effects: (1) Oral cancer, (2) Mouth disease, (3) Heart disease, (4) Addiction, and (5) Death. Warnings within each set were shown to respondents and rated one at a time (in random order) on the following outcomes: perceived effectiveness, attention, believability (credibility), importance, surprise, fright, disgust, and unpleasantness.

**Results:** A majority (88.9%) of smokeless tobacco users reported daily use. Approximately one-fifth (20.4%) of the sample were mixed-users (used both smoked and smokeless tobacco), of which about half (54.4%) reported that they primarily used smokeless over smoked forms like cigarettes or bidis. *Gutkha* was the most commonly used smokeless product in India, and *pan masala* in Bangladesh. The most commonly reported reason for using *pan masala* was the belief that it was "less harmful" than other types. The findings indicate strong support for health warnings in general, and for health warnings that included pictures in India and Bangladesh. In India—the first country in the world to carry pictorial health warnings on smokeless tobacco packages—a majority of respondents still reported that health warnings should have "more health information". More than one-third of Indian respondents reported that they made an effort to avoid smokeless tobacco packages with health warnings on them, indicating that users are noticing and reacting to warnings.

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With respect to the effectiveness of health warnings with different message themes: textonly warnings were perceived as less effective than each of the pictorial styles (p < 0.001for all). Graphic warnings were given higher effectiveness ratings than symbolic or testimonial warnings (p < 0.001). Few country differences were observed in the adult sample. Among youth, Indian respondents tended to give higher effectiveness ratings than their Bangladeshi counterparts. The findings also indicated that negative affect (a composite measure of surprise, fright, disgust, and unpleasantness) mediated the association between viewing health warnings and ratings of perceived effectiveness for adults and youth. Among adults, moderated-mediation analyses indicated that negative affect mediated the association between viewing health warnings and ratings of perceived effectiveness at different levels of the moderator (message credibility). In other words, the association between negative affect and perceived effectiveness varied as a function of message credibility; the association was stronger when message credibility was high, and weaker when it was low. Among youth, message credibility moderated the indirect effect (mediation) only for those who had viewed warnings with graphic health effects versus personal testimonials. No differences were observed across message themes with respect to levels of agreement with negative attitudes and beliefs, or overall 'bad' opinions about smokeless tobacco.

**Conclusions:** This set of findings reinforces the need to implement effective tobacco control strategies in low- and middle-income countries like India and Bangladesh. In terms of health warning message content—pictorial warnings depicting graphic health effects may have the greatest efficacy, consistent with research from highincome countries on cigarette warnings.

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#### On to the next mountain?

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# **DEDICATION**

In 1979, a 27-year-old petty officer in the Indian Navy, stationed in the Andaman Nicobar Islands, left his post to marry the young girl from a nearby village, and move away from everything they knew.

Mom & dad, for this and everything that followed, I am deeply grateful.

This is for you.

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## **1.0 INTRODUCTION**

Globally, tobacco use remains the leading preventable cause of death (World Health Organization, 2008b). As tobacco becomes increasingly regulated in high-income countries, the tobacco industry has increased their attention and allocation of resources to growing consumer markets in low-and-middle income countries (LMIC's) (Lee, Ling, & Glantz, 2012). In fact, about 80% of the world's one billion smokers live in LMIC's like India and Bangladesh (International Institute for Population Sciences (IIPS), 2010; World Health Organization, 2009).

"We should not be depressed simply because the total free world market appears to be declining. Within the total market, there are areas of strong growth, particularly in Asia and Africa...It is an exciting prospect."

> British American Tobacco Chairman, 1990 (Bates no. 502619006/9029)

Compounding the issue even further is the disproportionate concentration of smokeless tobacco use in India and Bangladesh. Of the approximately 300 million smokeless tobacco users worldwide, India and Bangladesh account for approximately 80%—well over 200 million smokeless tobacco users (International Institute for Population Sciences (IIPS), 2010; World Health Organization, 2009). There are many varieties of smokeless tobacco available in India and Bangladesh. Popular packaged forms of smokeless tobacco include *pan masala, gutkha* and *khaini*, all of which contain a mixture of ingredients such as slaked lime and spices, in addition to tobacco. Another popular form of smokeless

tobacco is *paan*, which is typically hand-made using fresh, green betel leaf to wrap tobacco and other ingredients.

Prevalence estimates vary regionally, but overall, 32.9% of males and 18.4% of females use smokeless tobacco in India; among female users, over 85.0% use smokeless tobacco exclusively (International Institute for Population Sciences (IIPS), 2010). In Bangladesh, the prevalence of smokeless tobacco use among females is comparable to that of males, at 27.9% and 25.4%, respectively (World Health Organization, 2009). The prevalence of smokeless tobacco use reflects high levels of social acceptability within these countries (Gupta & Ray, 2003; Kakde, Bhopal, & Jones, 2012).

In addition to its widespread use, another unique concern is that Indian and Bangladeshi smokeless tobacco products contain markedly higher levels of carcinogens compared to smokeless products popular in the US and Sweden (Stepanov, Hecht, Ramakrishnan, & Gupta, 2005). This difference may be due to the addition of other ingredients used in the preparation of smokeless tobacco, such as *areca* nut, which is carcinogenic in itself (Nair, Bartsch, & Nair, 2004). Indeed, India has one of the highest incidences of oral cancer in the world (Khan, 2012). Despite this, knowledge of the health risks of smokeless tobacco remains so low that it continues to be used for medicinal purposes in many communities (Gupta & Ray, 2003; Kakde et al., 2012; Khawaja et al., 2006; Rahman et al., 2012).

Communicating the health risks of tobacco use remains a priority for tobacco control, particularly in LMICs that are often characterized by limited access to health information,

less exposure to mass media campaigns, and lower literacy levels (World Health Organization, 2008b). Health warnings on cigarette packages are one example of a costeffective population-wide tobacco control strategy (Hammond, 2011). The World Health Organization's Framework Convention on Tobacco Control (WHO FCTC) established international standards for packaging and health warnings: Article 11 mandates that warnings cover at least 30% of tobacco packages and recommends pictorial warnings that cover 50% or more of the pack (World Health Organization, 2008a). India and Bangladesh are both signatory countries to the WHO FCTC.

In 2009, India became the first country in the world to require pictorial health warnings for smokeless tobacco packages. Despite this precedent, the initial Indian warning depicting a symbolic image of a scorpion was considered ineffective and "diluted" (Arora, Tewari, Nazar, Gupta & Shrivastav, 2012; Oswal, Raute, Pednekar, & Gupta, 2011). Due to criticism from the public health community, the Indian Ministry of Health announced a subsequent set of warnings to be implemented in June 2010, this time with graphic images of oral cancer. Due to industry interference, implementation was delayed and warnings did not appear on packages until May 2011 (Oswal, Pednekar, & Gupta, 2010; Sankaran, Heikki, & Glantz, 2014). In contrast, smokeless tobacco packages in Bangladesh will only begin to include pictorial health warnings starting March 2016 (as per amendments made to the Tobacco Control Act in May 2014).

When compared to text-only warnings, pictorial health warnings on cigarette packages have been shown to promote smoking cessation, and to increase health knowledge and

perceptions of risk (Hammond, 2011). Further, in a recent meta-analysis of experimental studies, Noar and colleagues (2015) found that pictorial warnings outperformed text-only warnings on a number of different outcomes, including: greater negative attitudes towards smoking, greater negative affect, and lower smoker cravings. This research, however, is largely based in high-income countries (HICs) and is entirely based on cigarette package warnings. The limited studies examining LMICs including Mauritius, China, Malaysia, Thailand, and Mexico (Fathelrahman et al., 2010; Fong et al., 2010; Green et al., 2014; Thrasher, Hammond, Fong, & Arillo-Santillán, 2007; Yong et al., 2013), are consistent with evidence from HICs—pictorial health warnings are more effective in increasing health knowledge and motivation to quit than text-only warnings.

To our knowledge, only two published studies (Adkison, Bansal-Travers, Smith, O'Connor, & Hyland, 2014; Callery, Hammond, O'Connor, & Fong, 2011)—one from the US and one from Canada—have experimentally tested attributes of smokeless tobacco health warnings. Although these two studies show promise for smokeless tobacco pictorial health warnings, the relevance of these findings to LMICs is unclear, given their different context of smokeless tobacco use. The limited existing evidence from an LMIC context includes five studies (observational and focus group) from India that all demonstrate the ineffectiveness of the 2009 smokeless tobacco health warning (Arora et al., 2012; Karinagannanavar & Raghavendra, 2011; Oswal et al., 2010, 2011; Rekha & Anjum, 2012), which has since been updated (Appendix A).

Thus, there is little evidence to guide regulators on selecting content for smokeless tobacco health warnings in the two countries that bear the greatest burden of smokeless tobacco use. The current study provides observational data on smokeless tobacco users, including perceptions of health warnings implemented in India, and is among the first to experimentally test the perceived effectiveness of novel health warnings in India and Bangladesh.

## 2.0 BACKGROUND

#### 2.1 Prevalence and patterns of use

According to the Global Adult Tobacco Survey (International Institute for Population Sciences (IIPS), 2010; World Health Organization, 2009), approximately 34.6% of adults in India and 43.3% in Bangladesh use tobacco. Of these tobacco users, about 14.0% of adults in India, and 23.0% in Bangladesh smoke tobacco in either cigarette or bidi form. As is the case in many LMIC's, the prevalence of smoked tobacco is disproportionately greater among males than females (24.3% vs. 2.9% in India; 44.7% vs. 1.5% in Bangladesh). Smokeless tobacco use has also been found to be higher among those with lower education, lower income, and those from rural areas (Bhawna, 2013; Hossain et al., 2014).

Unlike other LMICs, cigarettes make up a smaller proportion of overall tobacco use with only 5.7% of adults in India and 14.2% of adults in Bangladesh who reported smoking cigarettes. In contrast, approximately one-third of tobacco users in India (25.9%) and Bangladesh (27.2%) use smokeless tobacco. Also unique to the Indian and Bangladeshi context is that the gender gap for smokeless tobacco is narrower compared to smoked forms of tobacco. Prevalence estimates vary regionally, but overall, 32.9% of males and 18.4% of females use smokeless tobacco in India. In Bangladesh, the prevalence of smokeless tobacco use among females actually exceeds that of males, at 27.9% and 25.4%, respectively (International Institute for Population Sciences (IIPS), 2010, World Health Organization, 2009). This narrowing gender gap is also emerging in youth smoking trends for cigarettes. The Global Youth Tobacco Survey (GYTS) indicated that in Bangladesh 2.9% of boys and 1.1% of girls smoked cigarettes. Similarly, in India, 5.8% of boys and 2.4% of girls reported smoking cigarettes. According to GATS data, these figures represent gender-based differences of only 2% to 3% among youth, compared to adult differences of about 10% (India) and 28% (Bangladesh).

The high prevalence of smokeless tobacco use may be attributed largely to the cultural and social norms surrounding tobacco use within these countries. The norms surrounding smokeless tobacco use in these countries are inextricably connected to the history of betel quid and *areca nut*. A discussion of social norms surrounding smokeless tobacco in the present context would be incomplete without first, a historical overview of betel quid.

### 2.2 History of betel quid and *areca catechu* nut

Long before the introduction of tobacco in India, the use of betel quid<sup>1</sup>, a two millennia old custom, was a common cultural practice. Betel quid is made up of the leaf of a piper betel (commonly referred to as betel leaf), *areca catechu* nut, and slaked lime (calcium oxide and calcium hydroxide). It is chewed and than spit out. Other ingredients and spices are commonly added including cinnamon, cardamom, ginger, cloves, and sugar. The use of *areca catechu* nut, also known as betel nut, was also woven into social customs and cultural rituals (Strickland, 2002). In fact, *areca* nut is still used in ayurvedic

<sup>&</sup>lt;sup>1</sup>Betel nut and betel quid use were also widely prevalent in other regions of Southeast Asia, the Pacific Islands, and parts of the former Soviet Union. Rudolph Virchow collected skulls from different regions of the world, including South and Southeast Asia, that show brown and black stains on the remaining teeth of the maxilla from betel quid/nut chewing (Reichart, Creutz, & Scheifele, 2006).

medicine—it is believed to be a curative agent for many health conditions including fever, diabetes, ulcers, and abdominal pain to name but a few (Strickland, 2002). In terms of its social meaning, *areca nut* and betel quid chewing would be akin to sharing a cup of coffee with a friend in many Western societies. It was customary to offer betel quid at significant milestones, including birth, death, and marriage. The Sanskritic tradition describes the exchange of *areca* nut and betel quid as a token of love. During marriage ceremonies in India, an *areca* nut would be split and shared between the bride and groom (Gode, 1961). The red-stained lips from chewing betel quid were much desired and often alluded to in poetry from this era.

> "Soft as a bud her betel-scarlet lips, Skin stained with sandal-paste, and brimming eyes Running eye-shadow as the fountain sprays; Damp hair, flower-scented, dripping dress that grips And shows her body all. What charms arise From Beauty bathing late on summer days!"

> > From Brough, 1968 Poems from the Sankskrit, verse 191

After the introduction of tobacco in the 1600's, it soon became a valuable commodity in trade and it was not long before the collective use of betel quid with tobacco became engrained in social and cultural traditions.

During Mughal rule in India, tobacco became even more popular as the royals increasingly used it in various forms, like hookah. It is believed that Queen Noor Jahan (mother of the fifth emperor, Shah Jahan) made the tradition of chewing tobacco popular (Eraly, 2007). Tobacco gained even greater popularity during British rule. These early historical accounts provide context for the social and cultural norms surrounding current use of smokeless tobacco in India and Bangladesh. Today, the practice of chewing smokeless tobacco remains embedded in the cultural fabric of both of these countries (Choudhury, 2007; Kakde et al., 2012).

While cigarette and bidi smoking are regarded as a typically "masculine" and "grown up" practice (Gupta & Ray, 2003), no such characterization exists for the use of smokeless tobacco, perhaps due to its association with betel quid, a two millennia old practice. Additionally, the discreet nature of smokeless tobacco use (i.e., no combustion), may lend itself particularly well in a patriarchal society where deviation from well-defined gender roles is discouraged. Widespread normalization of betel quid, coupled with its addictive nature, has led to misperceptions of harm that encourage the use of smokeless tobacco, even among children.

This is in stark contrast to the way smokeless tobacco is used and regarded in other countries with large smokeless tobacco markets. In the US and Sweden, for example, smokeless tobacco is generally marketed as a harm reduction method, although, this is not yet a unified argument and much contention still remains (Hatsukami, Lemmonds, &

Tomar, 2004; Zeller & Hatsukami, 2009). Also in contrast to these western markets, the Indian and Bangladeshi smokeless tobacco market is unregulated and characterized by a plethora of smokeless tobacco products.

## 2.3 Forms of smokeless tobacco

Smokeless tobacco is available in a multitude of forms in India and Bangladesh. Among the more popular varieties in both countries are *paan*, *paan masala*, and *zarda*. Other products largely popular in India include, *gutkha*, nasal snuff, *mishri*, and *gudhaku*. In Bangladesh, popular local products include *gul*, *sadapata*, and *nasshi*. Table 1 lists popular forms of smokeless tobacco and a brief description of each. It is also important to note regional diversity with respect to the use of smokeless tobacco products in India. For example, *mishri* is used commonly among women in the states of Maharashtra and Goa. *Khaini* is commonly used by men and popular in Maharashtra, Gujarat, Bihar, and Uttar Pradesh (Sivaramakrishnan, 2001).

Type of smokeless product	Description
<b>Chewing tobacco</b> <i>Khaini (Khoinee</i> in Bangladesh)	Sun dried tobacco and slaked lime. The tobacco and slaked lime are mixed between the thumb and palm and typically placed in the lower premolar area.
Gutkha	Betel nut mixed with slaked lime, <i>areca catechu</i> nut and tobacco in granulated form.
Paan	Betel leaf with <i>areca catechu</i> nut, slaked lime, condiments, and sweetening agents
Paan masala	Dehydrated preparation of <i>areca catechu</i> nut, slaked lime, condiments and tobacco. Similar to paan but non-perishable.
Mawa	Thin shavings of <i>areca catechu</i> nut, tobacco, and slaked lime.
Zarda	A mixture of tobacco, slaked lime, spices, and tobacco.
Sadapata	Plain tobacco flakes.
Nasshi	A mixture of tobacco, slaked lime, spices, and tobacco.
<b>Pastes used as dentifrice</b> <i>Gudhaku</i> or <i>gul</i>	A paste made of powdered tobacco and molasses. It is applied to the teeth and gums.
Mishri	Made at home by roasting tobacco flakes until it turns into a brown paste. It is applied to the teeth and gums.
<b>Products that are inhaled</b> <i>Nasal snuff</i>	Finely ground flavoured tobacco that is sniffed through the nostrils.

Table 1. Types of smokeless tobacco in India and Bangladesh

According to GATS India data, the prevalence of use was highest for *khaini* (11.6%), *gutkha* (8.2%), betel quid with tobacco (6.2%), and oral snuff (4.7%) (International

Institute for Population Sciences (IIPS), 2010). Based on data from Euromonitor International (Campaign for Tobacco Free Kids, 2010), *gutkha* was the most popular form of chewing tobacco sold in India and estimated to account for approximately 80% of chewing tobacco total volume sales in 2010. This difference may be due to the fact that *gutkha* companies, compared to *khaini*-producing companies, are larger and able to more accurately report sales volume. In Bangladesh, the highest prevalence of use was seen for betel quid with tobacco (24.3%), *gul* (oral snuff) (5.3%), *sadapatta* (1.8%), *khoinee* (1.5%) (World Health Organization, 2009).

In addition to the array of commercial products, handmade varieties of smokeless tobacco remain quite popular. Vendors often line the streets in market areas in both India and Bangladesh. No sales data exists for these handmade variants, making it a challenge to track, much less to regulate. Both handmade and commercial smokeless tobacco variants are typically composed of the same ingredients.

Sharan and colleagues (2012) described the different preparations of betel quid (BQ) and betel nut (BN) and their commercial variants (Figure 1).



## Figure 1<sup>ii</sup>. Betel quid preparation and commercial variants

<sup>&</sup>lt;sup>ii</sup> Note. From: Sharan, R. N., Mehrotra, R., Choudhury, Y., & Asotra, K. (2012). Association of betel Nut with carcinogenesis: Revisit with a clinical perspective. PLoS ONE, 7(8), e42759. doi: 10.1371/journal.pone.0042759

The unripe *Areca* fruit (a), either directly or after short curing is shelled to get wet and soft BN (b) (*tambul* or *kwai*), which after cutting into 4–5 pieces (c & 1) is normally consumed with a piece of betel leaf (2) and slaked lime (3) making a simple BQ (d). The ripe *Areca* fruit (A), after drying and curing is shelled to get dry and hard nut (B), which is cut into smaller pieces (C) (*supari*) for mastication. The dry pieces of BN (4 & 12) are usually masticated with a variety of additives (5–8), all of which usually contain BN, on a betel leaf (9) supplemented with catechu (10) and slacked lime (11) in a complex BQ (D-1). A variant of the complex BQ (D-2) may include all of the above plus a variety of chewing tobacco additives (13–15). Commercialization of this widespread practice of BQ mastication has lead to mushrooming production of convenient and inexpensive alternate forms of BN preparations without (*paan masala*) or with tobacco (*gutkha*). Few of these products, packages in sachets (shown) or containers of various sizes (not shown), which are widely available in markets in India are shown here. All these products have no standardized production frame or declaration of nutritional components.

The heterogeneity and diversity of products within India and Bangladesh may pose the greatest challenge to regulation within these countries. Further compounding the issue of regulation, is the structure of the tobacco market in these countries.

## 2.4 The tobacco industry in India and Bangladesh

#### Structure of the tobacco industry in India

Compared to more developed countries, cigarettes make up the smallest proportion of the tobacco market in India, at approximately 14%. The Indian market is dominated by three domestic companies, which all have ties to international companies. British American Tobacco owns about one-third of the Indian Tobacco Company Limited (ITC), the leading tobacco manufacturer in India, as well as Vazir Sultan Industries (VST) Industries. Phillip Morris International owns about one-quarter of Godfrey Phillips India, the second largest manufacturer in India. Overall, ITC holds about 80% of the Indian market, followed by Godfrey Phillips India (12%), and finally VST Industries (8%) (Campaign for Tobacco Free Kids, 2010; Sankaran et al., 2014)

Despite being the most popular form of smoked tobacco in the country, the bidi market is not controlled by large transnational manufacturing companies, but is instead dominated by household producers, or the "cottage industry". Bidi manufacturing companies hold no more than 5% of the Indian market. Similarly, local companies and smaller manufacturers dominate the Indian smokeless tobacco market. Five larger domestic companies account for about one-third of smokeless tobacco sales: Dhariwal Industries Ltd., Dharampal Satyapal Ltd., and Som Sungandh Industries Ltd., Shree Meeankshi Food Products Pvt Ltd., and Kothari Products Ltd. (Campaign for Tobacco Free Kids, 2010).

## Structure of the tobacco industry in Bangladesh

British American Tobacco Bangladesh and Dhaka Tobacco Industries, a domestic company, account for most of the cigarette market in Bangladesh (approximately 46% and 40%, respectively). The remainder of the market is made up of smaller domestic companies, which account for about 10% to 15% of the market. These smaller companies include Abul Khair Tobacco Company, Alpha Tobacco Manufacturing Company, Azizuddin Industries Ltd., Sonali Tobacco Company Ltd., National Tobacco, and Nasir Tobacco (Barkat et al., 2012).

Similar to India's cottage industry, bidi production in Bangladesh is dominated by household producers. With respect to smokeless tobacco, local companies dominate this market. In their examination of the South Asian smokeless tobacco supply chain, Siddiqui and colleagues (2015) found that a majority (88%) of smokeless tobacco products sold by smokeless tobacco vendors in their study, were produced locally, but only about 13% of these included the manufacturer's address, which raises questions about illicit trade in these markets as well.

In summary, the tobacco markets and supply chain in India and Bangladesh are complex and fragmented. Compounding the issue further is the fact that worldwide, it is estimated that about 91% of smokeless tobacco products are sold through informal distribution channels, and are custom-made (National Cancer Institute, 2014). The tobacco industry, and specifically the smokeless tobacco industry in India and Bangladesh represent a significant challenge to regulation. This lack of regulation surrounding production raises additional concerns with respect to the toxicity of products and the level of tobacco-specific nitrosamines (TSNA's) contained within them.

## 2.5 Toxicity and health effects of smokeless tobacco

In general, smokeless tobacco contains 28 known carcinogens (National Cancer Institute (U.S.), 1992), including tobacco-specific-nitrosamines, or TSNA's (Stepanov, Jensen, Hatsukami, & Hecht, 2006). TSNA's contain four chemical compounds, two of which, NNN (N-nitrosonornicotine) and NNK (N-nitrosonornicotine and 4-(methylnitrosamino)-1-(3-pyridyl)-1-butanone), are classified as Group 1 carcinogens. TSNA's are produced during the curing and fermenting process and have been found to cause oral, oesophageal, liver, pancreatic, and lung cancer (Hecht, 1998; Hecht & Hoffmann, 1988).

Due to the different types and classes of smokeless tobacco products worldwide, high levels of variability have been found in levels of TSNA's (Hoffmann, Brunnemann, Prokopczyk, & Djordjevic, 1994). In North America and Western countries, smokeless tobacco products, such as Swedish snus have been shown to be less harmful than cigarettes (Hatsukami, Ebbert, Feuer, Stepanov, & Hecht, 2007; Levy et al., 2004). Products in Sweden have been shown to contain lower levels of TSNA's overall (Österdahl, Jansson, & Paccou, 2004). In fact, in Sweden, the use of snus has been associated with a decrease in lung cancer and myocardial infarction and a decrease in smoking (Foulds, Ramstrom, Burke, & Fagerström, 2003). Due to its less-harmful nature,

there is some support for the use of smokeless tobacco as a harm reduction tool to reduce population harm from smoking—however, there is much contention surrounding this issue (Hatsukami et al., 2004; Kozlowski, 2007; Tomar, 2007). In contrast, smokeless tobacco products in India and Bangladesh do not lend themselves as easily to the harm reduction debate.

Indian and Bangladeshi smokeless tobacco products contain markedly higher levels of carcinogenic agents—like TSNA's—compared to popular smokeless products in the US and Sweden. The levels of NNN and NNK in Indian smokeless tobacco products have been found to vary greatly—from 1.74 to 76.9 and 0.08 to 28.4  $\mu$ g/g, respectively, compared to average levels of TSNA's in Swedish snus, which have been found to be about 0.15 to 3.0  $\mu$ g/g (Österdahl et al., 2004; Stepanov et al., 2005). More recently, a new Indian product—'Chaini Khani'—labelled as snus and advertised as a "safer" alternative to smoked and smokeless tobacco, was found to contain average levels of NNN, NNK, and NNAL of 22.9, 2.6, and 3.1  $\mu$ g/g respectively (Stepanov et al., 2014).

These differences may be due to the fact that in India and Bangladesh, tobacco processing is unregulated and produced in home-based operations and smaller domestic companies without standards for fermentation and curing—processes which increase the production of TSNA's (Brunnemann, Genoble, & Hoffmann, 1985). Also contributing to the difference in toxicity is the addition of other ingredients used in the preparation of smokeless tobacco, such as betel nut, which is itself carcinogenic (Garg, Chaturvedi, &

Gupta, 2014; International Agency for Research on Cancer, 2004; Nair et al., 2004; Sharan et al., 2012; Warnakulasuriya, Trivedy, & Peters, 2002).

## 2.5.1 Toxicity and health effects of betel nut (Areca catechu nut)

Betel nut is classified as a Group 1 carcinogen. Appendix B outlines the impact of betel nut and its different constituents on metabolic and cellular level changes—modifications that prove carcinogenic in multiple organ systems.

Its highly addictive nature is also cause for concern. After nicotine, alcohol, and caffeine, betel nut is the fourth most widely used substance in the world (Norton, 1998). *Arecoline*, one of the psychoactive alkaloids found in betel nut, works by stimulating the central and autonomic nervous system. This stimulation increases alertness, relaxation, and also works to satiate appetite (International Agency for Research on Cancer, 2004).

There is evidence suggesting a link between betel nut chewing and the development of oral submucous fibrosis (OSMF)—a pre-cancerous condition involving an inflammatory response which causes thickening of the mucosal lining, and eventual epithelial atrophy leading to a restricted oral opening (Rajendran, 1994). Prevalence estimates of OSMF vary regionally in India, but range between 0.2% to 1.2% and can be up to 0.4% in rural areas (Pindborg, 1972; Pindborg, Mehta, Gupta, & Daftary, 1968). The relative risk of oral cancer development for tobacco users with precancerous conditions has been estimated to be 397.3, compared to tobacco users without any precancerous conditions (Gupta, 1989). It has also been found that commercial variants like *gutkha* and *paan* 

*masala* contain greater amounts of betel nut compared to handmade varieties (Pandya, Chaudhary, Singh, Singh, & Mehrotra, 2009; Tilakaratne, Klinikowski, Saku, Peters, & Warnakulasuriya, 2006).

Given the marked differences in toxicity levels, it comes as no surprise that rates of oropharyngeal cancer are highest among smokeless tobacco users in developing countries, compared to those in developed countries (Stewart & Kleihues, 2003). Indeed, India has one of the highest incidences of oral cancer in the world (Khan, 2012). Smokeless tobacco use in this context has also been linked with cardiovascular disease and addiction (Gupta, Pednekar, Parkin, & Sankaranarayanan, 2005; Gupta, Gupta, & Khedar, 2013; International Agency for Research on Cancer, 2004). There is also a growing body of evidence supporting the link between smokeless tobacco use and negative reproductive health effects.

#### 2.5.2 Women and smokeless tobacco

Studies have demonstrated a threefold increase in stillbirths among women who chewed tobacco during pregnancy compared to those who did not (Krisshna, 1978; Verma, Chansoriya, & Kaul, 1983). More recent studies have found that mothers who used smokeless tobacco products had two to three times greater odds of having low birth weight babies and stillbirths (Deshmukh, Motghare, Zodpey, & Wadhva, 1998; Gupta & Subramoney, 2006; Gupta & Sreevidya, 2004; Krishnamurthy & Joshi, 1993; Mehta & Shukla, 1990). Pratinidhi and colleagues (2010) examined the effects of *mishri* (tobacco tooth cleaning powder) use on fetal health during pregnancy and perinatal outcomes. The

findings indicated that current *mishri* users (compared to non-users and those who had stopped/reduced use) had more stillbirths, lower birth weight babies (169.9 grams less), and experienced greater complications during and after pregnancy. Overall, *mishri* users were more likely to have an operative delivery—with a relative risk of 2.7 (Pratinidhi et al., 2010).

Despite the well-documented health effects caused by smokeless tobacco use, knowledge of the health effects remains low—to the extent that it continues to be used for medicinal purposes in many communities in the Indian subcontinent (Gupta & Ray, 2003; Kakde et al., 2012; Khawaja et al., 2006; Rahman et al., 2012), as well as migrant South Asian communities worldwide (Kakde et al., 2012; Messina et al., 2013).

### 2.6 Health knowledge and smokeless tobacco

While national estimates based on GATS data indicate that Indians and Bangladeshis report high levels of awareness that smoked and smokeless tobacco are harmful (levels of awareness range between 89% and 97%)—knowledge of the specific health effects of smoking is typically lower. Indians and Bangladeshis report the greatest levels of knowledge for lung cancer (84.9% and 91.5%, respectively), however levels of awareness are lower for other health effects, like heart attack (63.9% India; 85.9% Bangladesh) and stroke (49.4% India; 81.6% Bangladesh) (International Institute for Population Sciences (IIPS), 2010; World Health Organization, 2009). Previous research from Western countries suggests that greater levels of health knowledge lead to greater intentions to quit, and more successful quit attempts (Borland et al., 2009; Hammond, Fong, McDonald, Brown, & Cameron, 2004; O'Hegarty et al., 2006; Romer & Jamieson, 2001). Similarly, one study from India (Raute et al., 2011) indicated that smokeless tobacco users with greater levels of health knowledge (for mouth cancer, gum disease, and difficulty with opening the mouth) reported greater intentions to quit. In this study, 94% of users who had intentions to quit, believed smokeless tobacco caused mouth cancer, versus 75% of users with no intentions to quit. Another study based on data from the Tobacco Control Policy (TCP) India Pilot Survey conducted in the states of Maharashtra and Bihar (Sansone et al., 2012), indicated that respondents with greater levels of health knowledge reported greater intentions to quit. Thus, communicating the health risks of tobacco use remains a priority for tobacco control policy.

## 2.7 Policy environment in India

Khan and colleagues (2014) reviewed tobacco control policies in India, Bangladesh, Nepal and Pakistan. The findings indicate that smokeless tobacco policy remains a neglected area in all four countries. Further, the authors noted that where there is legislation that includes smokeless tobacco, it is either inadequate or poorly implemented.

## 2.7.1 Ban on the use of plastic sachets for tobacco products

In March 2011, the Supreme Court of India banned plastic sachets for tobacco products, as a way to reduce the amount of plastic litter and toxic environmental waste. In Jaipur, Rajasthan, the switch from plastic to paper packaging increased per unit costs (a tax

increase also occurred at the same time) of cigarettes, bidi, and smokeless tobacco, and as a result were found to decrease sales and consumption (Singh, Mangal, Saxena, Sharma, & Meena, 2012).

The ban on plastic packaging also proved to be a catalyst for initiating the ban on smokeless tobacco. Shortly after the ban on plastic packaging was implemented, the Supreme Court requested that the Government of India review the health effects of smokeless tobacco. The Ministry of Health and Family Welfare (MoHFW) was commissioned to develop a report on the health effects of smokeless tobacco and *areca* nut. In April 2011, a national panel on smokeless tobacco.

## 2.7.2 Smokeless tobacco ban

In 2011, the production and distribution of *gutkha* was banned based on the regulations outlined by the Food Safety and Standards Authority (FSSA): "...food products will not contain any substance which may be injurious to health: Tobacco and nicotine shall not be used as ingredients in any food products". Under the Food Safety and Regulation (Prohibition) Act 2011, *gutkha* is completely banned. However, *paan masala* and *zarda* for example, are still a legal product under the Act.

To date, all 29 Indian states and six of seven union territories have banned the sale, manufacture, distribution, and storage of *gutkha*, by invoking Regulation 2.3.4 of the FSSA Regulations, 2011 (Prohibition and Restrictions on sales). Although this represents great strides in India's fight against tobacco, the spirit of the law is not adhered to in all
jurisdictions. *Gutkha* continues to be sold in separate pouches as a way to circumvent the ban (tobacco sold separately from the flavouring and spices). Further, it has been observed that despite the ban, shopkeepers will still sell *gutkha*, albeit only to select customers (Nair et al., 2012). Few states have also extended the ban to cover other smokeless tobacco products, like *khaini* and *zarda*.

Although limited, there are two published studies based in low-income communities in Mumbai (state of Maharashtra), which have examined the impact of the ban. One study conducted two months after the *gutkha* and *paan masala* ban, found that these products were available even after the ban (Nair et al., 2012). Another study conducted four to six months after the ban, found that non-availability of *gutkha* led to over one-fifth (23.5%) of *guktha* users quitting and over half (55.8%) reducing their consumption (Mishra et al., 2014).

#### 2.7.3 Advertising and promotion

In 2003, the Indian Parliament passed the Cigarettes and Other Tobacco Products Act (COTPA). According to the COTPA, any direct or indirect tobacco advertising or promotion is prohibited (with the exception of point of sale displays). However, the industry is able to circumvent this ban by using surrogate advertising—smokeless tobacco companies produce identical products without tobacco, but with the same brand name. COTPA prohibitions do not apply to non-tobacco products, thereby allowing smokeless tobacco manufacturers to continue advertising their brands.

'Chaini Khaini'—marketed as snus, and as a "safer" alternative to smoking or chewing tobacco, is one example of this. The 'Chaini' brand also produces 'Chaini Chaini' which is essentially the same product, but without the tobacco. 'Chaini Chaini' advertisements run rampant in India, and typically feature well-known Indian actors and actresses.

### 2.7.4 Mass media campaigns

In 2009, the Government of India, along with the World Lung Foundation, created India's first smokeless tobacco campaign. The thirty-second TV ad shows Dr. Chaturvedi, a head and neck surgeon at the Tata Memorial Hospital in Mumbai, presenting some of his patients at different stages of oral cancer (caused by smokeless tobacco use). An evaluation of this campaign indicated that the TV ad made a majority of smokeless tobacco users "stop and think", and made them feel concerned about their habit (Murukutla et al., 2012).

## 2.7.5 Health warning labels

In addition to advertising prohibitions, The COTPA also required the implementation of pictorial health warnings on tobacco packages.

In 2007, the Group of Ministers (GOM) appealed to the Shimla High Court on the basis that the original set of images proposed in 2006 were "too gory" and "unacceptable", and that the 'skull and cross bone' hurt religious sentiments (Oswal et al., 2010) (Appendix A). A subsequent round of warnings was created in 2007 without the 'skull and cross bone' image. The GOM was still unsatisfied, and commissioned the Department of Audio Visual Publicity to produce a new set of warnings to replace the proposed sets from 2006 and 2007. The new set of health warnings included a black and white symbolic image of a scorpion (for smokeless tobacco packages), a chest X-ray of a tuberculosis patient, and a graphic image of diseased lungs (both for cigarette packages)—all of which were considered "weak" and "diluted" (Arora et al., 2012; Oswal et al., 2011). The pictorial warnings included the message, "Tobacco causes cancer", along the right hand side of the warning. For cigarette packaging, the top of the warning label read "Smoking kills", for smokeless forms of tobacco, it read "Tobacco kills".

In 2009, India became the first country in the world to implement pictorial health warnings for smokeless tobacco packages. These warnings covered approximately 40% of the front of the pack. Despite this precedent, the public health community criticized the use of the "diluted" warnings, specifically that of the symbolic image of a scorpion. Thus, the Indian Ministry of Health announced a subsequent set of warnings to be implemented in June 2010, this time with graphic images of oral cancer. Due to industry interference however, implementation was delayed and warnings did not appear on packages until May 2011 (Oswal et al., 2010; Sankaran et al., 2014).

In September 2012, the Ministry of Health and Family Welfare released a notification announcing a newer round of graphic health warnings for cigarettes and smokeless tobacco packages that were implemented in April 2013. Most recently, further amendments have been made to the COTPA. As of April 2015, requirements for health warnings were set to cover at minimum 85% of the principal display area, on both sides of the pack, however this was indefinitely delayed (Appendix A).

#### 2.8 Policy environment in Bangladesh

India and Bangladesh have drastically different policy environments with respect to tobacco control measures. For example, despite the fact that Bangladesh's Tobacco Control Act (2005) prohibits all advertising and promotion of tobacco, much like the regulations outlined in the COTPA in India—Bangladesh's regulations only apply to cigarettes, not smokeless tobacco.

#### 2.8.1 Health warning labels

The Tobacco Control Act requires only smoked forms of tobacco to carry health warnings. These warnings are text-only and cover about 30% of the front and the back of the pack (in contravention of the FCTC).

However, there has been growing momentum towards updated labelling regulations in Bangladesh. In May 2013, Bangladesh made amendments to their Tobacco Control Act, to expand all legislation pertaining to smoked forms of tobacco to include smokeless tobacco (this includes regulations surrounding advertising and promotion). Further, it has been proposed that beginning in March 2016, all smoked and smokeless tobacco products will be required to carry a graphic health warning. However, similar to India's experience with tobacco industry pushback, it is anticipated that graphic health warnings will be strongly opposed in Bangladesh as well.

In summary, the high prevalence of use in India and Bangladesh is largely influenced by a myriad of factors including cultural and social norms, lack of health knowledge, and inadequate or poorly enforced tobacco control legislation. Given the global burden of tobacco use borne by these countries, there is a critical need to implement stronger tobacco control measures to tackle the growing epidemic of smokeless tobacco use within India and Bangladesh.

## **3.0 STUDY RATIONALE**

The global burden of smokeless tobacco use is borne by LMICs, including India and Bangladesh. Communicating the health risks of tobacco use remains a priority for tobacco control, particularly in LMICs that are often characterized by limited access to health information, less exposure to mass media campaigns, and lower literacy levels (World Health Organization, 2008b).

Emphasis should be placed on implementing policies that have the greatest reach, frequency of exposure, as well as the potential to benefit tobacco users from disadvantaged groups, which make up the majority of smokeless tobacco users in India and Bangladesh (Palipudi et al., 2012; Prabhakar, Pednekar, & Narake, 2012). The WHO has identified pictorial health warnings on product packaging as among the most costeffective policy interventions to communicate the health risks of tobacco use. Health warnings on smokeless tobacco packages are an excellent medium for communicating health information given their reach and frequency of exposure, and are unique among tobacco control policies in that they are delivered at the time of use and at the point of sale.

There is little evidence to guide regulators on selecting content for smokeless tobacco health warnings in India and Bangladesh: two countries that bear the greatest burden of smokeless tobacco use. The central question of whether provocative pictorial depictions of health effects are the most effective approach for smokeless tobacco health warnings, and whether this effect is mediated or moderated by other factors, has yet to be

effectively addressed in low and middle-income countries. The current study was among the first to examine the perceived effectiveness of a set of novel health warning labels for smokeless tobacco packages, among adults and youth in India and Bangladesh.

# 4.0 CONCEPTUAL FRAMEWORK AND HYPOTHESES

This review was conducted to examine the theoretical and empirical literature to identify the type of messaging content that may be perceived as most effective among Indian and Bangladeshi respondents, and possible factors that may mediate or moderate this relationship.

# 4.1 Fear appeals and graphic warning labels

Pictorial warnings on cigarette packages have been associated with greater health knowledge, increased motivation to quit smoking, greater attempts to quit, and have also been shown to help to de-normalize tobacco use and lower brand appeal (Hammond, 2011). Pictorial warnings often contain graphic, fear-arousing images that elicit negative emotion. Health communication and advertising theories consider emotional content one of three core dimensions, along with the ad format and informational content. For example, Witte and colleagues suggest that emotional content influences affective and cognitive responses to messages that, in turn, affect attitudes, intentions, and behaviour (Witte & Allen, 2000).

Overall, there is mounting evidence supporting the use of fear appeals in health messaging, but less research on the theoretical framework that drives this effect. This paucity of theory-driven research was also highlighted in a recent meta-analysis conducted by Noar and colleagues (2015), which examined 35 experimental studies testing the efficacy of pictorial warnings compared to text-only.

The following provides an overview of some of the theories that may help explain the underlying mechanisms of fear appeals.

#### 4.1.1 Inverted U-shaped Model

According to the *Inverted U-shaped Model*, there is a direct relationship between fear arousal and message acceptance. The Inverted U-shaped Model (Janis, 1967), derived from Drive theory, posits that all individuals are driven by basic physiologic and psychological needs including hunger, thirst, sleep, fear and affection. When these needs are unmet, individuals are "driven" to make decisions that will restore this balance. In the context of health communication, when an individual is faced with a message that elicits fear, they will either be driven to accept or reject the message in order to resolve the imbalance they have experienced. The U-shaped Model also suggests that there is an <u>optimal</u> level of fear—that extremely high levels of fear arousal would result in message rejection and avoidance, whereas extremely low levels of fear arousal would have no impact on how the message is received.

#### 4.1.2 **Protection Motivation Theory**

*Protection Motivation Theory* (PMT) provides another theoretical framework to help explain fear appeals (Rogers, 1975). Unlike in the Inverted U-shaped Model, fear arousal is not the sole component that drives attitude and behaviour change. The degree to which one will be motivated to protect themselves against a threat depends on their judgement of the threat and their ability to cope with it—that is, the perceived severity of the message, perceived vulnerability towards the threat, and their own self efficacy and response efficacy.

#### 4.1.3 The Extended Parallel Process Model

The *Extended Parallel Process Model* (EPPM) (Witte, 1992) is perhaps the most prominent theory in the domain of fear appeals. It expands on the principles of Protection Motivation Theory (Rogers, 1975), as well as in the original Parallel Response Model the first model of fear appeals to include cognitive antecedents of behaviour change (Leventhal, 1971; Leventhal & Trembly, 1968). The EPPM suggests that people are motivated to engage in 'fear control' or 'danger control'.

In other words, threatening information that increases fear arousal will only result in positive behaviour change ('danger control') when response and self-efficacy is high. With low self-efficacy and/or response efficacy, high fear arousal is predicted to result in defensive avoidance ('fear control') (Witte & Allen, 2000). This concept of 'fear control' is not unlike the theory of *cognitive dissonance* (Festinger, 1962), which refers to the mental discomfort experienced when confronted with information that is in direct opposition to one's beliefs or lifestyle choice. In the context of tobacco use, this theory suggests that those with a greater dependence on tobacco, and potentially lower self-efficacy, may attempt to rationalize their behaviour to help overcome the dissonance they experience when faced with a high fear-arousal message that runs counter to their lifestyle choice.

In the context of health warning labels, the effectiveness of a graphic health warning will depend on its ability to convey perceived threat and severity, as well as its ability to convey effective cessation messaging. This messaging should not only encourage cessation, but also provide resources that may help the tobacco user quit—factors that are critical in promoting self and response efficacy.

## 4.1.4 Empirical research

Marketing research conducted on behalf of governments suggests that warnings that arouse greater negative emotion, including fear and disgust, are rated as more effective (BRC Marketing and Social research, 2004; Elliot & Shanahan Research, 2003; Environics, 1999, 2000). Similarly, research evaluating anti-tobacco television ads suggests that emotional content can increase engagement and recall of health messages (Biener, Ji, Gilpin, & Albers, 2004; Biener, McCallum-Keeler, & Nyman, 2000; Davis, Nonnemaker, Farrelly, & Niederdeppe, 2011; Terry-McElrath et al., 2005; Wakefield et al., 2003)

Other negative emotions may also play a role in message acceptance. Disgust represents a negative emotion related to fear, which may also affect responses to graphic pictorial health warnings. In theory, disgust might also be expected to influence message acceptance similarly to fear, however very few persuasion studies have examined the role of disgust (Dillard & Pfau, 2002; Rozin, Haidt, & McCauley, 2008). Very few studies within the area of tobacco control found that ads with "disgusting" content were more effective (Donovan, Jalleh, & Carter, 2006; Leshner, Bolls, & Thomas, 2009).

To date, population-based surveys have failed to detect any significant adverse outcomes from pictorial health warnings that might be interpreted as defensive reactions (Borland et al., 2009; Hammond et al., 2004). Hammond and colleagues (2004), found that approximately half of smokers reported at least some fear, disgust, or anger in response to the pictorial health warnings implemented in Canada in 2001, and levels of fear and disgust were associated with an increase in cessation behaviour at follow-up. In one experimental study, Peters and colleagues (Peters et al., 2007) also found that pictorial warnings were associated with greater negative emotions than US style text-only warnings, and that these emotions were associated with more negative attitudes towards smoking.

In addition, a growing body of evidence on the efficacy of cigarette health warnings suggests that symbolic images are significantly less effective than images that depict the health effects or human suffering from tobacco use (Hammond et al., 2012; Hammond, 2011; Flay and Burton, 1990).

There is reason to believe that health warnings with graphic health effects may work especially well to overcome literacy barriers (Fong, Hammond, & Hitchman, 2009; Hammond et al., 2012; Thrasher et al., 2010). However, few studies have examined the impact of pictorial warnings in LMICs (Hammond et al., 2012; Thrasher et al., 2010, 2012). Generally, the findings from these studies indicate that those with lower education gave higher effectiveness ratings for pictorial warnings, overall (Hammond et al., 2012; Thrasher et al., 2010). Thrasher and colleagues (2012) found that individuals with higher

education perceived warnings with testimonial-style content to be less effective than warnings with didactic information.

#### 4.2 Transportation Imagery Model

Alongside gruesome images of disease caused by tobacco use, graphic health warnings may also include narratives, such as personal testimonials from tobacco users. The *Transportation Imagery Model* helps explain the potential mechanisms through which narratives are proposed to work<sup>iii</sup> (Green & Brock, 2000; Green & Brock, 2002). 'Transportation' can be described as the feeling of getting "lost" or "carried away" in a story, and often involves increased cognitive attention, emotional involvement, and a lack of awareness of one's surroundings (Green & Brock, 2005). The transportation imagery model posits that this concept of 'transportation' is among the most important mediating factors through which a narrative achieves its effectiveness (Larkey & Hecht, 2010). By becoming cognitively immersed within a narrative, it becomes difficult to refute the implicitly stated messages and thus limits the extent to which one feels they can counter-argue the information (Dal Cin, Zanna, & Fong, 2004; Green & Brock, 2000; Hinyard & Kreuter, 2007; Slater & Rouner, 2002).

Behavior and attitudinal changes can also be mediated by the role of 'identification'—the extent to which one perceives the spokesperson of a health message to be similar to oneself (Hinyard & Kreuter, 2007). Larkey and Hecht (2010) proposed a model of

<sup>&</sup>lt;sup>iii</sup> The literature in this area is primarily focused on longer narratives than the short quotes that would be used in health warnings.

culture-centric narratives in health promotion based on persuasion and health promotion literature. Their model suggests that the narrative approach, coupled with a culturally relevant message, may be most efficacious in influencing behaviour change.

The transportation imagery model underscores the importance of message recipients being able to 'identify' with the message itself—as these are the messages that are most often deemed credible, believable, and least likely to be rejected. In the context of health warnings, graphic warnings including a narrative (i.e., personal testimonial), may promote 'identification' more than text only warnings, or graphic health warnings without a narrative.

#### 4.2.1 Empirical research

In the domain of tobacco control, narrative communication on tobacco warning labels have produced mixed results in LMICs (Hammond et al., 2012; Thrasher et al., 2012). With respect to narrative communication for anti-tobacco television ads, cross-country research conducted by Wakefield and colleagues (2013) tested five Australian and USbased television ads with varying message content (graphic health effects, a personal testimonial, and symbolic imagery) in ten LMICs, including India and Bangladesh. Ads depicting graphic health effects were perceived as most effective across all countries, whereas the personal testimonial ad was given the lowest ratings across all measures of perceived effectiveness.

However, it is important to note that the personal testimonial ad showcased an Australian woman, 'Zita'. According to Larkey and Hecht's culture-centric narrative model (2010), 'cultural embeddedness' leads to 'identification', an important mediating factor without which 'transportation' into the narrative and subsequent behavior change is unlikely. Tailored health messages may promote greater acceptance and identification (Hawkins, Kreuter, Resnicow, Fishbein, & Dijkstra, 2008; Noar, Benac, & Harris, 2007). Perhaps if 'Zita' instead reflected the ethnic profile of the culture in which the ad was tested, the personal testimonial ad would have fared better and been perceived as more effective.

Take for example, the first national-level smokeless tobacco mass media campaign in India. The campaign messages were tailored to an Indian audience and included a reallife testimonial from a 24-year-old male with advanced-stage oral cancer. According to an evaluation conducted by Murukutla and colleagues (2012), the campaign made people "stop and think" and increased concerns about smokeless tobacco use. The success of the radio ad led to the production of a television ad and billboards with the same testimonial message. Furthermore, an Australian study that examined testimonial health messages found that indigenous smokers rated a tailored anti-tobacco (including an indigenous spokesperson) ad significantly higher on all measures of effectiveness, compared to their non-indigenous counterparts (Stewart et al., 2011).

#### Summary

Many of the principles that underlie the effectiveness of cigarette package health warnings—such as high reach and frequency of exposure—are likely to be fairly

universal and apply to smokeless tobacco package health warnings. However, one might expect pictorial warnings to be more effective than text-only warnings among LMICs given lower levels of literacy and health knowledge.

Text-only health warnings have little or no effect among those who cannot read them; this includes illiterate or low-literacy individuals, individuals who are literate in a language other than that used for text warnings, and young children. The most effective way to reach low-literacy smokers may be to include pictures, which can be universally understood. Previous research would suggest that strong fear-arousing messages are most likely to alter beliefs about health risks, as well as appeal and general acceptability of tobacco products. Health behaviour theories also underscore the importance of ensuring that the warnings are credible and believable; otherwise, they are likely to be rejected.

Given the widespread social acceptability of tobacco use in India and Bangladesh, it is unknown how individuals will perceive graphic depictions of health effects or personal testimonials related to the health effects caused by smokeless tobacco. From a health behaviour point of view, the *Theory of Planned Behaviour* (and the related *Theory of Reasoned Action*) identifies intention, which is in part determined by social norms, as the best predictor of behaviour change (Ajzen, 1991; Ajzen & Fishbein, 1980). The concept of social norms (Cialdini & Trost, 1998) suggests that individuals have a tendency to conform to group behaviours. Given the widespread acceptability of smokeless tobacco, these theories highlight the importance of health warnings that convey the risks of smokeless tobacco in a manner that undermines social acceptability.

## 4.3 Hypotheses

Five primary hypotheses were proposed:

### Hypothesis 1a

Pictorial warnings, including graphic health effects, will be perceived as most effective, compared to text-only warnings. A growing body of evidence on the efficacy of cigarette health warnings suggests that symbolic images are significantly less effective than images that depict the health effects or human suffering from tobacco use. Thus, within the pictorial styles, warnings with symbolic imagery will be rated as least effective, compared to warnings with graphic health effects (with and without a personal testimonial).

## Hypothesis 1b

It is hypothesized that there will be no difference in ratings of effectiveness for graphic health effects compared to personal testimonials, as there is mixed evidence in this domain.

## Hypothesis 2a

Given the longer history of pictorial health warnings on smokeless tobacco packs in India, it is hypothesized that warnings with graphic health effects will be more novel in Bangladesh, and thus perceived as more effective than text-only warnings with and without symbolic imagery, compared to India.

# Hypothesis 2b

Smokeless tobacco users with greater intentions to quit will rate warnings as more effective than those without any quit intentions, given their need to remove dissonance and rationalize their behavior.

# Hypothesis 2c

Respondents with lower levels of education will rate warnings as more effective than those with higher levels of education.

## Hypothesis 3a

Negative affect (including fear) will mediate the association between viewing health warnings and ratings of perceived effectiveness, such that warnings that elicit higher levels of negative affect will in turn elicit higher perceived effectiveness ratings. It is hypothesized that warnings with graphic health effects will elicit greater levels of negative affect which will in turn elicit greater perceived effectiveness ratings, than all other warnings.

#### Hypothesis 3b

Message credibility will moderate both the direct and indirect effect (mediation) of viewing health warnings on perceived effectiveness ratings. That is, the association between negative affect and perceived effectiveness will vary as a function of message credibility; the association will be stronger when message credibility is high, and weaker when it is low.

# Hypothesis 4a

Viewing pictorial health warnings will increase: 1) the proportion of respondents reporting negative attitudes and beliefs, and 2) overall 'bad' opinions of smokeless tobacco. It is expected that pictorial warnings with graphic health effects will increase overall 'bad' opinions to the greatest extent, compared to text-only and symbolic warnings.

## Hypothesis 4b

Health warnings would presumably be more novel in Bangladesh, considering that smokeless tobacco packages did not include health warnings at the time this study was conducted. Thus, it is expected that respondents from Bangladesh will report higher levels of: 1) negative attitudes and beliefs; and 2) overall 'bad' opinions of smokeless tobacco, compared to Indian respondents.

## Hypothesis 5a

It is expected that those who view pictorial warnings will report greater levels of agreement with the health effects caused by tobacco use, compared to those who view text-only or symbolic warnings.

## Hypothesis 5b

Societal norms may be less positive in India given the country's longer history of tobacco control. Therefore, it is expected that Indian respondents will report higher levels of

agreement with the health effects caused by smokeless tobacco use, compared to Bangladeshi respondents.

## 5.0 METHODOLOGY

#### 5.1 Survey Translation

Questionnaires were translated into Hindi and Marathi for India, and into Bengali for Bangladesh (Appendix C). The committee approach to translation was used (Harkness & Schoua-Glusberg, 1998), and the following process was followed:

- Two translators: one from the Indian research team, fluent in Hindi, Marathi, and English, and one translator from the Bangladeshi research team, fluent in Bengali and English, independently translated the questionnaire items, providing comments on any issues or potential problems with the questionnaire in their country/language.
- The translation coordinator from the University of Waterloo, along with the Primary Investigator for the current project, and two members of the Canadian research team, collected the translations and summarized issues for discussion.
- 3. For each country, a meeting was held with the Canadian research team, and the translators to discuss any of the issues that arose during translation.
- Questionnaire items were revised based on these group discussions. Any substantial question revisions were checked with other languages to ensure comparability of the final versions.

5. Two final meetings were held with the translators from India and Bangladesh to finalize survey revisions. The final survey was pre-tested prior to data collection.

#### 5.2 Sample recruitment

Face-to-face recruitment and interviews took place at 15 sites around Navi Mumbai, India (April 10 to August 6, 2012), and 6 sites around Dhaka, Bangladesh (May 9 to June 18, 2012). Sites were busy public areas, selected for geographic and demographic diversity. Interviewers recruited respondents using a standard intercept technique (Sudman, 1980), whereby a physical landmark was selected and every other person to pass it was approached in Navi Mumbai; in Dhaka, every third person to pass the landmark was approached in busy locations, which was increased to every person in locations with less pedestrian traffic.

Interviews were conducted in the respondents' preferred language in India (English, Hindi, or Marathi), and in Bengali in Bangladesh. Interviewers read aloud questions to respondents and entered their responses into tablets. Interviewers were trained by the same team members from the University of Waterloo, to increase consistency between sites, and supervised by local research staff who monitored randomly in the field, to ensure study protocols were followed.

#### 5.2.1 Eligibility and consent

All respondents had to be at least 16 years of age, and interviewers were instructed to ask for identification if necessary. The adult sample  $\geq 19$  years of age (no upper age limit)

consisted of only smokeless tobacco users, whereas the youth sample (16-18 years) included both smokeless tobacco users and non-users, given the potential for future tobacco initiation among youth. No restrictions were placed on respondents' use of other tobacco products (i.e., cigarettes, bidi, etc.). Interviews were conducted in the respondents' preferred language in India (English, Hindi, or Marathi), and in Bengali for Bangladeshi respondents.

Prior to the interview, all respondents were given information about the study and asked to provide verbal consent. No personal identifiers were collected; respondents remained anonymous. Interviews took approximately 20 to 25 minutes to complete. In appreciation of their participation, respondents in India received refreshments valued at up to 100 Indian rupees (INR), approximately \$2.00 CAD. Respondents in Bangladesh were offered their choice of either a t-shirt or refreshment, valued at an average of 126 Bangladeshi taka (BDT), approximately \$1.70 CAD.

The study was reviewed by and received ethics clearance from the Office of Research Ethics at the University of Waterloo, the ethical review committee at Healis-Sekhsaria Institute for Public Health, and the Bangladesh Medical Research Council. Figure 2 presents the sample recruitment and Table 2 presents study sites in India.



Figure 2. Sample flowchart by country, age group, smokeless tobacco use status, and sex

# 5.2.2 Site selection: India

Study sites (Table 2) included fifteen areas around suburban Mumbai: three malls, three McDonald's locations, four market areas, and five areas near schools/colleges. Interviewers worked in groups of four or five at each site, rotating locations every day or two. Interviews were conducted on all days of the week, between the hours of 9:00am to 6:30pm.

Dates	Site	Interviews
2012.07.04 (43)	Bharati Vidyapeeth College of Engineering and	161
2012.07.17 (60)	Bharati Vidyapeeth College of Architecture	
2012.07.23 (56)	Belapur, Navi Mumbai	
2012.08.06 (2)		
2012.07.03 (24)	Sudhagad Junior College, Kalamboli	52
2012.07.11 (28)		
2012.07.09 (28)	Dr. D.Y. Patil Vidyanagar, Nerul, Navi Mumbai,	28
	Thane	
2012.07.18 (28)	Smt. Indira Gandhi College of Engineering,	28
	Kopar Khairane, Navi Mumbai	
2012.07.13 (27)	C.K.T.College, Panvel	55
2012.07.31 (28)		
2012.07.22 (28)	McDonald's, Andheri	28
2012.07.19 (25)	McDonald's, Kalamboli	38
2012.07.28 (13)		
2012.07.10 (28)	McDonald's, Vashi	52
2012.08.01 (24)		
2012.07.12 (42)	D'Mart (mall), Panvel	98
2012.07.24 (56)		
2012.07.05 (32)	Inorbit Mall, Vashi	63
2012.07.25 (31)		
2012.07.16 (20)	Little World Mall, Kharghar	60
2012.07.27 (24)		
2012.08.02 (16)		
2012.06.29 (32)	Vashi mini market, Vashi	32
2012.06.28 (31)	Nerul market near railway station, Nerul	123
2012.07.26 (40)		
2012.08.03 (52)		
2012.07.02 (28)	Sanpada market	120
2012.07.20 (32)		
2012.07.30 (60)		
2012.07.06 (28)	Dharavi Market area	64
2012.07.21 (36)		
	TOTAL COMPLETED INTERVIEWS	1,002

**Table 2.** Study sites in India

Numbers in parenthesis indicate number of completed surveys on that day.

# 5.2.3 Site selection: Bangladesh

Study sites (Table 3) included six different locations around Dhaka City Corporation: two

bus terminals, two areas near schools/colleges, and two public spaces near market and

residential areas. Interviewers worked in groups of 6 at each site, rotating locations every day or two. Interviews were conducted on all days of the week, between the hours of 7:30am and 8:00pm (varied depending on location).

Dates	Site	Interviews
2012.05.09 (50)	Gabtoli Bus Terminal	50
2012.05.10 (65)	Agargaon (low SES area, passport office, shopping mall)	65
2012.05.30 (89);	Mohakhali Bus Terminal	110
2012.05.31 (21)	Wonakhan Bus Terminar	110
2012.05.12 (109)		
2012.05.14 (72)		
2012.05.18 (86)		
2012.05.19 (69)	Geneva Camp (low SES area, residential)	686
2012.05.20 (57)		
2012.05.27 (127)		
2012.05.28 (166)		
2012.06.18 (23)	Stamford University area, Dhanmondi	23
2012.05.15 (63)	Viguarunnessa Girls' School and College Azimpur Bran	147
2012.05.16 (84)	viquarunnessa Giris Senoor and Conege, Azimpur Bran	14/
	TOTAL COMPLETED INTERVIEWS	1,081

Table 3. Study sites in Bangladesh

Numbers in parenthesis indicate number of completed surveys on that day.

## 5.2.4 Screening and background survey

A short introductory script was used to introduce the survey and check basic eligibility requirements in both countries. After consent was given, eligible respondents completed a short background survey that included key socio-demographic and smokeless tobacco use measures (adapted from International Tobacco Control Policy Evaluation Project Surveys) (ITC Project, 2013; ITC Project, 2011) and included current and past tobacco use, quit intentions (for smokeless tobacco users), and susceptibility to smokeless tobacco use (for youth non-users).

# 5.2.5 Experimental conditions (message themes)

After completing the background survey, respondents were randomized into one of four experimental conditions or message themes: 1) text-only warning, 2) pictorial warning with symbolic imagery, 3) pictorial warning with a graphic health effect, and 4) pictorial warning with a personalized graphic health effect and testimonial (Figure 3).

Figure 3. Experimental Conditions (message themes)

## **MESSAGE THEME**



**Note**: Only the English set of warnings for India is displayed. Warnings were also translated into Hindi and Marathi for India, and were shown only in Bengali for Bangladesh. **Image sources**: <sup>1</sup>Indian warning for smokeless tobacco packs (implemented 2009-2011); <sup>2</sup>Based on proposed Indian warning for cigarette and smokeless tobacco packs (2006); <sup>3</sup>Indian warning for smokeless tobacco packs (implemented 2011-2013); <sup>4</sup>Cigarette pack warnings from Mauritius and Malaysia; <sup>5</sup>Based on proposed Indian warning for cigarette packs (2006); <sup>6</sup>World Lung Foundation; <sup>7</sup>Dr. Paulose (<u>http://drpaulose.com/laser-treatment/laser-treatment/of-oral-leukoplakia-in-jubilee-hospital-trivandrum-kerala-india</u>); <sup>8</sup>International Packaging Study (<u>http://davidhammond.ca/projects/packaging-warnings/health-warnings-7-country-study/</u>); all others created for the study. <sup>1-5</sup>Available at <u>www.tobaccolabels.ca</u>.

Each respondent was shown a series of five health warnings within that condition, each depicting one of the following five health effects: 1) oral cancer, 2) mouth disease, 3) heart disease, 4) addiction, and 5) death. The same five health effects were depicted in each experimental condition using the designated message theme (text-only, symbolic, graphic health effect, or personal testimonial). The experimental conditions (message themes) test four distinct ways of presenting health warnings, across each of the five health effects caused by smokeless tobacco. Presentation of health warnings was counterbalanced to minimize order effects and ensure that the effectiveness of message theme held across all health effects and was not image-specific. Health warnings were shown as stand-alone warnings, and not on smokeless tobacco packages.

All warnings had the text "TOBACCO KILLS" on the bottom of the image (the text on Indian smokeless tobacco health warning labels at the time of the study). Condition 1 warnings consisted of five text-only warnings corresponding to each of the five health effects: "Tobacco causes oral cancer"; "Tobacco causes mouth disease"; "Tobacco causes heart disease"; "Tobacco causes addiction" and "Tobacco causes death".

Condition 2 warnings had the same text as Condition 1, accompanied by a symbolic image (i.e., metaphorical representation of risk) representing danger or caution. One symbolic image—the black and white scorpion—was the image on pictorial warnings for smokeless tobacco packages in India from 2009 to 2011 (and still remained on some packages at the time of the study in 2012). The 'skull and cross bone' image was based on previously proposed (Appendix A) pictorial warnings for smoked and smokeless

forms of tobacco in India. However, the image was never implemented due to the belief (as stated by the Group of Ministers) that it hurt "religious sentiments" (Oswal et al., 2010).

Condition 3 had the same text as Condition 1, and included an image of a graphic health effect (i.e., physical impact on the body/organs). The image for 'death' was based off of a previously proposed warning for packages of smoking forms of tobacco in India, which was never implemented due to tobacco industry interference (Oswal et al., 2010) (Appendix A). The warnings for 'mouth disease' and 'oral cancer' were among the four graphic warning labels implemented on smokeless tobacco packages in India on December 1, 2011.

Condition 4 included a personalized graphic warning, of a "real" person with an accompanying personal narrative (i.e., lived experience of a smokeless tobacco user or a loved one suffering from the consequences smokeless tobacco use). Name and age were also included.

Warnings were adapted for local use to ensure cultural appropriateness. Adaptation of the warnings included the following: 1) translation into Bengali for Bangladesh, and into Hindi and Marathi for India, 2) use of ethnically appropriate models in warning label images, and 3) culturally-appropriate names used for the testimonial warnings, as suggested by local research teams. Table 4 presents personal testimonials adapted for

each country. Local research partners finalized and approved all warnings and

translations. Figure 4 outlines the survey protocol followed.

Personal testimonial	Indian version	Bangladeshi version
Tobacco causes oral cancer <sup>1</sup> lost my jaw to oral cancer. <sup>1</sup>	"I lost my jaw to oral cancer." Ajay, age 38, died two weeks after this photo was taken.	"I lost my jaw to oral cancer." Abdur, age 38, died two weeks after this photo was taken.
Tobacco causes mouth disease <sup>19</sup> ecause of using tobacco, have my mouth. Depark, age 40	"Because of using tobacco, I have this disease in my mouth." Deepak, age 40.	"Because of using tobacco, I have this disease in my mouth." Deepak, age 40.
Tobacco causes heart disease "This is my second caused by tobac caused by toba	"This is my second heart attack caused by tobacco use. It could be my last." Raj, age 44.	"This is my second heart attack caused by tobacco use. It could be my last." Moti, age 44.
Tobacco is highly addictive "I thought I could quit bbacco any time I wander Roht, age 45 TOBACCO KILLS	"I thought I could quit tobacco any time I wanted. I was wrong." Rohit, age 45.	"I thought I could quit tobacco any time I wanted. I was wrong." Golam, age 45.
Tobacco kills 2500 Indians every day Tobacco use killed my husband. I fed is a alone. Gita, ago 38	"Tobacco use killed my husband. I feel so alone." Gita, age 36.	"Tobacco use killed my husband. I feel so alone." Momtaz, age 36.

Table 4. Personal testimonial health warnings: Indian and Bangladeshi versions





# 5.3 Measures

#### 5.3.1 Sociodemographics

Socio-demographic variables included sex, age, education, and income. For adults, education level (highest level completed) was categorized as: 'Low' ("Illiterate"), 'Moderate' ("Middle school or less" in India; "Secondary school or less" in Bangladesh), or 'High' ("Secondary school" to "Graduate with degree/diploma or more" in India; "SSC (Secondary school certificate)/HSC (Higher school certificate) (9-12 years)" to "University degree" in Bangladesh). For Indian youth, education (last year completed) was categorized as 'Low' ("Did not attend school", and "Primary school" to "Middle School (up to class VII)"), 'Moderate' ("Secondary school"), or 'High' ("Class XI (Higher Secondary)" or "Graduate (degree, diploma) or more"). For Bangladeshi youth, education was categorized as 'Low' ("Illiterate", "Literate (no formal education)", and "Primary (1 to 5 years)"), 'Moderate' ("Secondary school (6-8 years)"), or 'High' ("SSC"/"HSC" (9-12 years) or more) (Table 5).

Adults		Youth		
Education Categories	India	Bangladesh	India	Bangladesh
Low	Illiterate	Illiterate	Did not attend school, and "Primary school to "Middle School" (up to class VII)	"Illiterate", "Literate (no formal education)", and "Primary (1 to 5 years)"
Moderate	Middle school or less	Secondary school or less	Secondary school, Class XI (Higher Secondary), or Graduate (degree, diploma) or more	Secondary school (6-8 years)
High	Secondary school to Graduate with degree/diploma or more	SSC/HSC (9-12 years) to University degree	Class XI (Higher Secondary), or Graduate (degree, diploma) or more	Secondary school and High school 9 to 12 years or more

Table 5.	Education	categories in	India and	Bangladesh

To measure average monthly household income, respondents were asked: "In the last year, on average, how much was the total monthly income of your household?" Monthly household income level was categorized as '*Low*' (<10,000 Indian rupee (INR); <5,000 Bangladeshi taka), '*Moderate*' (10,000 to <20,000 INR; 5,000 to <10,000 taka), '*High*' (20,000 INR or more; 10,000 taka or more), or '*Not stated*'. For reference, one CAD dollar is equivalent to approximately 50 INR, and about 65 taka (Table 6).

Income Categories	India (INR)	CAD	Bangladesh (taka)	CAD
"Low"	<10,000	<\$190.00	<5,000	<\$78.00
"Moderate"	10,000 to <20,000	~\$190.00 to <\$380.00	5,000 to 10,000	\$78.00 to ~\$155.00
"High"	20,000 or more	~\$380.00 or more	10,000 or more	~\$155.00 or more
INR=Indian rupees				

**Table 6.** Average monthly household income categories in India and Bangladesh with Canadian dollar (CAD) equivalents

## 5.3.2 Patterns of use

#### Smokeless tobacco use

*Daily smokeless* tobacco use was defined as using smokeless tobacco "every day", and *non-daily smokeless* tobacco use as using "at least once a week", or "at least once in the last month". Among youth *non-users*, susceptibility to smokeless tobacco use was based on responses to three questions: 1) "Do you think in the future you might try using smokeless tobacco?"; 2) "If one of your best friends were to offer you smokeless tobacco, would you use it?"; and, 3) "At any time during the next year, do you think you will use smokeless tobacco?". Respondents who reported "definitely not" for all three measures were categorized as *non-susceptible*, and all others were categorized as *susceptible*, as per previous research on smoking susceptibility (Pierce, Choi, Gilpin, Farkas, & Merritt, 1996).

#### Usual product

Respondents were asked "Do you currently use any smokeless tobacco products at least once a month?" Response options in Bangladesh included *zarda*, pan with tobacco leaf, *gul, sadapata, pan masala*, and *nasshi*. In India, response options included *mishri*, betel quid with tobacco (pan), plain chewing tobacco, *gutkha, khaini, zarda*, tobacco toothpaste, nasal/oral snuff, *lal dantmanjan, dokta, gudhaku*, and *gul*. In both countries, an 'Other' option was also available. Respondents were asked the follow-up question "Which of these products do you use most frequently?" A 'Usual product' variable was created to capture these responses.

# Reasons for use

Smokeless tobacco users were asked "In choosing this type of smokeless tobacco (referring to their 'Usual product'), was part of your decision based on any of the following...1) The price, 2) This type is of high quality, or 3) This type is less harmful to my health." Response options included: 'Yes', 'No', 'Refused', and 'Don't know'.

# Mixed use (smokeless and smoked tobacco)

Respondents were asked, "In the past month, have you used any of the following smoked tobacco products?" In India, response options included: cigarettes (factory made and roll-your-own), bidis, hookah/shisha/narghile/water pipe, cigars/small cigars/cigarillos, pipe, chutta, hooklis, and other. Response options in Bangladesh included: cigarettes (factory made and roll-your-own), bidis, hookah/shisha/narghile, and other. Smokeless tobacco users who also selected any smoked tobacco product were classified as *mixed users*. 'Mixed users' were asked the follow-up question: "Which do you use more often?" Response options included 'Smoked tobacco', 'Smokeless tobacco', 'Use smoked and smokeless tobacco about the same', 'Refused', and 'Don't know'.

#### *Quit intentions*

Smokeless tobacco users were asked "Are you planning to quit... 1) Within the next month, 2) Within the next 6 months, 3) Sometime in the future, beyond 6 months, or 4) Not planning to quit". *Quit intentions* were categorized as 'Planning to quit' (first three response options) or 'Not planning to quit'.
## 5.3.3 Perceptions about smokeless tobacco

## Overall opinion about using smokeless tobacco (pre-post measure)

Respondents were asked the following, both before and after the presentation of health warnings: "What is your overall opinion about using smokeless tobacco? Is it.... 'Good', 'Neither good nor bad', 'Bad'?" 'Refused' and 'Don't know' were also response options.

## Perceptions of harm of smokeless tobacco products

Respondents were asked to rank six popular local smokeless tobacco products available in their country, and were also given the response option that "all are equally harmful". Respondents who reported "all are equally harmful", did not go on to rank the products from most to least harmful. Respondents who did not select "all are equally harmful", went on to rate six local smokeless tobacco products from most harmful to least harmful (where 1 was 'most harmful' and 6 was 'least harmful').

The six products were selected based on previous research and local consultation. In India, these products included (in no particular order): *gutkha, zarda, paan, mishri, snuff*, and *gudhaku*. In Bangladesh, these products included: *gul, zarda, paan, sadapata, paan masala*, and *nasshi* (Table 1). The order was reverse-coded, and mean ranks for each product were computed, whereby higher numbers corresponded with greater perceptions of harm.

## *Attitudes and beliefs about smokeless tobacco (pre-post measure)*

Attitudes and beliefs were assessed both before and after the presentation of health warnings. Respondents were asked whether they "Agree", "Disagree", or "Neither agree

nor disagree" with each of the following statements: 1) "Indian [Bangladeshi] society disapproves of using smokeless tobacco"; 2) "Smokeless tobacco is highly addictive"; 3) "It is acceptable for females to use smokeless tobacco"; 4) "Using smokeless tobacco sets a bad example for children"; 5) "Smokeless tobacco use is harmful to health"

Item 3 was reverse-coded so that positive and negative responses were consistent with the direction of the other attitudes and beliefs. An *Attitudes and Beliefs Scale* was created by summing the number of 'agree' responses across the five items, to yield a score of 0 to 5, where lower scores indicated more positive attitudes and beliefs towards smokeless tobacco.

## Awareness and support for graphic health warnings

To assess awareness of current labeling regulation<sup>iv</sup> (Appendix A), respondents were asked "As far as you know, do smokeless tobacco products in [India/Bangladesh] have health warnings on the packages?" "Yes (including 'some products')", "No", "Refused", and "Don't know", were response options.

To assess support for labeling policy, respondents were asked "Do you think that smokeless tobacco packages should have health warnings?" and "Do you think that health warnings should include pictures?" 'Yes', 'No', 'Maybe', 'Refused', and 'Don't know', were response options.

<sup>&</sup>lt;sup>iv</sup> Since 2009, India had implemented pictorial warnings for smokeless tobacco packages. At the time this study was conducted, the previous symbolic image of a black and white scorpion was replaced by graphic health warnings that covered 40% of the front of the pack, depicting oral cancer and mouth disease. Bangladesh had no health warnings on smokeless tobacco packages. However, pictorial health warnings for smokeless tobacco have since been legislated and scheduled for implementation in March 2016.

## Health warning labels in India

Indian respondents were asked: "Do you think health warnings on smokeless tobacco packages should have more health information than they do now, less information, or about the same amount as they do now?" Response options included 'More health information, 'Less health information', 'About the same', 'Refused' and 'Don't know'. Indian respondents were also asked "In the last month, have you made any effort to avoid buying smokeless tobacco packages with health warnings on them?" Response options included 'Yes', 'No', 'Refused', and 'Don't know'.

## 5.3.4 Perceived effectiveness <u>ratings</u> by message theme (between-experimental condition)

Respondents were randomly assigned to one of four health warning label experimental conditions, and asked to rate each health warning individually using a numeric scale, where 1="not at all", 5="in the middle", and 10="extremely". Warnings within each set were shown and rated one at a time (in random order) on the following measures: "Please tell whether this warning message... 'grabs your attention'; 'is believable', 'is important to you'<sup>v</sup>; 'is surprising'; 'is frightening'; 'is disgusting'; 'is unpleasant'.

### Perceived effectiveness of health warnings labels

Perceived effectiveness was assessed by asking respondents the following, while they viewed each health warning (Figure 5): "On a scale of 1 to 10, where 1 is 'not at all' and

<sup>&</sup>lt;sup>v</sup> The original wording read "...is <u>relevant</u> to you". Local partners in India were concerned that the concept of "relevance" would not translate well, but that the concept of "importance" would be better understood. Prior to launching the study, the wording was changed from 'relevant' to 'important' to address this concern.

10 is 'extremely', please tell whether this warning message would: 1)...make people more concerned about the health risks of using smokeless tobacco?; 2)...make people want to quit using smokeless tobacco?; 3)...help to prevent youth from starting to use smokeless tobacco?". Lastly, respondents were also asked: "Overall, how effective is this health warning?"



Figure 5. Example survey screen, as viewed by respondent

## 5.3.5 Health warning label recall

Message recall was assessed using an unprompted recall task for the five health warnings presented during the study. Respondents were asked to list any details of the health warnings that they viewed. Interviewers had a comprehensive programmed checklist of possible response options, in addition to an 'other' option that could be filled in with any items not already on the list. The protocol was designed to allow five minutes following the presentation of the last health warning before the unprompted recall task was completed. Given discrepancies in how data was collected for this particular measure in both countries, the data was unusable and not included in the analyses.

## 5.3.6 Health knowledge

All respondents were asked to report whether they believed that using smokeless tobacco caused any of a list of four health effects caused by using smokeless tobacco (oral cancer, mouth disease, heart disease, and death). A *Health Knowledge Scale* was created by summing the number of 'agree' responses across the four items, to yield a score of 0 to 4, where higher scores indicated greater levels of health knowledge.

## 5.3.7 Perceived effectiveness <u>rankings</u> by health effect (within-experimental condition)

Respondents were randomly assigned to one of five health effects—oral cancer, mouth disease, heart disease, addiction, or death—and completed a ranking task in which they were presented with the four health warnings (Conditions 1 to 4<sup>vi</sup>) specific to that health effect. Respondents were asked to compare the health warnings to each other (on the same screen) and rank the warnings from most to least effective (Figure 6). The order was reverse-coded, and mean ranks for each warning label were computed, whereby higher numbers corresponded with greater rankings of perceived effectiveness.

<sup>&</sup>lt;sup>vi</sup> Condition 1: text-only, Condition 2: symbolic imagery, Condition 3: graphic health effect, and Condition 4: personal testimonial health warning. Note that the order of presentation was counter-balanced.

**Figure 6.** Example set of health warnings viewed by respondent, within the 'oral cancer' health effect



From left to right: Condition 1: text-only, Condition 2: symbolic imagery, Condition 3: graphic health effect, and Condition 4: personal testimonial health warning

## 5.3.8 Ranking task for current Indian health warnings

In India, this ranking task was followed by one last ranking task, in which respondents were shown five health warning images (Figure 7), including current (at the time of study) and past Indian health warnings. Respondents were shown the five warning images on the same screen, and asked to rank them from most to least effective, with the question: "Overall, which warning do you think is the <u>most</u> effective for discouraging the use of smokeless tobacco?". The order was reverse-coded, and mean ranks for each warning label were computed, whereby higher numbers corresponded with greater rankings of perceived effectiveness.



Figure 7. Final ranking task of Indian health warnings (with implementation dates\*)

\*Warning A was the first health warning implemented, and although it was being phased out at the time of study it still remained on some smokeless tobacco packages. Warnings B through E (implemented December 1, 2011) appeared on smokeless tobacco packages at the time of study.

## 5.4 Analyses

All analyses were conducted using SPSS version 23.0. Unless otherwise noted, statistics and point estimates shown in tables are for unadjusted values.

### 5.4.1 Descriptive analyses

Descriptive statistics, including frequencies, chi-square tests (for categorical variables), one-way ANOVA, and t-tests (for continuous variables), were conducted to examine differences between the Indian and Bangladeshi samples.

# 5.4.2 Perceived effectiveness <u>ratings</u> of health warning labels (between experimental conditions)

Multiple linear regression models were used to examine the effects of message theme, country and individual-level predictors on the perceived effectiveness of health warnings.

The four measures of perceived effectiveness were highly correlated with one another (Cronbach's  $\alpha$ =0.97); thus, only the measure of "overall effectiveness" was used in the analysis. The "overall effectiveness" measure was summed across the five health warnings within each experimental condition and then divided by five (number of warnings in each condition), to yield a mean score between 1 and 10 for each condition.

In the model examining adults, message theme, country, age, sex, education, income, smokeless tobacco use (*daily users* and *nondaily users*), mixed use, and quit intentions were entered as covariates. In the model examining youth, message theme, country, age, sex, education, and smokeless tobacco use (*daily users, nondaily users, susceptible* 

*nonusers* and *non-susceptible non-users*) were entered as covariates. Two-way interaction terms for message theme by socio-demographic and smokeless tobacco use variables were screened individually, and added where significant to the models described above.

## 5.4.3 Mediation and moderation results

## Mediation

To examine whether negative affect mediated the effect of viewing health warnings on perceived effectiveness ratings, a series of simple mediation tests were conducted using Ordinary Least Squares (OLS) regression-based path analysis.

The four measures that were conceptualized as 'negative affect': 'fright', 'disgust', 'surprise', and 'unpleasant', were highly correlated with one another (Cronbach's  $\alpha$ =0.98); thus, the *Negative Affect Scale* was created whereby each measure was summed across the five health warnings within each experimental condition and then divided by five (number of warnings in each condition), to yield a mean score between 1 and 10 for each condition. Higher scores indicated greater levels of negative affect.

The bootstrap method was used, and the indirect effect (mediation) was estimated with bias-corrected (BC) 95% confidence intervals (CI) of 10,000 bootstrapped samples (Hayes, 2013; Preacher & Hayes, 2004). For statistical inference of indirect effects (mediation), confidence intervals that do not include zero indicate significance. Mediation analyses were completed using the SPSS PROCESS macro (Model 4) developed by Hayes (2013).

## Moderated mediation: Message Credibility

To examine whether message credibility moderated the direct (the association between message theme and perceived effectiveness, controlling for negative affect) or indirect effect (the association between message theme and perceived effectiveness, via negative affect), a moderated mediation model (also known as conditional direct effects) was specified and included the mediation pathway described in the previous section. This moderated mediation analysis was completed using the SPSS PROCESS macro (Model 15) developed by Hayes (2013). The model is a direct effect and second stage moderation model, and included two interaction terms: 1) *message theme* by *message credibility* and 2) *negative affect* by *message credibility*.

Non-significant interaction terms were removed from final models. Variables were meancentered (Aiken & West, 1991) and significant interactions were examined by using the 'pick-a-point approach', meaning that the conditional direct and indirect effects of the moderator were examined at one standard deviation above and below the mean; levels corresponded to 'low', 'moderate', and 'high' levels of message credibility (Hayes, 2013).

For the mediation and moderated mediation model described, the following covariates were entered into the adult model: country, age, sex, education, income, smokeless tobacco use (*daily users* and *nondaily users*), mixed use, and quit intentions. In the model examining youth, country, age, sex, education, and smokeless tobacco use (*daily users*,

*nondaily users*, *susceptible nonusers* and *non-susceptible non-users*) were entered as covariates.

## 5.4.4 Difference change in attitudes and beliefs and overall opinions of smokeless tobacco, after viewing health warnings

Attitudes and beliefs about smokeless tobacco and overall opinions about smokeless tobacco were asked both before and after presentation of health warnings.

McNemar Chi Square tests were conducted to test the difference in: 1) levels of agreement with the five attitudes and beliefs about smokeless tobacco, and 2) levels of agreement with the overall opinion that smokeless tobacco is 'good', 'neither good nor bad', or 'bad', before and after the presentation of health warnings.

Multiple linear regression models were conducted with the *Attitudes and Beliefs scale* (Cronbach's  $\alpha$ =0.70), set as the dependent variable. The models conducted for adults adjusted for message theme, *Attitudes and Beliefs* at baseline (scale), country, age, sex, education, income, smokeless tobacco use (*daily user, non-daily user*), mixed-use, and quit intentions. The models conducted for youth adjusted for overall opinion at baseline, country, age, sex, education, and smokeless tobacco use (*daily user, non-daily user, non-daily user, susceptible non-user, non-susceptible non-user*). Two-way interaction terms for message theme by socio-demographic and smokeless tobacco use variables were screened individually, and added to the final model where significant.

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A set of Generalized linear models were conducted with a binomial distribution and logit link function, and the overall opinion that using smokeless tobacco is 'bad', set as the dependent variable. The models conducted for adults adjusted for message theme, overall opinion at baseline ("smokeless tobacco is bad"), country, age, sex, education, income, smokeless tobacco use (*daily user, non-daily user*), mixed-use, and quit intentions. The models conducted for youth adjusted for overall opinion at baseline, country, age, sex, education, and smokeless tobacco use (*daily user, non-daily user, susceptible non-user, non-susceptible non-user*). Two-way interaction terms for message theme by sociodemographic and smokeless tobacco use variables were screened individually, and added to the final model where significant.

## 5.4.5 Health knowledge

To examine whether viewing health warnings with different message themes influenced levels of health knowledge, multiple linear regression models were conducted with the *Health Knowledge Scale*, set as the dependent variable. The models conducted for adults adjusted for message theme, country, age, sex, education, income, smokeless tobacco use (*daily user, non-daily user*), mixed-use, and quit intentions. The models conducted for youth adjusted for overall opinion at baseline, country, age, sex, education, and smokeless tobacco use (*daily user, non-daily user, non-daily user, susceptible non-user, non-susceptible non-user*). Two-way interaction terms for message theme by socio-demographic and smokeless tobacco use variables were screened individually, and added to the final model where significant.

## 5.4.6 Perceived effectiveness <u>rankings</u> of health warning labels (withinexperimental conditions)

To examine whether the effect of message theme persisted across all health effects, respondents were randomly assigned to one of five health effects—oral cancer, mouth disease, heart disease, addiction, or death—and completed a ranking task in which they were presented with the four health warnings (text-only, symbolic, graphic health effect, personal testimonial) specific to that health effect.

Wilcoxon signed-rank tests were conducted to test the differences in perceived effectiveness rankings between experimental conditions (i.e., text-only vs. graphic health effects).

## 6.0 **RESULTS**

#### 6.1 Sample characteristics

Table 7 presents the overall characteristics of the adult and youth samples, by country. Interviews were conducted in the respondents' preferred language in India: English (n=33), Hindi (n=456), and Marathi (n=513). In Bangladesh, all interviews were conducted in Bengali (n=1,081).

Differences between the Indian and Bangladeshi samples were found for *age*, *quit intentions*, and *education*, for both adults and youth (p<0.001 for all comparisons). Among adults and youth, *quit intentions* were higher among Indian respondents. There were also differences seen in education levels between India and Bangladesh. More than half of adults and youth in India reported "high" education levels, whereas a majority of adults and youth in Bangladesh reported "low" or "moderate" education. Among adults, between-country differences were found in *income* level (p<0.001). In addition, *mixed-use* was significantly higher in Bangladesh in the adult sample (p=0.002). Among youth, between-country differences were found for *smokeless tobacco use* (p<0.001 for all comparisons).

		ADULTS		YOUTH			
	India n=502	Bangladesh n=569	Test statistic <sup>†</sup> (p-value)	India n=500	Bangladesh n=512	Test statistic <sup>†</sup> (p-value)	
Age range	20-63 years	19-80 years	<i>t</i> =3.8	16-18 years	16-18 years	<i>t</i> =-7.4	
(mean; SD)	36.0 (9.2)	38.6 (12.5)	( <i>p</i> <0.001)	17.5 (0.7)	17.1 (0.8)	( <i>p</i> <0.001)	
Sex (%)	40.0	15.0	$\mathbf{x}^2$ 1 (	50.0	10 (	$\mathbf{v}^2$ 0.00	
Female	49.8	45.9	$X^{2}=1.6$	50.0	49.6	$X^{2}=0.02$	
Male	50.2	54.1	(p=0.22)	50.0	50.4	(p=0.90)	
Smokeless tobacco	use (%)						
Daily user	93.6	94.4	$X^2 = 0.3$	29.0	14.5		
Non-daily user	6.4	5.6	(n=0.61)	5.8	11.8		
Non-user			(P)			$X^2 = 49.6$	
susceptible				21.2	15.4	( <i>n</i> <0.001)	
Non-user non-						(p 01001)	
susceptible				44.0	58.4		
Mixed use (%)			$X^2 = 9 9$			$X^2 = 0.5$	
(smoked &	16.9	24.8	(n=0.002)	18.4	21.6	(n=0.50)	
smokeless)			(p 0.002)			(p 0.00)	
Ouit intentions <sup>††</sup> (%	6)						
Plans to quit	69.7	50.1	$X^2 = 42.5$	81.6	49.6	$X^2 = 35.3$	
No plans to quit	30.3	49.9	( <i>p</i> <0.001)	18.4	50.4	( <i>p</i> <0.001)	
I (0/)			<b>-</b>			- /	
Income (%)	20.5	70.0					
Low	38.5	/2.8	$x^2$ 121.0				
Moderate	34.9	18.0	$X^{2}=131.0$				
High	10.4	3.0	( <i>p</i> <0.001)				
Not stated	16.2	6.2					
Education (%)							
Low	3.8	31.5		20.0	36.3		
Moderate	44.4	55.6	X <sup>2</sup> =247.2	12.8	47.2	X <sup>2</sup> =277.5	
High	51.8	12.9	( <i>p</i> <0.001)	67.1	16.5	( <i>p</i> <0.001)	

**Table 7.** Overall sample characteristics for adults and youth in Navi Mumbai, India and Dhaka, Bangladesh (N=2,083)

<sup>†</sup>*Test statistic denotes between-country differences (India vs. Bangladesh), within adult or youth sample.* <sup>††</sup>*Only among smokeless tobacco users.* 

## 6.2 Patterns of use and perceptions of harm

## 6.2.1 Smokeless tobacco use

As Table 7 indicates, virtually all adult smokeless tobacco users reported daily use,

compared to approximately half of youth users. Among non-users, about one-third

(32.5%) of youth in India, and about one-fifth (20.9%) of youth in Bangladesh were susceptible to smokeless tobacco use. The proportion of smokeless tobacco users planning to quit was higher in India than in Bangladesh among both adults and youth (p<0.001).

## 6.2.2 Usual product and reasons for use

Table 8 presents the usual products reported by adults and youth in Navi Mumbai, India and Dhaka, Bangladesh.

INDIA	Adults	Youth
	n=494	n=174
Gutkha	26.3	51.7
Mishri	21.1	10.9
Paan	16.4	5.2
Plain chewing tobacco	13.6	10.3
Zarda	7.9	4.6
Nasal/oral snuff	6.5	4.6
Khaini	3.0	6.9
Tobacco toothpaste	2.4	1.1
Gul	1.2	0.0
Dokta	0.6	0.6
Lal dantmanjan	0.4	1.7
Gudhaku	0.2	2.3
BANGLADESH	Adults	Youth
	n=556	n=115
Paan masala	54.6	66.1
Zarda	22.3	3.5
Gul	11.7	7.0
Paan	9.7	21.7
Sadapata	0.9	0.0
Nasshi	0.7	0.9

**Table 8.** Percentage of smokeless tobacco users reporting their usual product, by country and age group (n=1,339)

In India, more than half (51.7%) of youth, and about one-quarter (26.3%) of adults reported gutkha as their usual product. *Mishri, paan*, and *plain chewing tobacco* were also among the most popular 'usual products' for adults, whereas, youth reported *mishri*, *plain chewing tobacco*, and *khaini* as their second, third, and fourth most popular 'usual products'. More than half of adult and youth users in Bangladesh reporting using *paan masala* as their 'usual product' (54.6% and 66.1%, respectively). *Zarda*, *Gul*, and *Paan* were also rated as among the most popular 'usual products' for both adults and youth.

Figure 8 presents the percentages of smokeless tobacco users reporting various reasons for use of their usual product.

**Figure 8.** Percentage of smokeless tobacco users reporting reasons for using their 'usual product', by country and age group (n=1,338)

Less Harm

■ High Quality

Price



To control for multiple comparisons, a sigificance level of p < 0.01 was used instead of p < 0.05. Among Indian youth, no differences were found in the proportions of smokeless tobacco users reporting that they chose their usual product based on the 'price', the 'qualilty', and the belief that it was 'less harmful' than other types (46.6%, 46.6%, and 47.7%, respectively).

Among Indian adults, significantly lower proportions reported that they selected their usual product because it was of higher quality (35.5%) compared to those who reported they selected their usual product because of the price (46.9%,  $X^2_{(df=1)}$ =25.0, p<0.001), or the belief that it was less harmful (49.1%,  $X^2_{(df=1)}$ =32.5, p<0.001, respectively).

Bangladeshi youth reported 'less harm' (53.9%) as the primary reason for selecting their usual product, compared to beliefs about the products 'high quality' (26.1%) and 'price' (24.3%) ( $X^2_{(df=1)}$ =28.4, p<0.001;  $X^2_{(df=1)}$ =28.9, p<0.001). Similarly, 'less harm', was the primary reason Bangladeshi adults reported for selecting their usual product (43.2%), compared to beliefs about 'high quality' (23.4%), and 'price' (22.5%) ( $X^2_{(df=1)}$ =73.8, p<0.001;  $X^2_{(df=1)}$ =66.5, p<0.001).

Few differences between adults and youth were observed. In India, a greater proportion of youth reported that they chose their usual product based on its 'high quality' compared to Indian adults ( $X^2_{(df=1)}$ =6.6, p<0.01).

## 6.2.3 Mixed-use

About one-fifth of Indian adults were mixed-users, of which about half (47.1%) reported that they used smokeless tobacco more often than smoked forms of tobacco. Approximately one-quarter of Bangladeshi adults were mixed-users, of which more than half (55.3%) reported that they used smokeless tobacco more often than smoked forms of tobacco.

Compared to adults, no differences were found in the proportions of Indian and Bangladeshi youth who reported mixed-use, at about one-fifth. Among youth, 70.1% in India, and 45.1% in Bangladesh reported using smokeless tobacco more often than smoked forms.

## 6.2.4 Perceptions of harm of local smokeless tobacco products

Respondents ranked (from most harmful to least harmful) six popular local smokeless tobacco products, and were also given the response option that "all are equally harmful". Respondents who reported "all are equally harmful", did not go on to rank the products from most to least harmful.

Approximately one-third (32.6%) of youth and 12.9% of adults in India reported that all products were equally harmful, compared to about 3.7% of youth and only 0.2% of adults in Bangladesh.

Table 9 presents the mean rank scores of perceived harm for six popular local smokeless

tobacco product types available in each country, from most to least harmful.

INDIA						
	Gutkha	Zarda	Paan	Snuff	Mishri	Gudhaku
Adults $n=437$	4.2 (1.6) <sup>a</sup>	4.2 (1.4) <sup>a</sup>	3.9 (1.5) <sup>b</sup>	$3.4(1.4)^{c}$	$3.2(1.8)^{c}$	$2.1(1.5)^{d}$
	Gutkha	Zarda	Paan	Mishri	Snuff	Gudhaku
<b>Youth</b> <i>n</i> =337	$4.5(1.5)^{a}$	4.1 (1.3) <sup>b</sup>	4.1 (1.4) <sup>b</sup>	$3.6(1.8)^{c}$	$2.8(1.3)^{d}$	$1.9(1.3)^{e}$
BANGLADESH						
	Gul	Zarda	Paan	Sadapata	Paan masala	Nasshi
Adults $n=568$	5.0 (1.2) <sup>a</sup>	4.2 (1.4) <sup>b</sup>	3.7 (1.5) <sup>c</sup>	$3.7(1.3)^{c}$	$2.2 (0.9)^d$	2.2 (1.7) <sup>d</sup>
	Gul	Zarda	Paan	Sadapata	Paan masala	Nasshi
Youth	$(1, 0)$ $(1, 2)^{a}$	1 2 (1 2) <sup>b</sup>	10(1) <sup>b</sup>	$2.7(1.5)^{\circ}$	$22(00)^d$	$20(16)^{e}$

**Table 9.** Mean rank score\* (SD) for perceived harm rankings of six local smokeless tobacco products, by country and age group (n=1,835)

\*Higher mean rank scores correspond with greater perceptions of harm. Different letters denote significant differences of perceived effectiveness rankings <u>between</u> experimental conditions, based on Unadjusted Wilcoxon Signed-Rank tests with a Bonferroni correction for multiple comparisons, where p < 0.01.

Among Indian youth (users and non-users), *gutkha* was ranked as most harmful compared to other products. Among adults, *guktha* and *zarda* were rated the most harmful. Bangladeshi adults and youth both ranked *gul* as most harmful. Overall, adults and youth ranked perceived harm similarly, with few exceptions.

Differences were found in perceptions of harm based on the type of product used by the respondent. In India, among usual users of *gutkha* (the most commonly used product), both adults and youth perceived *zarda* as most harmful [mean rank=4.4 (SD=1.2) for adults; mean rank=4.3 (SD=1.2) for youth]. In Bangladesh, among usual users of *paan masala* (the most commonly used product), adults perceived *gul* to be most harmful

[mean rank=4.9 (SD=1.3), while youth perceived *sadapata* to be most harmful [mean rank=4.6 (SD=1.3)].

### 6.3 Awareness and support for pictorial health warning labels

Overall, levels of awareness of labeling regulations were high. In India, 71.1% of adults and 74.6% of youth correctly reported that health warnings appeared on smokeless tobacco packs. In Bangladesh, 83.6% and 83.7% of adults and youth surveyed, correctly reported that no warnings appeared on packs. No differences in the percentage of correct responses were observed between adults and youth in India or Bangladesh.

Support for health warning labeling policies was also high. More than three-quarters of adults and youth in India (74.1% and 81.0%, respectively) and Bangladesh (77.5% vs. 86.1%) reported that smokeless tobacco packages should include health warnings. Support for health warnings with pictorial content was also high: a majority of adults and youth in India (78.9% and 86.8%) and Bangladesh (85.1% and 92.4%) reported that smokeless tobacco health warnings should include pictures.

Overall, a greater proportion of youth reported support for health warnings  $(X^2_{(df=1)}=6.8, p=0.009 \text{ in India}; X^2=12.7, p=0.001 \text{ in Bangladesh})$ , and the inclusion of pictures  $(X^2=11.04, p=0.001 \text{ in India}; X^2_{(df=1)}=13.4, p<0.001 \text{ in Bangladesh})$ , compared to adults.

Indian respondents were asked if health warnings on smokeless tobacco packages should have "more health information than they do now, less information, or about the same amount as they do now?" A greater proportion of Indian youth (83.0%) reported that smokeless tobacco packages should have "more health information", compared to adults (76.3%) ( $X^2_{(df=1)}=6.9$ , p=0.008). No differences were found in the percentages of adults and youth who reported "less health information" (13.3% vs. 9.8%) and "about the same amount of information" (9.6% vs. 7.2%).

Lastly, Indian smokeless tobacco users were asked if they had made any effort to avoid buying smokeless tobacco packages with health warnings on them. No differences were found in the proportion of adults (39.4%) and youth (42.5%) in India who reported that they made an effort to avoid smokeless tobacco packages with health warnings on them.

## 6.4 Perceived effectiveness <u>ratings</u> of health warnings: Between-experimental conditions

Respondents were randomly assigned to one of four health warning label experimental conditions (message themes): 1) text-only, 2) symbolic, 3) graphic health effect, and 4) personal testimonial. Respondents rated each of the four health warnings in each theme based on its "overall effectiveness" using a numeric scale, where 1="not at all", 5="in the middle", and 10="extremely".

Appendix E presents sample characteristics for adults and youth in India and Bangladesh, by experimental condition. No differences were found between the experimental conditions, with the exception of *quit intentions* among Bangladeshi adults: those in the symbolic and testimonial conditions reported greater intentions to quit than those in the text and graphic conditions.

Table 10 presents the overall perceived effectiveness ratings [Mean, (SD)] of health warnings between each of the four experimental conditions (across all five health effects), by country, and age group.

	EXPERIMENTAL CONDITIONS								
INDIA	Text	Symbolic	Testimonial	Graphic					
Adults $n=502$	$5.0(0.9)^{a}$	5.2 (0.9) <sup>a</sup>	6.9 (0.9) <sup>b</sup>	7.4 (1.1) <sup>c</sup>					
<b>Youth</b> <i>n</i> =500	$5.2(0.9)^{a}$	$5.2(0.9)^{a}$	7.0 (0.9) <sup>b</sup>	$7.5(0.9)^{c}$					
BANGLADESH	Text	Symbolic	Testimonial	Graphic					
Adults $n=569$	5.3 (2.2) <sup>a</sup>	5.9 (2.3) <sup>a</sup>	6.7 (1.5) <sup>b</sup>	7.4 (1.7) <sup>c</sup>					
Youth $n=5/2$	4.4 (2.0) <sup>a</sup>	5.0 (1.6) <sup>a</sup>	6.8 (1.7) <sup>b</sup>	7.2 (1.6) <sup>b</sup>					

**Table 10.** Overall perceived effectiveness <u>ratings</u> [Mean, (SD)] for health warnings between- experimental conditions, by age group and country (n=2,083)

Different letters denote significant differences of perceived effectiveness ratings between experimental conditions based on unadjusted one-way ANOVA with a Tukey correction for multiple comparisons, where p<0.05.

Overall, health warning labels with graphic health effects and personal testimonials were consistently given the highest perceived effectiveness ratings, compared to text-only and symbolic health warnings. The only differences found in how adults and youth rated health warnings were for text and symbolic health warning ratings in Bangladesh. Compared to adults, youth gave both text and symbolic health warnings lower ratings of perceived effectiveness (F=11.9, p=0.001; F=14.0, p<0.001, respectively).

## 6.4.1 Perceived effectiveness <u>ratings</u> of health warnings (between-experimental conditions): Adults

Mulitple linear regression models were conducted to examine the effects of message theme, country and individual-level predictors (age, sex, education, income, smokeless tobacco use, mixed-use, and quit intentions) on the perceived effectiveness of health warnings. Two-way interaction terms for message theme by socio-demographic and smokeless tobacco use variables were screened individually, and added to the model, where significant.

Among adults (*n*=1,060), *message theme* ( $X^2_{(df=3)}$ =406.9, *p*<0.001), *education* ( $X^2_{(df=2)}$ =17.8, *p*<0.001), *income* ( $X^2_{(df=3)}$ =31.6, *p*<0.001), and *quit intentions* ( $X^2_{(df=1)}$ =99.6, *p*<0.001) were associated with ratings of perceived effectiveness. Those with no quit intentions rated warnings as less effective than those intending to quit ( $\beta$ =-0.43, *p*=0.001). Pairwise comparisons were conducted with a Bonferroni correction for multiple comparisons. Text-only messages were rated as less effective than any of the pictorial warnings, including symbolic (t=-3.03, *p*<0.01), graphic (t=-17.7, *p*<0.001), and testimonial (t=-13.5, *p*<0.001). Among the pictorial themes, graphic health warnings were rated as more effective than symbolic (t=1.5, *p*<0.001) and testimonial warnings (t=1.0, *p*<0.001). Overall, illiterate respondents gave higher effectiveness ratings than their counterparts with low (t=4.1, p<0.001) and moderate/high (t=2.5, *p*<0.01) levels of education. Respondents with low (t=5.8, *p*<0.001), moderate (t=4.1, *p*<0.001) ( $\beta$ =0.67, *p*<0.001) or high (t=3.6, *p*<0.001) income levels rated warnings as more effective compared to those who did not state their income.

The *message theme* by *country* interaction ( $X^2_{(df=3)}=9.7$ , p=0.02) indicated that the effect of message theme (graphic warnings perceived as most effective, followed by testimonial warnings, symbolic warnings, and text-only warnings) held for Bangladesh (p<0.01 for all contrasts). In India, the same pattern was found, except text and symbolic warnings were not rated any differently than one another. Graphic health warnings were not rated differently between India and Bangladesh, nor were any differences observed in the ratings of text-only or testimonial warnings. However, respondents from Bangladesh perceived symbolic warnings to be more effective than their Indian counterparts (t=2.7, p<0.01)

## 6.4.2 Perceived effectiveness <u>rating</u>s of health warnings (between-experimental conditions): Youth

In a model conducted among youth smokeless tobacco users and non-users, country, age, sex, education, and smokeless tobacco use (*daily user, non-daily user, susceptible non-user, non-susceptible non-user*) were entered as covariates. Two-way interaction terms for message theme by socio-demographic and smokeless tobacco use variables were screened individually, and added to the model, where significant.

Among youth (*n*=1,001), *message theme* ( $X^2_{(df=3)}$ =665.3, *p*<0.001), *country* ( $X^2_{(df=1)}$ =32.4, *p*<0.001), *education* ( $X^2_{(df=2)}$ =11.4, *p*=0.003), and *age* ( $X^2_{(df=1)}$ =4.3, *p*=0.04) were significantly associated with perceived effectiveness. Indian youth gave higher effectiveness ratings than their Bangladeshi counterparts ( $\beta$ =0.62, *p*<0.001). Similar to findings from the adult sample, text-only warnings were rated as less effective than all of

the pictorial styles, including symbolic (t=-2.6, p<0.01), graphic (t=-21.5, p<0.001), and testimonial (t=-17.5, p<0.001). Among the pictorial themes, graphic health warnings were rated as most effective compared to symbolic (t=18.2, p<0.001), and testimonial health warnings (t=4.0, p<0.001). Also, youth with moderate or high levels of education (vs. illiterate/low), and who were younger (vs. older) gave higher effectiveness ratings (p<0.01 for all contrasts).

Significant interactions included *message theme* by *country* ( $X^2_{(df=3)}$ =9.2, *p*=0.03) and *message theme* by *education* ( $X^2_{(df=6)}$ =13.6, *p*=0.04). Although the general pattern was consistent (graphic warnings perceived as most effective, followed by testimonial warnings, symbolic warnings, and then text-only warnings), the effect of message theme was not significant for every level in either country. Bangladeshi youth gave lower effectiveness ratings for text-only, symbolic and graphic warnings than Indian youth (*p*<0.01 for all contrasts), but no country differences were observed in the ratings of testimonial warnings.

The pattern observed for the main effect of *education* (described above) did not hold across any of the four *message themes*. Among youth who had viewed text-only warnings, those with high education gave lower ratings than those with illiterate/low or moderate levels of education (t=-2.2, p<0.01 and t=-1.1, p<0.01). Among those who viewed graphic warnings, those with moderate education gave higher ratings than those with either illiterate/low or high levels of education (t=2.2, p<0.01) (t=3.2, p<0.001). Among those who viewed testimonial warnings, those with moderate education (vs.

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illiterate/low) gave higher ratings (t=2.8, p < 0.01). Effectiveness ratings did not differ by level of education for respondents who viewed symbolic health warnings.

### 6.5 Mediation and moderation results

## 6.5.1 Mediation analyses: Negative affect

To examine whether negative affect mediated the influence of viewing health warnings on perceived effectiveness ratings, a series of simple mediation tests were conducted using Ordinary Least Squares (OLS) regression-based path analysis. The bootstrap method was used, and the indirect effect (mediation) was estimated with bias-corrected (BC) 95% confidence intervals (CI) of 10,000 bootstrapped samples (Hayes, 2013; Preacher & Hayes, 2004). For statistical inference, confidence intervals that do not include zero indicate significant indirect effects. Mediation analysis was completed using the SPSS PROCESS macro (Model 4) developed by Hayes (2013).

Separate models were conducted to test each of the negative affect variables as the potential mediating variable (*fright, unpleasant, surprise,* and *disgust*), as well as the overall *Negative Affect Scale*. The results were consistent in direction and statistical significance (results not shown), indicating no difference in the predictive utility of each individual negative affect measure compared to the overall *Negative Affect Scale*. Furthermore, these variables were highly correlated with one another ( $\alpha$  0.98), thus the *Negative Affect Scale* was used for all analyses.

To examine differences in message theme on ratings of perceived effectiveness, the following dichotomous predictor variables were created: 1) Text-only vs. Pictorial (included symbolic, graphic, and personal testimonial warnings); 2) Personal testimonial vs. Graphic health effects; 3) Symbolic vs. Personal testimonials; and 4) Symbolic vs. Graphic health effects. The SPSS Process macro can only compute dichotomous or continuous variables.

In the adult model, country and individual-level predictors (age, sex, education, income, smokeless tobacco use, mixed-use, and intentions to quit) were added as covariates. In the youth model, country, age, sex, education, and smokeless tobacco use (*daily user, nondaily user, susceptible nonuser, and nonsusceptible nonuser)*, were added as covariates.

Figure 9 presents the proposed conceptual meditation model of the association between viewing health warnings with different themes (X) and perceived effectiveness (Y) via the mediating variable, negative affect (M).

Figure 9. Proposed mediation model



Table 11 presents the results of the OLS regression models examining the direct and indirect effect of viewing health warnings with different message themes on perceived effectiveness ratings. Each model corresponds to the four dichotomous predictors (X).

**Table 11.** Regression coefficients based on mediation analyses examining the direct and indirect effect of message theme (X) on perceived effectiveness (Y) through negative affect (M) (n=2,083)

		ADU	JLTS	YOUTH				
			OUT	ARIABLES				
	M (Negativ	e Affect)	Y (Perceiv effectivene	ed ess)	M (Negati	ive Affect)	Y (Perceiv effectivene	ved ess)
PREDICTORS	Coeff.	SE	Coeff.	SE	Coeff.	SE	Coeff.	SE
Model 1								
X: Text (ref.) vs. Pictorial	1.30***	0.15	0.70***	0.08	1.60***	0.14	0.74***	0.09
M: Negative Affect			0.56***	0.17			0.60***	0.02
Indirect effect of X on Y	0.74 (Bias-	corrected 9	5% CI 0.56,	0.91)	0.54 (Bias	-corrected	95% CI 0.45	5, 0.64)
Model 2								
X: Testimonial (ref.) vs.	0.87***	0.16	0.29*	0.11	0.51*	0.17	0.29*	0.10
M: Negative Affect			0.29***	0.03			0.39***	0.03
Indirect effect of X on Y	0.25 (Bias-	corrected 9	5% CI 0.15,	0.38)	0.20 (Bias	-corrected	95% CI 0.08	8, 0.34)
Model 3								
X: Symbolic (ref.) vs.	0.80***	0.18	0.92***	0.09	1.75***	0.15	0.99***	0.11
Testimonial M: Negative Affect			0.54***	0.02			0.47***	0.03
Indirect effect of X on Y	0.43 (Bias-corrected 95% CI 0.23, 0.62)				0.52 (Bias-corrected 95% CI 0.39, 0.66)			
Model 4								
X: Symbolic (ref.) vs.	1.63***	0.18	1.01***	0.11	2.25***	0.15	1.24***	0.11
Graphic M: Negative Affect			0.53***	0.03			0.47***	0.03
Indirect effect of X on Y	0.47 (Bias-	corrected 9	5% CI 0.35,	0.61 (Bias-corrected 95% CI 0.47, 0.74)				

Note. Unstandardized regression coefficients presented in table, p<0.05, p<0.01, p<0.001. Confidence intervals that <u>do not</u> contain zero indicate significance of the indirect effect.

As shown in Table 11, there was noticeable consistency in the direction and significance of the direct and indirect effects, across Models 1 to 4 for both adults and youth. Given

the consistency in results, descriptive results will only be provided in-text for youth (Model 1 in Table 11). Appendix F presents the conceptual mediation model (Figure 9) with corresponding regression coefficients for each of the four models, to visually present the results from Table 11.

Youth (*n*=490) who viewed pictorial warnings reported greater levels of negative affect than those who viewed text-only warnings (path *a*  $\beta$ =1.60, *p*<0.001), and greater negative affect predicted greater levels of perceived effectiveness (path *b*  $\beta$  =0.60, *p*<0.001). The direct effect of viewing pictorial warnings (vs. text-only) on ratings of perceived effectiveness was reduced, but remained significant when controlling for negative affect (from path *c*  $\beta$ =1.71, *p*<0.001 to path *c* '  $\beta$ =0.74, *p*<0.001). Thus, viewing pictorial health warnings (vs. text-only) both directly (controlling for negative affect) and indirectly (via negative affect) influenced perceived effectiveness ratings. Bootstrapped analyses confirmed this mediating effect (path *ab*  $\beta$ =0.54, 95% CI 0.45 to 0.64).

As noted above, the same pattern was found for adults and youth for Model 2: Graphic health effect vs. Personal Testimonial (ref.); Model 3: Personal Testimonial vs. Symbolic (ref.); and Model 4: Graphic health effect vs. Symbolic (ref.)—Table 11 and Appendix F.

### 6.5.2 Moderated mediation analyses: Message credibility

To examine whether message credibility moderated the direct (the association between message theme and perceived effectiveness, controlling for negative affect) or indirect effect (the association between message theme and perceived effectiveness, via negative affect), a moderated mediation model, was specified and included the mediation pathway described in the previous section. This moderated mediation analysis was completed using the SPSS PROCESS macro (Model 15) developed by Hayes (2013). The model is a direct effect and second stage moderation model, and included two interaction terms: 1) *message theme* by *message credibility* and 2) *negative affect* by *message credibility*. Non-significant interaction terms were removed from final models. In the adult model, country and individual-level predictors (age, sex, education, income, smokeless tobacco use, mixed-use, and intentions to quit) were added as covariates. In the youth model, country, age, sex, education, and smokeless tobacco use (*daily user, nondaily user, susceptible nonuser, and nonsusceptible nonuser)*, were added as covariates.

Variables were mean-centered (Aiken & West, 1991) and significant interactions were examined by using the 'pick-a-point' approach. The conditional direct and indirect effects of the moderator were examined at one standard deviation above and below the mean; levels corresponded to 'low', 'moderate', and 'high' levels of message credibility (Hayes, 2013).

Figure 10 presents the proposed conceptual moderated-meditation model with message theme set as the predictor variable (X), negative affect as the mediating variable (M), perceived effectiveness as the outcome variable (Y), and message credibility as the moderator (V).

Figure 10. Proposed direct effect and second stage moderation model



Table 12 presents the results of a series of regression models conducted to examine whether message credibility moderates the direct or indirect effect of viewing health warnings on perceived effectiveness ratings. Each model corresponds to the four dichotomous predictor variables (X) described in the previous section on Mediation Analyses.

	ADULTS				YOUTH			
	OUTCOMI				EVARIABLES			
	M (Negati	ive	Y (Perceived		M (Negative Affect)		Y (Perceived	
	Affect)		effectiveness)				effectiveness)	
PREDICTORS	Coeff.	SE	Coeff.	SE	Coeff.	SE	Coeff.	SE
Model 1								
X (Text (ref.) vs. Pictorial)	1.30***	0.15	0.70***	0.09	1.60***	0.13	0.53***	0.10
M (Negative Affect)			0.44***	0.03			0.47***	0.03
V (Credibility)			0.23***	0.02			0.33***	0.03
Neg. affect x Credibility			0.03***	0.01			-0.001	0.008
Message theme x Credibility			0.14**	0.05			0.13**	0.05
Model 2								
X (Testimonial (ref.) vs.	0.87***	0.16	0.19	0.10	0.51**	0.17	0.15	0.09
Graphic)								
M (Negative Affect)			-0.03	0.05			0.20***	0.05
V (Credibility)			0.44***	0.03			0.47***	0.04
Neg. affect x Credibility			0.14***	0.01			0.09**	0.02
Message theme x Credibility			0.06	0.06			0.02	0.07
Model 3								
X (Symbolic (ref.) vs.	0.80***	0.18	0.84***	0.11	1.75***	0.15	0.47***	0.13
Testimonial)								
M (Negative Affect)			0.44***	0.05			0.42***	0.05
V (Credibility)			0.18***	0.03			0.30***	0.05
Neg. affect x Credibility			0.04***	0.01			0.01	0.02
Message theme x Credibility			0.17***	0.06			0.05	0.09
Model 4								
X (Symbolic (ref.) vs.	1.64***	0.18	0.94***	0.13	2.25***	0.15	0.62***	0.15
Graphic)								
M (Negative Affect)			0.38***	0.05			0.40***	0.05
V (Credibility)			0.19***	0.04			0.31***	0.05
Neg. affect x Credibility			0.05***	0.01			0.001	0.02
Message theme x Credibility			0.10	0.11			0.11	0.09

**Table 12.** Regression coefficients for the conditional direct and indirect effects of viewing health warnings on perceived effectiveness ratings (n=2,083)

Note. Unstandardized regression coefficients presented in table, \*p < 0.05, \*\*p < 0.01, \*\*\*p < 0.001.

As shown in Table 12, among adults, the *negative affect* by *message credibility* interaction was significant across all four models (Model 1:  $\beta$ =0.03, *p*<0.001; Model 2:  $\beta$ =0.14, *p*<0.001; Model 3:  $\beta$ =0.04, *p*<0.001; Model 4:  $\beta$ =0.05, *p*<0.001), indicating moderation of the indirect effect (moderated-mediation). In other words, the effect of

viewing health warnings on perceived effectiveness ratings, via negative affect, varied as a function of message credibility.

In terms of moderation of the direct effect (association between viewing health warnings and perceived effectiveness, controlling for negative affect), the *message theme* by *message credibility* interaction was significant only for Models 1 and 3 ( $\beta$ =0.14, p=0.04 and  $\beta$ =0.17, p<0.001, respectively), indicating that perceived effectiveness ratings varied as a function of message credibility only for those who viewed any pictorial warning (vs. text-only), and for those who viewed personal testimonials (vs. symbolic warnings).

Among youth, message credibility moderated the indirect effect for those who had viewed warnings with graphic health effects (vs. personal testimonial warnings) (Model 2:  $\beta$ =0.09, *p*<0.001). Moderation of the direct effect (association between viewing health warnings and perceived effectiveness, controlling for negative affect), was found only among those who had viewed any pictorial warning (vs. text-only) (Model 1:  $\beta$ =0.13, *p*=0.007).

Significant interactions were examined to assess: 1) the conditional <u>direct</u> effect of message theme on perceived effectiveness ratings, and 2) the conditional <u>indirect</u> effect of message theme on perceived effectiveness, at three levels of the moderator (message credibility): the mean, one SD above the mean, and one SD below the mean. These three levels correspond to 'low', 'moderate', and 'high' levels of message credibility.

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Table 13 presents the results from a series of regression analyses conducted to probe

interaction terms related to moderation of the direct and indirect effects of viewing health

warnings on ratings of perceived effectiveness.

**Table 13**. Conditional direct and indirect effects of viewing health warnings with different message themes on perceived effectiveness ratings, at different values of the moderator (message credibility) (n=2,083)

ADULTS							
Conditional direct effects of message theme on perceived effectiveness, controlling for negative affect		Conditional <u>indirect</u> effects of message theme on perceived effectiveness via negative affect (Moderated mediation)					
Message credibility Coefficient (SF)		Coefficient	Bias-corrected 95%				
	Coefficient (SE)	(bootstrapped SE)	bootstrapped CI				
Model 1: Text (ref.) vs. pictorial							
Low (-2.10)	0.39*** (0.08)	0.49 (0.08)	0.35 to 0.66				
Moderate (0)	$0.70^{***}(0.09)$	0.57 (0.08)	0.42 to 0.73				
High (2.10)	1.00*** (0.17)	0.64 (0.08)	0.49 to 0.81				
Model 2: Testimonial (ref.) vs. G	raphic						
Low (-1.75)		-0.25 (0.08)	-0.44 to -0.10				
Moderate (0)		-0.03 (0.04)	-0.12 to -0.06				
High (1.75)		0.19 (0.05)	0.11 to 0.30				
Model 3: Symbolic (ref.) vs. Test	imonial						
Low (-2.10)	0.47** (0.17)	0.27 (0.09)	0.11 to 0.47				
Moderate (0)	0.84*** (0.11)	0.35 (0.09)	0.17 to 0.53				
High (2.10)	1.21*** (0.17)	0.42 (0.10)	0.23 to 0.62				
Model 4: Symbolic (ref.) vs. Gra	phic	• • •					
Very low (-2.09)		0.46 (0.12)	0.24 to 0.71				
Low (0)		0.63 (0.12)	0.41 to 0.89				
Moderate (2.09)		0.79 (0.14)	0.55 to 0.99				
	YOUT	H					
Model 1: Text (ref.) vs. pictorial							
Low (-2.10)	0.25*** (0.07)						
Moderate (0)	0.53*** (0.10)						
High (2.10)	0.82*** (0.19)						
Model 2: Testimonial (ref.) vs. G	raphic	•					
Low (-1.53)		0.03 (0.05)	-0.05 to 0.14				
Moderate (0)		0.10 (0.04)	0.04 to 0.22				
High (1.53)		0.18 (0.06)	0.07 to 0.31				
Model 3: Symbolic (ref.) vs. Testimonial							
Low							
Moderate							
High							
Model 4: Symbolic (ref.) vs. Gra	vhic						
Very low							
Low							
Moderate							

Note. Unstandardized regression coefficients presented in table, p<0.05, p<0.01, p<0.01, p<0.001. Confidence intervals that <u>do not</u> contain zero indicate significance.

As shown in Table 13, among adults (all models) and youth (Model 2), as levels of message credibility increased, so too did the indirect effect. The mediating effect of negative affect on perceived effectiveness varied depending on the extent to which a respondent believed the message to be credible.

A similar pattern of findings was observed with respect to the conditional direct effect (Models 1 and 3 for adults and Model 1 for youth), such that where the interaction of *message theme* by *credibility* was significant, as levels of message credibility increased, so too did the direct effect. Higher levels of message credibility were associated with higher levels of perceived effectiveness ratings, for adults and youth who viewed any pictorial warning (vs. text-only), and for adults who viewed personal testimonial warnings (vs. symbolic warnings).

# 6.6 Attitudes, beliefs and overall opinions of smokeless tobacco, after viewing health warnings

## 6.6.1 The influence of viewing health warnings on 'Attitudes and beliefs' about smokeless tobacco

Attitudes and beliefs were assessed both before and after the presentation of health warnings. Respondents were asked whether they "Agree", "Disagree", or "Neither agree nor disagree" with five negative attitudes and beliefs about smokeless tobacco. Appendix G presents the level of agreement (%) with five negative attitudes and beliefs about smokeless tobacco, before and after presentation of health warnings, across message

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themes. Table 14 presents the percent change in levels of agreement with the five negative attitudes and beliefs about smokeless tobacco by experimental condition, country, and age group.

	TEXT			SYMBOLIC				
	INDIA		BANGLADESH		INDIA		BANGLADESH	
	Adults	Youth	Adults	Youth	Adults	Youth	Adults	Youth
Harmful to health	+10.4	+3.4	+12.6***	+9.5**	+7.9	+1.6	+10.7**	+5.2
Society disapproves	+13.6***	0.0	+14.0***	+10.0**	+9.4	+9.6**	+5.0	+2.6
Bad example for children	+6.7	+3.9	+7.0	+7.9	+6.3	-8.9	+10.0**	+8.7**
Not acceptable for females	+14.8	+2.4	+5.6	+7.7	+8.6	+15.7**	+2.8	-0.5
Addictive	+9.6	+2.4	-2.1	+1.6	-1.6	+6.7	+4.3	+0.9
		TESTI	MONIAL		GRAPHIC			
	IND	IA	BANGL	ADESH	INDIA BANGLADES			ADESH
	Adults	Youth	Adults	Youth	Adults	Youth	Adults	Youth
Harmful to health	+14.3	-3.2	+18.7***	+10.1**	+4.9	-4.9	+14.7***	+11.2***
Society disapproves	+10.3	+2.4	+22.9***	+11.7***	+8.9	+8.9	+11.2***	+10.4**
Bad example for children	+9.5	-6.4	+18.8***	+8.7	+2.4	+5.2	+10.4**	+11.9**
Not acceptable for females	+4.7	+2.7	+17.4***	+4.2	+10.6	-3.5	+6.1	+5.2
Addictive	+13.8**	+2.4	-2.7	+2.3	0.6	+3.0	-0.8	+0.8

**Table 14.** Percent change in agreement with five attitudes and beliefs about smokeless tobacco, before and after presentation of health warnings, by experimental condition, country, and age group (n=2,083)

Numbers in the table represent the difference in the percentages of respondents agreeing with the attitude/belief about smokeless tobacco before and after viewing health warnings. Positive numbers indicate an increase in negative attitudes and beliefs. McNemar Chi-Square tests were conducted to assess differences between percentages.

\*Significant difference (at \*\*p < 0.01, \*\*\*p < 0.001) between percentages agreeing before vs. after viewing warnings.

Multiple linear models were conducted with the *Attitudes and Beliefs scale*, set as the dependent variable. The models conducted for adults adjusted for message theme, *Attitudes and Beliefs* at baseline (scale), country, age, sex, education, income, smokeless tobacco use (*daily user, non-daily user*), mixed-use, and quit intentions. The models conducted for youth adjusted for *Attitudes and Beliefs* at baseline (scale), country, age, sex, education, and smokeless tobacco use (*daily user, non-daily user*). Two-way interaction terms for message theme by socio-demographic and smokeless tobacco use variables were screened individually, and added to the final model where significant.

Among adults (n=1,057), *Attitudes and Beliefs* about smokeless tobacco did not differ based on message theme, but did differ by *country* ( $X^2_{(df=1)}=34.7, p<0.001$ ), *age* ( $X^2_{(df=1)}=6.5, p=0.011$ ), *plans to quit* ( $X^2_{(df=1)}=25.9, p<0.001$ ), and *income* ( $X^2_{(df=3)}=8.3, p=0.04$ ). Those from Bangladesh (vs. India) ( $\beta=0.45, p<0.001$ ), younger adults (vs. older) ( $\beta=0.01, p=0.011$ ), and those not planning to quit (vs. planning to quit) ( $\beta=0.33, p<0.001$ ), reported greater levels of negative *Attitudes and Beliefs* after viewing warnings. Adults with 'Moderate' levels of income reported greater negative *Attitudes and Beliefs*, compared to those with 'Low' income levels (t=1.1, p<0.01). No significant interactions were found.

Among youth (*n*=998), *Attitudes and Beliefs* about smokeless tobacco did not differ based on message theme, but did differ by *country* ( $X^2_{(df=1)}$ =48.9, *p*<0.001), *education* ( $X^2_{(df=2)}$ =8.3, *p*=0.016), and *smokeless tobacco use*  $X^2_{(df=3)}$ =8.5, *p*=0.037). Youth from Bangladesh reported greater levels of negative *Attitudes and Beliefs* compared to youth from India ( $\beta$ = 0.57, *p*<0.001). Youth with 'High' levels of education reported more negative *Attitudes and Beliefs* than youth with 'Illiterate/Low' levels of education (t=2.8, *p*<0.01). With respect to smokeless tobacco use, susceptible nonusers reported more negative Attitudes and Beliefs than nonsuceptible nonusers (t=2.9, *p*<0.01). No significant interactions were found.

# 6.6.2 The influence of viewing health warnings on the overall opinion that smokeless tobacco is 'bad'

Respondents were asked about their overall opinion about using smokeless tobacco, and whether it was 'good', 'neither good nor bad', or 'bad', both before and after viewing health warnings. Appendix H presents the proportion of respondents reporting their overall opinion of smokeless tobacco before and after presentation of health warnings and Appendix I presents the percent change difference in levels of agreement with respondents' overall opinion of smokeless tobacco.

Generalized linear models with a binomial distribution and logit link function were conducted with the overall opinion that using smokeless tobacco is 'bad', set as the dependent variable. The models conducted for adults adjusted for message theme, overall opinion at baseline ("smokeless tobacco is bad"), country, age, sex, education, income, smokeless tobacco use (*daily user, non-daily user*), mixed-use, and quit intentions. The models conducted for youth adjusted for overall opinion at baseline, country, age, sex, education, and smokeless tobacco use (*daily user, non-daily user, non-daily user, susceptible non-user,* 

*non-susceptible non-user*). Two-way interaction terms for message theme by sociodemographic and smokeless tobacco use variables were screened individually, and added to the final model where significant.

Among adults (n=1,064), the overall opinion that using smokeless tobacco is 'bad', did not differ based on message theme, but did differ with respect to sex ( $X^2_{(df=1)}=6.5$ , p=0.011), country ( $X^2_{(df=1)}=4.8$ , p=0.028), dual use ( $X^2_{(df=1)}=6.0$ , p=0.014), education ( $X^2_{(df=2)}=6.3$ , p=0.043), and income ( $X^2_{(df=3)}=36.6$ , p<0.001). Specifically, males ( $\beta=0.09$ , p=0.036), non mixed-users ( $\beta=0.09$ , p=0.025), and those from Bangladesh ( $\beta=0.07$ , p=0.034) reported greater proportions of 'bad' opinions about smokeless tobacco, after viewing warnings. Adults with either 'Low' or 'Moderate/High' levels of education reported greater overall 'bad' opinions of smokeless tobacco, compared to 'Illiterate' respondents (t=2.2, p<0.01; t=2.5, p<0.01). Those with 'Moderate' income reported greater levels of 'bad' opinions, compared to those with 'Low' income (t=3.6, p<0.001). No significant interactions were found.

Among youth (n=1,008), the overall opinion that using smokeless tobacco is 'bad', did not differ based on message theme, but did differ with respect to country ( $X^2_{(df=1)}=8.6$ , p=0.003), and education ( $X^2_{(df=2)}=8.6$ , p=0.014). Similar to findings from the adult sample, those from Bangladesh ( $\beta=0.11$ , p=0.003) reported greater proportions of 'bad' opinions about smokeless tobacco, after viewing warnings. Indian youth with 'Moderate' or 'High' levels of education reported greater levels of 'bad opinions' about smokeless tobacco, compared to those with 'Illiterate/Low' education (t=3.0, p=0.01; t=2.9, p=0.01). No significant interactions were found.

# 6.6.3 Health knowledge

All respondents were asked to report whether they believed that using smokeless tobacco caused any of a list of four health effects caused by using smokeless tobacco (oral cancer, mouth disease, heart disease, and death). Levels of agreement (%) with the health effects caused by smokeless tobacco were high across both countries and age groups.

Table 15 presents respondents' level of agreement (%) with beliefs that smokeless tobacco causes oral cancer, mouth disease, heart disease, and death, by experimental condition, and age group. Due to the extreme ceiling effect observed in the Bangladeshi sample, the data was stratified by country so as not to obscure potential differences in the Indian sample.

	TEXT				SYMBOLIC				
	INDIA		BANGLADESH		INDIA		BANGLADESH		
	Adults	Youth	Adults	Youth	Adults	Youth	Adults	Youth	
Oral cancer	87.2	85.2	97.9	96.2	89.0	91.9	99.3	95.7	
Mouth disease	68.8	79.7	98.6	99.2	77.2	79.0	99.3	99.1	
Death	65.6	81.3	93.0	96.9	70.1	79.0	91.4	96.6	
Heart disease	62.4	63.3	88.8	96.2	57.5	65.3	85.7	94.9	
	TESTIMONIAL				GRAPHIC				
	INDIA		BANGLADESH		INDIA		BANGLADESH		
	Adults	Youth	Adults	Youth	Adults	Youth	Adults	Youth	
Oral cancer	92.1	92.0	98.6	97.7	87.9	88.6	98.6	95.5	
Mouth disease	81.7	77.6	99.3	99.2	78.2	77.2	99.3	98.5	
Death	76.2	82.4	93.7	99.2	72.6	86.2	95.8	97.7	
Heart disease	69.0	60.8	96.5	92.3	60.5	75.6	90.8	94.0	

**Table 15.** Percentage of respondents who believe using smokeless tobacco causes the health effects of oral cancer, mouth disease, heart disease, and death, by experimental condition, country, and age group (n=2,083)

Multiple linear regression models were conducted with the *Health Knowledge Scale*, set as the dependent variable. Data were stratified by country, and the models conducted for adults adjusted for message theme, age, sex, education, income, smokeless tobacco use (*daily user, non-daily user*), mixed-use, and quit intentions. The models conducted for youth adjusted for message theme, age, sex, education, and smokeless tobacco use (*daily user, non-daily user, susceptible non-user, non-susceptible non-user*). Two-way

interaction terms for message theme by socio-demographic and smokeless tobacco use variables were screened individually, and added to the final model where significant.

No significant differences were found for Bangladeshi adults (n=563). However, among Indian adults (n=501), *health knowledge* differed by message theme ( $X^2_{(df=3)}=8.3$ , p=0.04), sex ( $X^2_{(df=1)}=8.4$ , p=0.004), age ( $X^2_{(df=1)}=9.4$ , p=0.002), and income ( $X^2_{(df=3)}=30.5$ , p<0.001). Specifically, males (vs. females) ( $\beta=0.17$ , p=0.035), younger adults (vs. older adults) ( $\beta=0.01$ , p=0.015), and non-mixed users (vs. mixed users) ( $\beta=$ 0.30, p<0.001) held greater levels of health knowledge. Also, adults who viewed health warnings with personal testimonials reported greater levels of health knowledge than adults who had viewed text-only warnings (t=2.6, p=0.01), symbolic warnings (t=1.9, p=0.01), or graphic health warnings (t=2.5, p=0.01). With respect to income, those with 'Low' levels of income reported lower levels of health knowledge than those with 'Moderate' (t=-4.5, p<0.001) and 'High' (t=-2.3, p=0.01) levels of income. Furthermore, those who did not state their income, reported lower levels of health knowledge than those with 'Moderate' (t=-4.8, p<0.001) and 'High' (t=3.0, p<0.01) levels of income. No significant interactions were found.

No significant differences were found for Bangladeshi youth (*n*=509). Among Indian youth (*n*=499), *health knowledge* did not differ by message theme, but it did differ by age  $(X^2_{(df=1)}=5.8, p=0.016)$  and smokeless tobacco use  $(X^2_{(df=3)}=33.7, p<0.001)$ . Older youth reported greater levels of health knowledge, compared to those who were younger ( $\beta$ = 0.17, *p*=0.016). With respect to smokeless tobacco use, *nonsusceptible* non-users reported

greater levels of health knowledge than *susceptible* non-users (t=3.6, p<0.001) and daily users (t=5.3, p<0.001). No significant interactions were found.

# 6.7 Perceived effectiveness <u>rankings</u> of health warnings: Withinexperimental conditions

To examine whether the effect of message theme persisted across all health effects, respondents were randomly assigned to one of five health effects—oral cancer, mouth disease, heart disease, addiction, or death—and completed a ranking task in which they were presented with the four health warnings (Conditions 1 to 4) specific to that health effect. Respondents were asked to compare the health warnings to each other (on the same screen) and rank the warnings from most to least effective. The order was reverse-coded, and mean ranks for each warning label were computed, whereby higher numbers corresponded with greater rankings of perceived effectiveness. Table 16 presents perceived effectiveness rankings across health effects and message themes.

	0 )	TEXT	SYMBOLIC	TESTIMONIAL	GRAPHIC
	ORAL CANCER	Tobacco causes oral cancer TOBACCO KILLS	Tobacco causes oral cancer	Tobacco causes oral cancer <sup>1</sup> bid my saw to of an area of an area area of an area area area area a	Tobacco causes oral cancer TOBACCO KIILS
	India				
-	Adults $n=98$	$1.4 (0.8)^{a}$	$2.1(0.8)^{b}$	$3.0(0.8)^{c}$	$3.5(0.8)^{d}$
	Youth <i>n</i> =102	$1.4(0.8)^{a}$	$2.1(0.8)^{b}$	$3.0(0.7)^{c}$	$3.4(0.9)^{d}$
	Bangladesh	( )	× /	( )	( )
	Adults $n=119$	$1.3 (0.6)^{a}$	$1.9(0.6)^{b}$	$3.0(0.7)^{c}$	$3.9(0.3)^{d}$
	Youth $n=98$	$1.3(0.6)^{a}$	$1.9(0.4)^{b}$	$3.0(0.5)^{c}$	$3.9(0.4)^{d}$
	MOUTH DISEASE	Tobacco causes mouth disease	Tobacco causes mouth disease	Toppacer Price Pri	Topacco causes mouth disease
	India			TODAGOG KILLS	TODAUGU KILLS
	Adults $n=101$	$1.5(0.8)^{a}$	$22(08)^{b}$	$2.9(0.8)^{\circ}$	$34(09)^{d}$
	Youth $n=96$	$1.4 (0.8)^{a}$	$1.9(0.6)^{b}$	$3.0(0.7)^{\circ}$	$3.6(0.6)^{d}$
	Bangladesh	( )	× /		( )
	Adults $n = 114$	$1.4 (0.6)^{a}$	$1.9(0.7)^{b}$	$3.6(0.6)^{c}$	$3.0(0.7)^d$
	Youth $n = 105$	$1.3(0.6)^{a}$	$1.9(0.5)^{b}$	$3.4(0.5)^{c}$	$3.4(0.8)^{c}$
FECTS	HEART DISEASE	Tobacco causes heart disease	Tobacco causes heart disease	Tobacco tuses heart disease "This my second tuses disc. tuses that the my second tuse and to tuse tuses that tuses that tuses	Tobacco causes heart disease
ΕF	India		TUBACCO KILLS	TOBACCO KILLS	TOBACCO KILLS
ΗE	$\frac{11013}{100}$	$1.7(0.0)^{a}$	$(0, 0)^{a}$	$28(0.0)^{b}$	$25(0.8)^{\circ}$
E	Nouth $n = 102$	1.7(0.9) 1 7 (0.9) <sup>a</sup>	2.0(0.9) 1.0(0.9) <sup>a</sup>	2.8(0.9) 2.9(0.8) <sup>b</sup>	$3.5(0.8)^{\circ}$
N	Rangladesh	1.7 (0.7)	1.7 (0.7)	2.9 (0.0)	5.5 (0.0)
$\mathbf{E}_{\ell}$	Adults $n = 107$	$1.5(0.7)^{a}$	$1.9(0.7)^{b}$	$31(05)^{\circ}$	$35(10)^{d}$
Η	Youth $n=103$	$1.3 (0.6)^{a}$	$2.0 (0.7)^{b}$	$3.0(0.6)^{c}$	$3.7 (0.8)^{d}$
	ADDICTION	Tobacco is highly addictive	TOBACCO is highly addictive	Tobacco is highly addictive "Insight Could duit Edeaco any tobacco ru tobacco Tobacco ru tobacco tobac	Tobacco is highly addictive
	India			I ODAGGO KILLS	
	Adults $n=103$	$1.6 (0.8)^{a}$	$1.9(0.8)^{b}$	$3.0(0.8)^{c}$	$3.5(0.7)^{d}$
	Youth $n=98$	$1.6(0.8)^{a}$	$1.7(0.8)^{a}$	$3.0(0.7)^{b}$	$3.6(0.7)^{c}$
	Bangladesh	~ /			~ /
	Adults $n=104$	$1.4 (0.6)^{a}$	$1.9(0.7)^{b}$	$3.0(0.5)^{c}$	$3.8(0.6)^{d}$
	Youth $n=105$	1.4 (0.6) <sup>a</sup>	1.9 (0.8) <sup>b</sup>	3.0 (0.5) <sup>c</sup>	3.7 (0.7) <sup>d</sup>
	DEATH	Tobacco kills 2500 Indians every day TOBACEE KILLS	TOBACCO Rills 2500 Indians every day	Tobacco kila 2500 indans every day "Refer a abox tobacco Killus	Tobacco kills 2500 Indians every day
	India				
	Adults <i>n</i> =99	$1.5 (0.8)^{a}$	$2.5(1.0)^{b}$	$3.2(0.9)^{c}$	$2.8(1.0)^{b}$
	Youth <i>n</i> =101	$1.5 (0.9)^{a}$	$2.3 (0.9)^{b}$	$3.3(0.9)^{c}$	$2.9(0.8)^{d}$
	Bangladesh	_	L	-	L
	Adults $n=117$	$1.5 (0.8)^{a}$	$2.0(0.8)^{b}$	$3.5(0.7)^{c}$	$2.9(0.8)^{d}$
	Youth $n=95$	$1.6 (0.8)^{a}$	2.2 (1.0) <sup>o</sup>	$3.5(0.8)^{\circ}$	$2.7 (0.9)^{a}$

**Table 16.** Perceived effectiveness rankings (Mean rank, SD) of smokeless tobacco health warnings by health effect, within-experimental conditions (n=2,083)

Higher numbers indicate higher perceived effectiveness rankings. Different letters denote significant differences of perceived effectiveness rankings <u>between</u> experimental conditions, based on Unadjusted Wilcoxon Signed-Rank tests with a Bonferroni correction for multiple comparisons, where p<0.01.

Text-only warnings were ranked as least effective for three out of five health effects (oral cancer, mouth disease, and death) across both countries, and age groups. Across all health effects, graphic and testimonial-style health warnings were consistently ranked as most effective, compared to text-only and symbolic warnings. Graphic health warnings were ranked as most effective against all other message themes (text-only, symbolic, and personal testimonial), for three out of five health effects (oral cancer, heart disease, and addiction). For the health effect of 'death', adults and youth in both countries ranked the personal testimonial as most effective.

# 6.8 Pictorial health warning labels in India

Indian respondents were asked to rank (from most to least effective) four Indian pictorial health warnings implemented at the time of study (Health warnings B through E, Table 17), as well as the old pictorial health warning (Health warning A). Table 17 presents perceived effectiveness rankings of these five pictorial health warnings.

**Table 17.** Perceived effectiveness rankings (Mean; SD) of Indian health warning labels implemented on smokeless tobacco packages at the time of study, among adults and youth (n=995)

	$\mathbf{A}$ †	В	С	D	Ε
Implementation dates	2009-2011	2011-2013		2011-April 2015	
	TOBACCO KILLS Tobacco causes cancer	TOBACCO KILLS	TOBACCO KILLS	TOBACCO KILLS	TOBACCO KILLS
Adults n=499					
	$1.5(1.1)^{a}$	$3.0(1.3)^{b}$	$3.7(1.2)^{c}$	$3.3(1.2)^{d}$	$3.3(1.2)^{d}$
<b>Youth</b> <i>n</i> =496					
	$1.5(1.1)^{a}$	$3.0(1.2)^{b}$	$3.7(1.3)^{c}$	$3.5(1.2)^{d}$	$3.3(1.1)^{e}$

Higher numbers indicate higher levels of perceived effectiveness. Different letters denote significant differences in rankings between health warning labels based on unadjusted Wilcoxon Signed-Rank tests with a Bonferroni correction for multiple comparisons, where p < 0.01.

<sup>†</sup>Warning A was the first health warning implemented, and although it was being phased out at the time of study it still remained on some smokeless tobacco packages. Warnings B through E (implemented December 1, 2011) appeared on smokeless tobacco packages at the time of study.

Pictorial health warnings implemented at the time of study on smokeless tobacco packages in India (Health warnings B through E) included images of graphic health effects, and were consistently ranked higher on perceived effectiveness compared to the old health warning label (Health warning A), which included a symbolic image of scorpion. Adults and youth ranked health warnings consistently, with the exception of Health warning D, which was given a higher perceived effectiveness ranking by youth compared to adults ( $X^2_{(df=1)}$ =4.9, p=0.027).

# 7.0 **DISCUSSION**

This study examined the perceived effectiveness of novel health warnings for smokeless tobacco packages among adults and youth in Navi Mumbai, India, and Dhaka, Bangladesh. This study provides observational data on smokeless tobacco users, including perceptions of health warnings implemented in India, and is among the first to experimentally test the perceived effectiveness of message content in two low-and middle-income countries.

#### 7.1 Patterns of use and perceptions of harm

Several differences in patterns of smokeless tobacco use and perceptions of harm were observed between the Indian and Bangladeshi sample. With respect to youth, Indian respondents were more likely to be daily smokeless tobacco users, and non-users were more likely to be susceptible to smokeless tobacco use, compared to their Bangladeshi counterparts. These findings may highlight the influential role of the marketing environment in India, the ease of access, and more permissive cultural and social norms with regards to the social acceptability of smokeless tobacco (Schensul et al., 2013).

In contrast, Indian users indicated greater intentions to quit than adult and youth users in Bangladesh. The longer history of tobacco control in India may help explain this difference. In 2009, India became the first country in the world to implement pictorial health warnings on smokeless tobacco packages. Also in the same year, the first national mass media campaign highlighting the harmful effects of smokeless tobacco from reallife users was aired on radio and television in India (Murukutla et al., 2012). Previous research has shown that tobacco control interventions, such as smoking bans and antitobacco mass media campaigns have the potential to impact key outcomes such as reducing smoking prevalence (Wilson et al., 2012). In recent years, Bangladesh has made progress with respect to some tobacco control policies; however, these policy changes may not have had enough time to penetrate the public's understanding of smokeless tobacco issues the same way it has in India. Aside from the burden of smokeless tobacco, Navi Mumbai in India and Dhaka in Bangladesh are quite different with respect to culture and tobacco control policy environments. Thus, it was not surprising that betweencountry differences were observed.

False beliefs about the harmfulness of specific smokeless tobacco products were also common. Additionally, more than half of users reported that they chose their usual product on the basis that it was "less harmful" than other types. Perceptions of harm also differed with respect to a respondent's usual product. For example, while *gutka* was rated as the most harmful smokeless tobacco product in India overall, respondents who reported *gutka* as their "usual product" perceived *zarda* to be most harmful instead. This is similar to previous research indicating that tobacco users have a tendency to rate their own product as less harmful (O'Connor et al., 2007). It is important to note that to our knowledge there are no differences in relative harm across the types of local smokeless tobacco products assessed in the study.

This set of findings may be explained through Cognitive Dissonance theory (Festinger, 1962). In the context of tobacco use, this theory suggests that those with no intentions to

quit and perhaps a greater dependence on tobacco may attempt to rationalize their behaviour to help overcome the dissonance they experience when faced with information that runs counter to their lifestyle choice. Further, these findings might also indicate an optimistic bias among smokeless tobacco users, particularly those with a "usual product", in which they perceive their own product as "less harmful" than other products (Arnett, 2000; Weinstein, Marcus, & Moser, 2005). Thus, there is a need to communicate the health effects of smokeless tobacco use within these populations to try and address the false beliefs found in this and other studies (Gupta & Ray, 2003; Kakde et al., 2012; Khawaja et al., 2006; Rahman et al., 2012).

# 7.2 Awareness and support for health warnings

Similar to previous studies (ITC Project, 2011, 2015), the current study found high levels of support for health warnings, including those with pictures. Even in India—a country with pictorial health warnings for smokeless tobacco packages—a majority of respondents still reported that health warnings should have "more health information". This is similar to findings for health warnings on cigarette packs—even in countries with pictorial warnings, like Canada, Australia, Uruguay, and Thailand—support for "more health information" on packs was still high (Hammond et al., 2004). Most respondents were also able to correctly identify whether health warning labels were currently implemented on smokeless tobacco packs in their country. This set of findings suggests a general sense of awareness of tobacco control policy and perhaps the desire to change current labeling regulations in both of these countries. However, awareness in this study was based on a measure of agreement (i.e., yes/no responses). Had unprompted recall

been used, it is possible that lower levels of awareness may have been observed.

With respect to message avoidance, some neurophysiological data suggests gruesome images may elicit 'defensive avoidance', leading to message rejection (Kessels, Ruiter, Wouters, & Jansma, 2014; Kessels, Ruiter, & Jansma, 2010). To date, however, experimental and population-based studies have failed to detect any significant adverse outcomes from defensive reactions like avoidance (Borland et al., 2009; D. Hammond et al., 2004; Peters et al., 2007).

The current study found that more than one-third of the Indian sample reported that they made an effort to avoid the current smokeless health warnings. This may be an underestimation, given that during the time this study was conducted, some packs still carried the previous, less effective (Arora et al., 2012) warning (scorpion image: Appendix A), which may not have elicited the same avoidance. Previous research examining avoidance behavior in Canada among adult smokers found that those who reported avoiding health warnings (36%) were just as likely to quit, make a quit attempt, or reduce their smoking, as smokers who did not avoid warnings (Hammond et al., 2004). Furthermore, a recent study conducted in Australia, Canada, the United Kingdom, and the United States, (Yong, 2014) that examined the impact of cigarette warnings on quit attempts via mediational pathways found that avoidance behavior actually increased the frequency of thinking about the harmful effects of smoking, which may apply to smokeless tobacco use as well.

### 7.3 Perceived effectiveness by message theme

In support of *Hypothesis 1a*, pictorial warnings were perceived to have greater efficacy than text-only warnings, similar to previous research for health warnings on cigarette packs conducted primarily in high-income (Cameron, Pepper, & Brewer, 2013; Hammond, 2011) and low-and-middle income countries (Fathelrahman et al., 2010; Green et al., 2014; Thrasher et al., 2007; Yong et al., 2013).

In addition, pictorial warnings depicting gruesome health effects were perceived as most effective, even over pictorial health warnings with a personal testimonial. This finding did not support *Hypothesis 1b*, which stated that there would be no difference in perceived effectiveness ratings between warnings with graphic health effects and those with personal testimonials. Based on the mixed evidence in this domain, it was unknown whether personal testimonials—a narrative communication strategy suggested as promising for cancer prevention and control (Kreuter et al., 2007)—would prove more or less effective than graphic warnings without a personal narrative. Personal testimonials may be particularly impactful in countries with traditions of sharing knowledge through storytelling. Indeed, interventions to address pressing public health issues in LMICs, such as HIV/AIDS in Africa, have often included narrative approaches in their interventions (Vidanapathirana, Abramson, Forbes, & Fairley, 2006; Wei et al., 2011).

Given that smokeless tobacco use is concentrated among the rural poor in India and Bangladesh, the most effective way to reach these low-literacy populations may be to include pictures, which can be universally understood. However, it is possible that people can "read" pictures in different ways. For example, pictures of diseased organs may or may not be recognized, and further, cultural groups may also vary in their focus on different organ systems as responsible for illness, as well as in the anxiety that they associate with different kinds of bodily symptoms (Good & Good, 1981; McElroy, 1990). The current study found that warnings with graphic health effects for all health effects but 'death' were ranked the highest overall, perhaps suggesting that respondents were able to "read" the pictures of diseased body parts consistently.

A possible explanation for the lower effectiveness of the 'death' warning may be that the visual portrayal of 'death' as a graphic health effect was not successful. For example, warnings depicting 'oral cancer', 'mouth disease', 'heart disease', and 'addiction', all included external and visceral graphic images of diseased and damaged body parts, whereas the 'death' warning included an image that might be considered more symbolic rather than graphic. Thus, the 'death' warning may not have had the same initial hard-hitting impact as the more gruesome and graphic images for 'oral cancer', 'mouth disease', 'heart disease', and 'addiction'. Death by its very nature is inherently symbolic, abstract, and difficult to portray. Symbolic representations of death may even differ across cultures. A grave or tombstone, for example, may be poorly understood in cultures with different traditions surrounding death, such as cremation.

#### 7.4 Perceived effectiveness by individual-level factors

The current study also found differences in ratings of perceived effectiveness as a function of individual-level factors.

According to *Hypothesis 2a*, it was expected that health warnings on smokeless tobacco packages would be more novel in Bangladesh and thus perceived as more effective, compared to in India. In contrast to what was hypothesized, overall, no differences were found in how adult respondents rated health warnings, with the exception of symbolic warnings, which Bangladeshi respondents tended to rate higher. Among youth, Indian respondents tended to rate health warnings <u>higher</u> than their Bangladeshi counterparts. This is particularly interesting in light of the longer history of tobacco control in India, and may imply that Indian respondents may not have become habituated to the existing pictorial health warnings.

In support of *Hypothesis 2b*, the results indicated that adults intending to quit rated warnings as more effective than those without any quit intentions. According to the Transtheoretical Model of Behavior Change, (Prochaska & DiClemente, 1983) respondents with no quit intentions, or "pre-contemplators", may be attempting to rationalize their behavior by discounting information that is in direct opposition to their lifestyle choice, and thus giving lower effectiveness ratings (Festinger, 1962).

Previous research suggests that pictorial warnings with graphic health effects may be especially beneficial in communicating health risk among disadvantaged populations with low literacy rates (Fong et al., 2009; Hammond et al., 2012; Thrasher et al., 2010). However, findings from the current study were mixed with respect to educational attainment. Among adults, those who were illiterate tended to give higher effectiveness ratings than those with higher education levels, similar to previous studies (Hammond et al., 2012; Thrasher et al., 2010). This finding has particular importance given the lower literacy rates in both India and Bangladesh (~60%), (UNESCO Institute for Statistics, 2013) and reinforces the importance of pictorial warnings. Among youth, the opposite pattern was observed, in that youth with moderate or high levels of education (vs. illiterate/low) gave higher effectiveness ratings. Furthermore, the interaction effect indicated that this pattern did not hold across the different message themes. Thus, *Hypothesis 2c* was supported in the adult sample, but not among the youth sample. Future research should examine the impact of different design elements and message content across educational attainment, as well as smokeless tobacco use dependence, to ensure that warning messages reduce, rather than exacerbate, disparities in tobacco use.

#### 7.5 Mediation and moderation

Negative affect was found to mediate the association between viewing health warnings and ratings of perceived effectiveness, such that viewing any type of pictorial warning elicited greater levels of negative affect, which in turn increased ratings of perceived effectiveness, supporting *Hypothesis 3a*.

In support of *Hypothesis 3b*, message credibility moderated the indirect effect of negative affect, meaning that the strength of the association between negative affect and perceived effectiveness varied as a function of message credibility. In this case, higher message credibility strengthened the association between affect and effectiveness across all models, but only for adults. Among youth, message credibility moderated the indirect effect only among those who had viewed warnings with graphic health effects versus

those who had viewed warnings with personal testimonials. In other words, graphic health warnings elicited greater message credibility. That personal testimonials included images of 'lived experiences' featuring older individuals, may have rendered the health effects of smokeless tobacco as too remote for youth. These younger respondents may have not have been able to identify with the depicted individual (Kreuter et al., 2007; Larkey & Hecht, 2010), nor with the experience conveyed (i.e, the death of a spouse).

These findings support the broader literature suggesting that negative emotions like fear underlie the effectiveness of warnings (Hammond et al., 2004; Borland et al., 2009; Peters et al., 2007; Witte and Allen, 2000; BRC Marketing and Social Research, 2004; Elliot & Shanahan Research, 2003; Environics, 1999, 2000; Kees, Burton, Andrews, & Kozup, 2010). In the domain of anti-tobacco ads, health messages that produce strong negative emotional arousal, such as graphic depictions of health effects, are perceived as more effective, more likely to be recalled, and generate more thought and discussion (Biener et al., 2004, 2000; Biener, Wakefield, Shiner, & Siegel, 2008; Davis et al., 2011; Pechmann & Reibling, 2006; Terry-McElrath et al., 2005; Wakefield et al., 2003). These findings highlight the importance of not only selecting imagery that will elicit negative emotional reactions, but also imagery that is believable and perceived as credible with its target audience.

# 7.6 The influence of viewing health warning on attitudes and beliefs and health knowledge

#### 7.6.1 Attitudes and beliefs

According to *Hypothesis 4a*, it was expected that viewing pictorial health warnings would increase the proportion of respondents reporting negative attitudes and beliefs and the overall opinion that smokeless tobacco is bad. However, no differences were observed between message themes in levels of negative attitudes and beliefs or in the overall opinion that "smokeless tobacco is bad", after viewing health warnings, thus *Hypothesis 4a* was not supported.

With respect to negative attitudes and beliefs, this may partly be due to an observed ceiling effect, in which baseline levels of attitudes and beliefs were high across both countries and age groups. Additionally, for both the negative attitudes and beliefs measure, and the overall opinion that "smokeless tobacco is bad", it is possible that the study design did not provide appropriate content that might influence these general attitudes and beliefs. For example, while every warning label contained information about the *specific* health effects caused by smokeless tobacco use, the questions asked about smokeless tobacco in *general* (i.e., "What is your overall opinion of smokeless tobacco?"). Had the health warnings been presented so that they appeared on actual smokeless tobacco products (instead of as stand-alone warnings), and had the questions asked about these specific products (instead of general attitudes and beliefs towards smokeless tobacco), the results may have been more reflective of the differences between message themes (i.e., text-only vs. graphic health effects).

However, *Hypothesis 4b* was supported, such that respondents from Bangladesh reported greater levels of negative attitudes and beliefs, as well as a greater proportion reporting that "smokeless tobacco is bad", compared to Indian respondents. Presumably, health warnings may be more novel in Bangladesh compared to India.

#### 7.6.2 Health knowledge

Similar to *Hypothesis 4a, Hypothesis 5a* stated that levels of health knowledge will differ based on the type of warning viewed, such that those who viewed text-only and symbolic warnings would report lower levels of health knowledge, than those who viewed warnings with graphic health effects or personal testimonials.

This hypothesis was partially supported, as differences were observed between message themes for levels of health knowledge, but only among adults. Similar to the ceiling effect observed in the measure of negative attitudes and beliefs, levels of agreement for all health effects were generally high across both countries and age groups, but especially for Bangladesh. This ceiling effect may be indicative of social desirability. Had unprompted recall been used rather than a measure of agreement (i.e, yes/no response options), differences may have been observed as a function of message theme.

Due to the nature of the data (extreme ceiling effect observed in the Bangladeshi sample), the analyses of health knowledge was stratified by country so as not to obscure potential differences in the Indian sample. As a result, *Hypothesis 5b* was unable to be tested. It was hypothesized that Indian respondents would report higher levels of health knowledge compared to Bangladeshi respondents, given India's longer history of tobacco control.

#### 7.7 Limitations

The current sample was not a probability-based or nationally representative, although study sites were selected to capture demographic diversity within the sampling areas. Overall, the patterns of use observed in the present study are similar to findings from the Global Adult Tobacco Survey (GATS), a nationally-representative household survey of adult smokeless tobacco users (15 years and older) in India and Bangladesh (International Institute for Population Sciences (IIPS), 2010; World Health Organization, 2009).

It is important to note that the adult sample in the current study was made up of entirely smokeless tobacco users, so prevalence of smokeless tobacco use cannot be estimated. However, it is possible to compare prevalence of use in the study's youth sample against national estimates, as it is made up of both smokeless tobacco users and nonusers between the ages of 16 and 18. According to GATS data from India (which defines "adult" as those 15 years of age and above), the overall prevalence of smokeless tobacco use was 8.2% among females aged 15 to 24 years and 23.1% among males of the same age range. The sample in the current study followed a similar pattern, with 13.0% of females and 21.8% of males aged 16 to 18 years reporting smokeless tobacco use. In Bangladesh, GATS data estimates the overall prevalence of smokeless tobacco use for those 15 to 24 years of age, at 4.0% among females, and 9.3% among males. Smokeless

tobacco use in the current study sample was 6.2% of females and 19.9% of males aged 16 to 18 years, in Bangladesh. Although the general patterns were consistent with nationally representative data, estimates from the current study were generally higher, which could be due to a variety of factors, the most likely of which was the sampling method. Overall, the current sample reflects similar patterns to those of national estimates; however, caution is still advised when generalizing the results from the present study to other regions. With respect to India, it is also important to note its regional diversity. According to GATS data from India, the prevalence of current smokeless tobacco use varies dramatically by state, ranging from approximately 5% in Goa to approximately 49% in Bihar. The current study was conducted in the state of Maharashtra, where the prevalence of smokeless tobacco use was around 28% (International Institute for Population Sciences (IIPS), 2010).

Another significant challenge in conducting cross-country research is translation. Although a systematic committee-approach was followed, it is possible that some survey measures may not have maintained conceptual equivalence after translation. This was observed with the measure of 'importance'. The original wording read: "Please tell me whether this warning message is *relevant* to you". Local partners were concerned that the concept of 'relevance' would not be understood, but that the concept of 'importance' would be. Even after revision, it seems the concept of 'importance' was not well understood in Bangladesh, and was confirmed with a test of Cronbach's alpha. When the measure of 'importance' was removed from an index that included other similar measures (i.e., credibility and attention), the alpha increased substantially in Bangladesh. Similar to the moderating role of message 'credibility' on ratings of perceived effectiveness, theoretically, the 'importance' of a message may also drive evaluations of perceived effectiveness. However, due to issues with translation and conceptual equivalence of this measure, 'importance' was not included in the analysis. It is also possible there were other issues in translation and conceptual equivalence, therefore caution is also advised when interpreting direct comparisons between India and Bangladesh.

Furthermore, measuring 'attention' through self-report tends not to be an accurate representation of actual visual attention paid. Instead, standard market research methods such as eye-tracking, are increasingly being used to better understand visual processing and attention (Wedel & Pieters, 2008). As eye-tracking becomes the standard for measuring visual attention in the literature surrounding tobacco health warning labels and advertisements (Fischer, Richards, Berman, & Krugman, 1989; Maynard, Munafò, & Leonards, 2013; Munafò, Roberts, Bauld, & Leonards, 2011; Strasser, Tang, Romer, Jepson, & Cappella, 2012), 'attention', as it was measured in the current study was not included in the current analysis.

The present study also has limitations common to survey research, including social desirability. Bangladeshi respondents agreed with more statements about negative attitudes and beliefs, a pattern that persisted across different levels of income, mixed-use, age, and quit intentions, possibly highlighting an increased level of social desirability in responding when compared to their Indian counterparts. An extreme ceiling effect was also observed in the measure of Health Knowledge in the Bangladeshi sample. One

explanantion for this tendency towards agreement in both countries might be cultural orientation. For example, India and Bangladesh can be defined as having a collectivist orientation and previous research suggests that social desirability tends to be highest in these collectivist cultures, which value maintaing good relationships with group members and putting group interests before their own. Individualistic cultures on the other hand—which typically represent 'Western' societies—value freedom of opinion and the attainment of one's goals (Lalwani, Shavitt, & Johnson, 2006; Middleton & Jones, 2000).

Alternatively, it is possible that Bangladeshi respondents did in fact have higher levels of negative attitudes and beliefs, and health knowledge, particularly given the trend towards strengthened civil society action on tobacco control. Although this is possible, it might be more plausible that social desirability did exist to some extent as it would in any survey using a face-to-face format. Furthermore, there may have been additional issues with interviewer bias in Bangladesh. The data for the recall measure (in which respondents were asked to recall any details of the health warnings they had just viewed) was unusable as it came to our attention that the protocol was not followed in Bangladesh. The recall was meant to be unprompted; respondents were asked to list any details they remembered and interviewers were to select the correctly recalled items on preprogrammed checklists. Interviewers instead turned their tablets to face respondents and had the respondent read the checklist and select the items they recalled viewing. Thus, in addition to social desirability, high levels of agreement observed in Bangladesh could be the result of a variety of factors.

It is also important to note that social desirability tends to be highest for agree/disagree questions, thus not all measures would have been prone to this bias. For example, it is likely that social desirability would would have had less impact on measures of negative affect and perceived effectiveness, given that they were assessed with a Likert scale.

Given the experimental nature of the study, it was not possible to mimic the effects of "real-world" exposure to health warnings, where users see the warnings multiple times over prolonged periods of time, rather than viewing it once. Exposure to health warnings in real-world settings tends to be more passive than in the context of an experimental study. This immediate, forced exposure may have led to stronger reactions to warnings, particularly those with graphic health effects. However, studies using similar methodology, displaying health warnings on computer screens and on mock cigarette packs have found similar results (Hammond et al., 2012; Thrasher et al., 2012). Additionally, warnings with personal testimonials might not have the same initial hardhitting impact as warnings with graphic health effects. The images used for personal testimonial warnings depicted a 'lived-experience' with an accompanying narrative, rather than a gruesome image. It is possible that warnings with personal testimonials may take longer to process, and may have greater long-term impacts. The true efficacy of personal testimonials may have been underestimated, or perhaps could not be captured with the current study design.

The current study findings are cross-sectional. Given time and budget constraints, it was not possible to employ a longitudinal design to follow up with respondents, nor was it

feasible to use more objective outcome measures (i.e., eye-tracking) to measure 'attention', for example. However, it is important to note that previous research indicates that *perceived* effectiveness ratings have been shown to predict *actual* effectiveness (i.e., attitude and behavioural changes) in the domains of drug use, seatbelt use, and drunk driving (Dillard, Shen, & Vail, 2007; Dillard, Weber, & Vail, 2007), and more recently in the domain of anti-smoking advertisements (Brennan, Durkin, Wakefield, & Kashima, 2014; Davis, Nonnemaker, Duke, & Farrelly, 2013).

## 7.8 Future research

Regulators often desire local evidence to justify policy decisions. In the case of health warnings, the evidence base is primarily from high-income Western countries. Future studies should continue to focus on the systematic evaluation of health warning content in diverse cultures, to ensure the 'domestic' evidence base is strengthened.

The consistency in findings across India and Bangladesh from the current study is notable with respect to warnings with graphic health effects out performing all other message themes. However, as personal testimonials are increasingly used in mass media campaigns worldwide, future research should examine the efficacy of this approach in greater detail. Care should also be exercised when developing warnings to fit into message themes, such as "graphic health effects" or "personal testimonials". These categories do not have to be mutually exclusive; warnings with graphic health effects can also contain a personal testimonial. Future research should examine the potential interactions and synergistic effects of message theme and message content. In addition to message theme (i.e., personal testimonial or graphic health effects), it is also important to note that some message content presents a greater challenge than others. For example, health effects such as 'death' and 'addiction', which by their very nature may be inherently symbolic, abstract, and difficult to visually portray. Symbolic representations of death may even differ across cultures. A grave or tombstone, for example, may be poorly understood in cultures with different traditions surrounding death, such as cremation. Furthermore, it is quite clear that the warning for 'death' as a graphic health effect did not perform in the same manner as the other warnings within this theme. It is likely that the depiction of 'death' in the current study was more symbolic than graphic. The 'death' warning was most effective in the form of a personal testimonial, suggesting that some health effects might be better represented as a personal testimonial than others. Asides from message content, other aspects of warning label content might also be driving efficacy, for example, the production quality, the message source, or other cues (Niederdeppe, Davis, Farrelly, & Yarsevich, 2007), which may be harder to examine. Future studies should pre-test warning label content to examine how well individual warnings execute a particular theme or style. Perhaps involving a qualitative component, such as focus group testing, to better understand how message content is perceived within the population it will be tested in.

In addition to examining the message characteristics that were explored in the current study (i.e., message theme and health effects), future research should also examine other design and content elements that may impact efficacy, such as gain and loss-framed messaging. Prospect Theory (Kahneman & Tversky, 1979) helps explain decision making under conditions of risk: when presented with gain-framed messaging, people tend to be risk-averse, and when confronted with the same factually-equivalent information, but framed as a loss, they are instead risk-seeking. According to Prospect Theory, decisions can be influenced by changing the way in which the information is presented (i.e., framing), but not changing the factual information.

Applying Prospect Theory to the study of health messaging, Rothman and Salovey (1997) suggest that the health behaviour in question will dictate whether the message should be framed as a gain or a loss. Previous research has shown that gain-framed messaging is more effective for health behaviours that have a certain outcome, such as applying sunscreen, because this behaviour *will* prevent skin cancer (Detweiler, Bedell, Salovey, Pronin, & Rothman, 1999). Similar to skin cancer prevention, smoking cessation is associated with outcomes that have a high degree of certainty, and little risk (i.e., quitting smoking *will* reduce the risk of many health effects), thus according to Prospect Theory, gain-framed messaging for tobacco-cessation would be more persuasive than messages framed as a loss.

In fact, a meta-analytic review by Gallagher and Updegraff (2011) found gain-framed messaging to be effective in promoting illness prevention behaviour, like smoking cessation. Loss-framed messaging has been shown to work best in illness detection, such as mammography utilisation (O'Keefe & Jensen, 2009), breast self-examination (Meyerowitz & Chaiken, 1987), and HIV testing (Kalichman & Coley, 1995), which are all associated with outcomes of greater uncertainty and higher levels of risk (i.e., cancer diagnosis, HIV-positive). Contrary to this, anti-tobacco messaging is typically lossframed, as these are the messages that have been shown to increase evoked fear, and when coupled with adequate self-efficacy, have been shown to increase healthy behaviours (Witte & Allen, 2000). Future research should examine the multiple ways with which to frame health messages, particularly in diverse cultural contexts. This would provide the evidence base to inform message content in greater detail.

Asides from message characteristics and framing, future research might also consider mediators, moderators, and outcomes that were not assessed in the current study. While care was taken to conceptualize mediation and moderations models based on both theory and empirical research, the analysis contained in this dissertation focused on basic mediation and moderation models with only one mediator and one moderator. In this study, credibility was conceptualized as a moderator of the association between negative affect and perceived effectiveness. Certainly, credibility might also be conceptualized as a mediator, or even as an outcome in itself. Additionally, other cognitive measures like attitudes and beliefs could also be conceptualized as mediators. Attitudes and beliefs are believed to be precursors to behaviour change, and thus it would be worthwhile for future research to examine whether attitudes and beliefs mediate the association between viewing warnings and perceived effectiveness. In addition, although the analysis surrounding mediation in this study focused on one mediator, negative affect, it is possible that different warnings might impact affective and cognitive measures differently. Conducting complex mediational analyses with several mediators, both affective and cognitive, would address this issue. Furthermore, it would also be

interesting to examine the interaction between negative affect and credibility, and whether more emotionally engaging images are perceived as more credible.

Future studies should also seek to understand other aspects of the policy environment that allow for greater efficacy of health warning messages. For example, Brennan and colleagues (2011) found that the introduction of pictorial warnings for cigarette packs in Australia alongside anti-tobacco television ads with the same message content proved to increase levels of awareness of the health effects included in the warning label and TV ad. In the context of low and middle income countries, while a TV ad may not be feasible due to limited financial resources, other mediums could be explored, for example radio ads.

Finally, in addition to the continuing experimental evaluation of health warnings, opportunities may also exist to conduct observational studies. In particular, Bangladesh has proposed a set of large, graphic, pictorial warnings to replace the current text-only warnings found on cigarette packs and will be the first warnings to ever be implemented for smokeless tobacco packs. The warnings are expected to be implemented in March 2016. Although implementation delays are expected, this provides an opportunity to evaluate health warnings in a real-world setting, as they are implemented (and over-time) in a low-and-middle income country that did not previously have warnings for smokeless tobacco packages.

# 7.9 Policy implications

The context surrounding smokeless tobaccco use in India and Bangladesh is unique. Chewing betel quid is a two-milennia old tradition passed down from the Mughal emperors, and is deeply embedded within the culture. Given these long standing cultural and social norms, it was not surprising that the current study found a high prevalence of daily use of smokeless tobacco, as well as the high prevalence of false beliefs about the harms associated with its use. In light of this, there remains a critical need to effectiveley communicate the health effects of smokeless tobacco use in these countries, which are arguably populations that may benefit greatly from effective health messaging.

Given that smokeless tobacco use in these countries is concentrated among those with lower education and income, health warnings with pictorial images may help overcome literacy barriers and convey health information in a way that text-only warnings cannot. As evidenced by the fact that this study found high levels of support for implementing stronger warnings with "more health information" in the case of India, and for implementing health warnings on smokeless tobacco packages in Bangladesh, it seems as though the general public would be receptive to and encouraging of strengthening policy around these issues.

In terms of message content, warnings with graphic health effects performed the best against all other message themes. Meaning that if existing graphic images are able to used, this may save on development costs as novel images will not need to be created or culturally adapted. This is of utmost importance in developing country contexts, where financial resources for public health initiatives may be scarce.

While the focus of this dissertation was on health warning labels for smokeless tobacco packages, it is important to note that health warnings on product packging should be viewed as one component of a comprehensive tobacco control strategy. Tackling the issue of smokeless tobacco, or tobacco more generally, in any context is difficult, but is especially challenging in countries with positive social norms towards tobacco use. Trying to warn the population of the dangers of tobacco use with large, graphic health warnings may not be enough. A multi-pronged approach is needed to tackle this issue. The evidence, although limited, suggests that tobacco control mass media campaigns can be used to address the burden of inequality among these vulnerable populations, particularly in rural areas. Thus, it is recommended that health warnings be implemented alongside mass media campaigns with the same message content to keep the message "top of mind" (Brennan et al., 2011; Turk et al., 2012).
### 8.0 CONCLUSIONS

India and Bangladesh bear the greatest burden of smokeless tobacco use, and furthermore, India has the highest incidence of oral cancer in the world. The findings from this dissertation reinforce the need to implement effective tobacco control strategies in low- and middle-income countries like India and Bangladesh. This set of findings add to the limited evidence base in low-and-middle income countries that graphic, feararousing images have the potential to be an effective tool for health communication within tobacco control.

This set of findings suggest that health warnings depicting the graphic health effects caused by tobacco use are perceived as most effective, when compared to health warnings with text-only, symbolic, or personal testimonial messages. Of particular importance is that these findings mirror patterns found in high-income countries with respect to cigarette warnings, and suggest that the ways in which individuals respond to different types of message content may be similar across diverse cultural environments.

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# **APPENDICES**

## APPENDIX A. Health warning implementation timeline in India

**2006:** Proposed health warnings for cigarettes ('smoking kills') and smokeless tobacco ('tobacco kills')



**2007:** Proposed health warnings for cigarettes ('smoking kills') and smokeless tobacco ('tobacco kills')



TOBACCO KILLS







**2009 to 2011:** Health warnings that were implemented for cigarettes ('smoking kills') and smokeless tobacco ('tobacco kills)



TOBACCO KILLS



\*These warnings (implemented December 1, 2011) appeared on smokeless tobacco packages at the time of study.

## APPENDIX A continued. Health warning implementation timeline in India



Tobacco caus



APPENDIX B. Flow chart of the main events of betel but (BN) induced carcinogenesis

Note. From: Sharan, R. N., Mehrotra, R., Choudhury, Y., & Asotra, K. (2012). Association of betel Nut with carcinogenesis: Revisit with a clinical perspective. PLoS ONE, 7(8), e42759. doi: 10.1371/journal.pone.0042759

# **APPENDIX C.** Study questionnaire and codebook (India)

INTRODUCTION/SCREENER	HINDI	MARATHI
Introduction:	नमस्ते, हम हिलीस-सेक्सारिया इन्स्टिटयूट फॉर	नमस्ते, आम्ही हिलीस-सेक्सारिया इन्स्टिटयूट फॉर पब्लीक हेल्थ
"Hi, we're from the Healis-Sekhsaria Institute	पब्लीक हेल्थ की तरफ से आये है और हम कॅनडा के सनिब्दर्सिन ऑफ बॉरर्स के साथ नंबाक के पॅकेस पर	या संस्थेतून आलो आहोत आणि कॅनडा च्या यूनिव्हर्सिटी ऑफ बॉरर्स सोवन नंनाखन्या पाकिसंबरील वेगवेगव्या प्रकारच्या
survey about different types of health	यूगण्हातमध्य मंबंधी चेतावनीयाँ दै उसके बारे में	पाटणू साथस संवार्ध्य पामिटावराल पंगपगळवा प्रकारण्या "आरोग्यविषयक सचना" या वर सर्वेक्षण करत आदोत. या
warnings on smokeless tobacco packaging,	सर्वेक्षण कर रहे है । यह 20 मिनीट का सर्वेक्षण	सर्वेक्षणासाठी 20 मिनिटे लागतील. या साठी तुम्हाला
in conjunction with the University of Waterloo	होगा. आपका अनमोल वक्त देने के लिए आपको	आमच्याकडून 100 रुपया पर्यंतची भेट देण्यात येईल. तुम्ही या
minutes. You will receive a small gift (valued	हमारी तरफ से १०० रुपये तक का गिप्ट दिया	सर्वेक्षणात अधिक माहिती जाणून घेण्यास इच्छुक आहात ?
at 100 INR)as a token of our thanks. Do you think you might be interested in hearing more	जायेगा । क्या आप इस सर्वेक्षण के बारे में अधिक जानकारी लेकर इसमें शामिल होना चाहेंगे ।	Screening Script:
Screening Script:	Screening Script:	<b>[INTERVIEWER NOTE</b> : Only ask if respondent appears less than 30 years of age.]
[INTERVIEWER NOTE: Only ask if respondent appears less than 30 years of	[INTERVIEWER NOTE: Only ask if respondent appears less than 30 years of age 1	तुमचे वय 19 वर्षे किंवा त्यापेक्षा जास्त आहे का ?
"Are you 19 years of age or older?"	पुष्टः] आपकी उम्र 19 साल या उससे जादा है t	Yes →IF YES: Continue to past month smokeless tobacco use question
$V_{00} \rightarrow IE VES$ : Continue to past month		
smokeless tobacco use question	Yes →IF YES: Continue to past month smokeless tobacco use question	No→ IF NO: जर नाहीः तुमच वय 16 वर्ष किवा त्यापक्षा जास्त आहे का?
No <b>→IF NO</b> : "Are you 16 years of age or older?"	No→ IF NO: अगर नही, क्या आपकी उम्र 16 माल या उससे जादा है ?	1 Yes →IF YES: Invite participant to continue on iPad
<ol> <li>Yes →IF YES: Invite participant to continue on iPad.</li> </ol>	1 Yes → अगर हा, सहभागी को आय पॅड के	। पुछः 2 No→ जर नाहीः (वय वर्षे 16 पेक्षा कमी) - दुर्दैवाने, आम्ही
2 No <b>→IF NO (age&lt;16)</b> –	सामने बिठाकर सर्वेक्षण शुरु करे ।	फक्त वय वर्ष 10 आणि त्यापक्षा आधक असणा-यानाच या सर्वेश्वणामध्ये सनभागी करु दक्तित्वो माफ करा आपण सनभागी
"Unfortunately, we can only include people age 16 and older in this study. Sorry, you are not eligible to participate, but thank	2 No→ अगर नही, ( उम्र 16 साल से कम )- दुर्भाग्यवश से, हम आपको इस सर्वेक्षण में शामील नही कर सकते, हम 16 साल या उससे जादा उम्र के	त्वपंगणमध्य सहमागा कर इाण्छता. माक करा, आवण सहमागा होण्यास पाञ नाही. परंतु आपण आपला जो अमुल्य वेळ दिला त्याबद्दल आभारी आहोत. सर्वेक्षणाचा शेवट करा.
you for your time." TERMINATE.	लोगोंको इस में शामील कर सकते है । आपका अमुल्य वक्त देने के लिए हम आपके आभार प्रकट करते है।	

→IF REFUSED: "Unfortunately, we need to know your age to determine your eligibility for the study." IF STILL NO RESPONSE, TERMINATE.	→ अगर मना कियाः माफ करे, पर इस सर्वेक्षण के लिए पाञ है या नही यह समझने के लिए हमे आपकी उम्र जानना जरुरी है। फिर भी कोई जवाब नही, तो सर्वेक्षण समाप्त करे।	→ जर नकारः दुर्दैवाने, या अभ्यासासाठी तुम्ही पाञ आहात की नाही, हे जाणून घेण्यासाठी आम्हाला तुमचे वय जाणून घेणे आवश्यक आहे. जर काही प्रतिसाद नाही तर सर्वेक्षणाचा शेवट करा
SMOKELESS TOBACCO USE: "For the purpose of this study, we will consider "smokeless tobacco" to include any of the following. 1 Mishri 2 Betel quid with tobacco (paan) 3 Plain chewing tobacco 4 Gutka 5 Khaini 6 Zarda 7 Tobacco toothpaste/paste 8 Nasal/ oral snuff 9 Lal dantmanjan 10 Dokta 11 Gudhaku 12 Gul 12 Other (aposify):	<ul> <li>धूँए रहित तंबाकू का प्रयोगः</li> <li>इस सर्वेक्षण के लिए हम निम्नलिखित धूँए रहित तंबाकू का कौनसा उत्पादन शामिल करेंगे ।</li> <li>1 मशेरी</li> <li>2 तंबाकू सहित पान</li> <li>3 सादा चबाने की तंबाकू</li> <li>4 गुटका</li> <li>5 खैनी</li> <li>6 जर्दा</li> <li>7 तंबाकू दंतमंजन / पेस्ट</li> <li>8 नाक से या मुहॅं से ली जानेवाली तंबाकू पावडर / तपकीर</li> <li>9 लाल दंत मंजन</li> <li>10 दोक्ता</li> <li>11 गुडाकू</li> <li>12 गुल</li> </ul>	<b>धुम्रविरहित तंबाखूचा वापर</b> : या अभ्यासासाठी धुम्रविरहित तंबाखूसाठी चे खालीलपैकी कोणतेही उत्पादन नमुद करा. 1 मिश्री 2 सुपारी व तंबाखू असलेले पान 3 साधा चघळण्याचा तंबाखू 4 गुटका 5 खैनी 6 जर्दा 7 तंबाखू दंतमंजन/ दंतमंजन 8 नाकाद्वारे/ तोंडावाटे ओढायची तपकीर 9 लाल दंतमंजन 10 दोकता 11 गुढाकु 12 गुल 13 इतर धूम्रविरहीत उत्पादन (नमूद करा):
<ul> <li>14 None of the above</li> <li>[Ask only if 19 years or older:]</li> <li>"Have you used smokeless tobacco in the past month?"</li> <li>1 Yes→IF YES: Invite participant to continue on iPad.</li> <li>2 No→IF NO and age=16-18: Invite participant to continue on iPad</li> </ul>	14 उपरोक्त मे से कोई नही क्या आपने पिछले महीने में धूँए रहित तंबाकू का प्रयोग किया है? 1. हाँ → भाग लेनेवाले को आयपॉड (iPad) आमंञित करे । 2. नहीं → यदि आयु 16-18 आयपॉड (iPad) पर फिर भी आमंञित करके जारी रहे ।	तुम्ही मागील महिन्यात धुम्रविरहित तंबाखूचा वापर केला आहे का ? १ होय →जर होय असेल तर सहभागीस पुढील प्रश्न विचारा. २. नाही→जर वय१६ ते १८ वर्ष मुलाखत कर्त्याला प्रश्नावली भरण्यासाठी बसवा.

3 No→IF NO and age=19+ -"Unfortunately,	3. नहीं → यदि आयु = 19+: दुर्भाग्यवश हम इस	३. नाही→ जर वय१९ वर्षापेक्षा जास्त, माफ करा, या
for this study, we are only looking for people	अध्ययन में उन्ही लोगों को शामिल कर रहे है, जो	अभ्यासासाठी आम्ही फक्त धुम्रविरहित तंबाखूचा वापर करणा-या
who use smokeless tobacco. Sorry, you are	धुँए रहित तंबाक का प्रयोग करते है, हमे खेद है हम	लोकांना माहिती विचारू इच्छितो.)
not eligible to participate, but thank you for	आपको शामिल नहीं कर सकते है <del>है</del> परन्त आपके	
	समय के लिए धन्यवाद।	
Adult smokoloss usors: 250 malos 250		
females		
- past-month smokeless tobacco use=1 and		
age >18		
Youth (smokeless tobacco users): 125		
males, 125 females		
- past-month smokeless tobacco use=1 and		
age 16-18		
Youth (non-users): 125 males, 125 females		
- past-month smokeless tobacco use=2 and		
IF QUOTAS ARE FULL:		
<ul> <li>For age: "Unfortunately, at this time, we are only looking for people [aged 16 to 18/ age 19 or over]. Sorry, you are not eligible to participate, but thank you for your time."</li> <li>For smokeless tobacco use: "Unfortunately, at this time, we are looking for people who [use smokeless tobacco / people who do not use smokeless tobacco]. Sorry, you are not eligible to participate, but thank you for your time."</li> </ul>	<b>उम्र के लिएः</b> दुर्भाग्यवश से, हम आपको इस सर्वेक्षण में शामील नही कर सकते, उम्र 16 से 18 साल तथा उम्र 19 साल या उससे जादा उम्र के लोगों को ही इस सर्वेक्षण में शामील कर सकते है । आपका अमुल्य वक्त देने के लिए हम आपके आभारी है । For smokeless tobacco use:दुर्भाग्यवश, हम इस समय उन्ही लोगों को शामिल कर रहे है, जो नियमित रुप से या जो धूँए रहित तंबाकू का इस्तेमाल नहीं करते है । हमे खेद है हम आपको इसमें शामिल नहीं कर सकते है । लेकिन आपके समय के लिए आपको धन्यवाद	<b>वयासाठीः</b> माफ करा. दुर्दैवाने तुम्ही या सर्वेक्षणात भाग घेण्यास पाञ नाही आहात. कारण आम्ही फक्त वय वर्षे 16 ते 18 किंवा वय वर्षे 19 आणि त्यापेक्षा जास्त वयातील लोकांना यात सहभागी करत आहोत. परंतु तुम्ही तुमचा वेळ दिल्या बद्दल तुमचे आभार. For smokeless tobacco use: दुर्दैवाने, यावेळी आम्ही अशा लोकांना अभ्यासामध्ये घेत आहोत जे (धुम्रविरहित तंबाखूचा नियमीत वापर करतात / धुम्रविरहित तंबाखूचा वापर करत नाही). माफ करा तुम्हाला आम्ही अभ्यासामध्ये सामील नाही करू शकत, परंतु आपण आपला मौल्यवान वेळ दिल्याबद्दल धन्यवाद.
<b>INTERVIEWER</b> : If eligible, continue on iPad.	<b>आय समह का चनाव करे</b> (आय के स्क्रिनर के आधार	<b>वयाचा गट निवडा</b> (वयाच्या स्क्रिनर वर आधारीत, वाच नका)
Select age group (based on age screener)	पर पहींचे मत)	
		तरुण
	यवक	प्रौढ
	। प्रौह	

Select language: (DO NOT READ)	<b>भाषा चुनिए</b> (पढीये मत)	<b>भाषा निवडा</b> (वाचू नका)
ENGLISH	अंग्रेजी	इंग्रजी
	हिंदी	हिंदी
	मराठी	मराठी
Great – thank you for your interest. I'm now	ग्रेट, आपकी रुची के लिए धन्यवाद । हम आपको	ग्रेटः तुम्ही दाखविलेल्या आवडीबद्दल धन्यवाद. आता मी तुमच्या
going to go over an information letter with	जानकारी पञ के बारे में बतायेंगे और यह जानकारी	समोर हे माहितीपञ वाचणार आहे व याची प्रत तुम्हाला देणार
you, and this copy is yours to keep. Once	पञ आपके लिए होगा । एक बार यह पञ मिलने के	आहे. तुम्हाला एकदा या अभ्यासाचा तपशील समजला की तुम्ही
you have received the details of the study, I'll	बाद आप इस सर्वेक्षण में शामिल होना चाहोंगे या	यात सहभागी होण्यास इच्छुक आहात की नाही, हे विचारल्या
ask you whether or not you are willing to participate and then we will begin the	नही, इसके बाद हम सर्वेक्षण की शुरुवात करेंगे।	नंतर आपण मुलाखत सुरु करु.
interview.		<b>मुलाखतकारासाठी सूचनाः</b> सहभागीस माहिती पञक दया.
[INTERVIEWER NOTE: Give participant the Information Letter]	<b>मुलाखतकर्ता के लिए सूचनाः</b> सहभागी को सूचनापञ दे।	जर तुम्हाला काही शंका असतील, तर तुम्ही मध्येच रोखून ज्याने निप्तान कह शकता
Please follow along and interrupt me with any		त्याच । गरसग करु शकता.
questions you may have:	- अगर आपको कोई भी सवाल हो तो हम	- तंबाखूच्या पाकिटांवरील आरोग्यविषयक सूचनांबद्दल
	किसाभा वक्त राक सकत हा ।	लोकांचे मत जाणून घेण्यासंबंधीच्या संशोधन अभ्यासात
- You are being asked to participate in a		सहभागी होण्याबद्दल तुम्हाला विचारले जात आहे.
research study that asks for people's		
opinions about health warnings on	- आपको तंबाकू के पँकेज पर दि गयी स्वास्थ्य	<ul> <li>तुम्हाला 20 मिनीटांच्या मुलाखतीत सहभाग घ्यावा</li> </ul>
smokeless tobacco packaging.	संबंधी चेतावनी के बारे में लोगों की राय जानने	लागेल. प्रथम तुम्हाला तुमच्या तंबाखुच्या सवयी बद्दल
	वाले एक शोध अध्ययन में भाग लेने के लिए	विचारले जाईल व नंतर तुम्हाला काही आरोग्यविषयक सूचना
- You would participate in a 20 minute	कहा जा रहा है ।	दाखवून त्या प्रत्येका बद्दलचे तुमचे मत विचारले जाईल.
interview. First you will be asked questions about you and your tobacco use, and then you will be shown a number of health warnings and asked about your opinions of	- आप की एक 20 मिनिट की मुलाखत होगी । पहले आपको आपके तंबाकू इस्तेमाल के बारे में सवाल पुछे जायेंगे, उसके बाद आपको अलग-	- या अभ्यासात सहभागी होण्यासाठी तुमचे वय वर्षे 16 किंवा त्यापेक्षा अधिक असले पाहिजे.
each.	अलग स्वास्थ्यसंबंधी चेतावनीयाँ दिखाई	
	जायेंगी और हर एक के बारे में आपकी राय	- सहभागी होणे ऐच्छीक आहे. तुम्हाला नको असलेल्या प्रश्नास
Vou must be 16 years of any an older to	पुछी जायेंगी ।	तुम्ही नकार देऊ शकता.
narticipate in this study		
	- इस अध्ययन में भाग लेने के लिए आपकी उम्र 16	- आम्ही आपल्याला सांगू इच्छितो की, या अभ्यासाचा भाग
	साल या उससे अधिक होनी चाहिऐ ।	म्हणून आम्ही आपल्याला धुम्रविरहित तंबाखूच्या
		पाकिटावरील आरोग्य विषयक इशारे दाखवणार आहोत.
		त्यापका काहा चिञाह वणनात्मक असताल आणि काही

- Participation is voluntary and you may decline to answer particular questions if you wish.	- इस अध्ययन में सहभाग स्वैच्छिक है अगर आप चाहों तो किसी भी सवाल का जवाब देने के लिए इन्कार कर सकते है।	तुम्हाला दुःखी पण करु शकतील. जर कदाचित असे घडले तर आम्ही अशी आशा करतो की, जॆ काही नकारात्मक बदल असतील ते तात्पुरत्या स्वरुपाचे असेल.
- We need to warn you that, as part of this study, you'll be asked to view health warnings on smokeless tobacco packaging and some of the pictures are quite graphic and may upset some people. If this were to occur, we expect that any negative affect would be temporary	- हम आपको बताना चाहते है की, इस अध्ययन के हिस्से के रुप में आपको धूँए रहित तंबाकू के पँकेट पर जो तसवीरे या कुछ ग्राफिक्स है, वह दिखाई जायेंगी, जो कही लोगो को परेशान भी कर सकते है। अगर ऐसा हो तो हम उम्मीद करते है की कोई भी नकारात्मक असर अस्थाई होगा।	-तुम्ही दिलेल्या वेळेचे आभार व्यक्त करण्यासाठी तुम्हाला आमच्याकडून छोटीशी भेट (100 रुपयापर्यतची) देण्यात येईल. -या अभ्यासासाठी तुम्ही पुरवलेली माहिती गुप्त ठेवली जाईल. हि माहिती फक्त अभ्यासातील संशोधनकर्ते तसेच सहाय्य यांच्यापर्यतच पोहचु शकेल.
- In appreciation of your time, you will receive a small gift valued at 100 rupees as a token of our thanks.	- आपका अमुल्य वक्त देने के लिए हम आपके आभार प्रकट करते है। उस आभार के रुप में (१०० रुपये तक) छोटासा गिप्ट देंगे ।	-तुमच्याकडून कोणतीही व्यक्तीगत माहिती जसे नाव किंवा पत्ता घेतला जाणार नाही. फक्त आपली सही किंवा नावाचे इनिशीयल घेतले जातील ज्या वरुन आम्ही दिलेली भेट
- All of the information you provide in this study will be kept strictly confidential - only the investigators and research assistants directly associated with the study will have access to this information.	-इस अध्ययन में आपके व्दारा दि गयी जानकारी को गोपनीय रखा जायेगा, केवल जजकर्तांओं और अनुसंधान सहाय्याकों के साथ जुडे लोगों को ही यह जानकारी दिखाई जायेगी। अगाके नगा या पने के रुप पें कोई भी लानीगत	आपल्याला मिळाली यासंबंधी माहिती आमच्याकडे राहिल. -तुम्ही पुर्णपणे तुमच्या मताने या अभ्यासामध्ये सहभागी व्हायाचे कि नाही हे ठरवू शकता आणि तुम्ही हे सर्वेक्षण कोणत्याही क्षणी थांबवू शकता.
<ul> <li>No personal information such as name or address will be collected, other than a signature or initial to confirm that your small</li> </ul>	जानक गोप पा पा के एव म कोई पा व्यक्तगर जानकारी आपके पास से ली नही जायेगी । आपको गिप्ट मिला या नही यह पुस्ती करने के लिए सिर्फ आपके हस्ताक्षर लिये जायेंगे ।	-या अभ्यासासाठी यूनिव्हर्सिटी ऑफ वॉटर्लू तसेच हिलीस- सेक्सारिया इन्स्टिटयूट फॉर पब्लीक हेल्थ च्या नैतिकता समितीने परवानगी दिली आहे. जर आपल्याला काही प्रश्न असतील तर आपण हिलीस इथे संपर्क करु शकता.
gift was received. Your survey responses will not include any identifying information.	-इस अध्ययन में आप सहभाग जारी रखने के लिए स्वतंञ है और आप किसी भी समय अध्ययन रोक	-जर आपल्याला काही प्रश्न असतील तर आपण हिलीस मध्य डॉ. गुप्ता यांच्याशी संपर्क साधू शकता.
- You are free to choose whether or not to continue participation in this study, and you can choose to stop being a part of it at any time. If you choose to stop the survey at any point, you will still receive a phone card.	सकत हे । -इस अध्ययन की यूनिव्हर्सिटी ऑफ वाँटर्लू और हिलीस-सेक्सारिया इन्स्टिटयूट फॉर पब्लीक हेल्थ के नैतिकता समिती से समीक्षा की गई है. अगर आपको	-आपल्याला काही प्रश्न आहेत? जर नसेल, तर तुमच्या परवानगीने आपण सर्वेक्षणाला सुरुवात करु शकतो.

<ul> <li>This study has been reviewed by and received ethics clearance through the University of Waterloo and the Healis - Sekhsaria Institute for Public Health. If you have any comments or concerns resulting from your involvement please contact the Director of the Office of Research Ethics at the University of Waterloo, whose contact information is listed in your letter.</li> </ul>	सहभाग से लेकर कोई सवाल है में नैतिकता समिती से संपर्क कर सकते है । -यदि अध्ययन के बारे में आपको कोई सवाल है तो आप हिलीस मे डॉ. गुप्ता से संपर्क कर सकते है । क्या आपको कोई सवाल है ? यदि नही, तो आप इस अध्ययन में सहभाग लेने के लिए सहमती दे सकते हो, ताकी हम अध्ययन जारी कर सके ।	
<ul> <li>If you have any questions about the study you can also contact Dr. Prakash Gupta at Healis.</li> </ul>		
Do you have any questions? If not, we'd like to ask you to give your consent if you would like to participate in the study.		
[INTERVIEWER NOTE: Read out loud exactly as written]	<b>मुलाखत लेनेवाले के लिए सूचनाः</b> जो लिखा है वो जोर से पढे ।	<b>प्रश्नकर्त्यासाठी सूचनाः</b> जे काही लिहिले आहे ते मोठयाने वाचा.
Based on the information you received in the Information letter, do you agree to take part in this research study being conducted by Healis – Sekhsaria Institute for Public Health and the University of Waterloo? Yes →IF YES, continue to survey No →IF NO, "Thank you for your time." TERMINATE	सूचना पञ में प्राप्त की गयी जानकारी के आधार पर आप, हिलीस-सेक्सारिया इंस्टिटयूट फॉर पब्लीक हेल्थ और कॅनडा च्या यूनिव्हर्सिटी ऑफ वॉटर्लू के व्दारा किये जानेवाले अध्ययन में भाग लेने के लिए सहमत है। 1 हाँ 2 नहीं → आपका अमुल्य वक्त देने के लिए हम आपके आभार प्रकट करते है।	माहितापआमध्य सवक्षणाबद्दल जा माहिता आह त्यावरुन आपण या सर्वेक्षणामध्ये सहभागी होऊ इच्छिता जो हिलीस-सेक्सारिया इंस्टिटयूट फॉर पब्लीक हेल्थ आणि कॅनडा च्या यूनिव्हर्सिटी ऑफ वॉटर्लू व्दारा करण्यात येत आहे. १ होय २ नाही → आपला अमुल्य वेळ दिल्या बद्दल आभारी आहोत.

MAIN SURVEY			
	Great, we'll now begin the interview.Before we begin I'd like to let you know that there are no right or wrong answers to any of these questions. We are just interested in your personal opinion. Please be assured that all your responses will be kept entirely confidential. To begin, I'm going to ask you some questions about yourself and your smokeless tobacco use.	बहुत अच्छे, अब हम साक्षात्कार शुरू करेंगे। हम इसको शुरू करने से पहले यह बताना चाहेंगे कि इन प्रश्नोके कोई भी सही या गलत उत्तर नहीं है, हम तो सिर्फ आपकी व्यक्तिगत राय जानना चाहते हैं। कृपया निश्चिन्त रहें कि आपकी प्रतिक्रिया बिल्कुल गोपनीय रहेगी। शुरू करने से पहले हम आपके धूँए रहित तंबाकू के उपयोग के बारे में जानना चाहेंगे।	ग्रेट, आता आपण मुलाखत सुरू करू शकतो. मुलाखतीला सुरूवात करण्याआधी आम्ही आपणास सांगु इच्छितो कि इथे कोणते उत्तर बरोबर किंवा चुक नसेल , आम्हाला फक्त तुमचे वैयक्तिक मत जाणून घेण्यामध्ये रूची आहे. तुमची सर्व उत्तरे ही गोपनीय असतील. सुरूवातीला आम्ही तुम्हाला काही तुमच्या आणि तुमच्या धुम्रविरहित तंबाखूच्या वापराविषयी प्रश्न विचारणार आहोत.
D.gender	Select gender of respondent: (DO NOT READ) FEMALE MALE	प्रतिवादी / उत्तरदाता के लिंग का चुनाव करेः (पढीये मत) स्ञी पुरुष	सहभागीचे लिंग निवडाः (वाचु नका) स्ञी पुरुष
D. age (AII)	To begin, may I ask how old you are? →IF age<16 – "Unfortunately, we can only include people age 16 and older in this study. Sorry, you are not eligible to participate, but thank you for your time." TERMINATE. →IF 16-18 – if started as adult survey, mark as youth and continue with youth education question (Y.D Educ (16-18)) →IF 19+ – if started as youth survey, mark as adult and continue with adult education questions (D. Educ (19+))	पहले हम पुछना चाहता हूँ, तुम्हारी उम्र क्या है । → अगर आपकी उम्र 16 साल से कम हैं:- दुर्भाग्यवश से, हम आपको इस सर्वेक्षण में शामील नही कर सकते, हम 16 साल या उससे जादा उम्र के लोगोंको इस में शामील कर सकते है । आपका अमुल्य वक्त देने के लिए हम आपके आभार प्रकट करते है । TERMINATE	सुरुवात करण्यापूर्वी, आपले वय काय आहे ? <b>→जर वय 16 वर्षपिक्षा कमीः</b> - दुर्दैवाने, आम्ही फक्त वय वर्ष 16 आणि त्यापेक्षा अधिक असणा- यांनाच या सर्वेक्षणामध्ये सहभागी करु इच्छितो. माफ करा, आपण सहभागी होण्यास पाञ नाही. परंतु आपण आपला जो अमुल्य वेळ दिला त्याबद्दल आभारी आहोत. TERMINATE

SLTStatus1	In the last 30 days, how often did you use any smokeless tobacco products?	पिछले 30 दिनों मे ग्रापने कभी धूँए रहित तंबाकू के उत्पाद का इस्तेमाल किया है <b>?</b>	गेल्या ३०दिवसात तुम्ही कधी धुम्रविरहित तंबाखूचा वापर केला म्राहे ?
	1 Every day 2 At least once a week 3 At least once in the last month 4 Not at all	1 रोजाना 2 सप्ताह में कम से कम एक बार 3 पिछले महीने में कम से कम एक बार 4 कभीभी नही	१ दररोज २ म्राठवड्यात किमान एकदा तरी ३ गेल्या महिन्यात किमान एकदा तरी ४ कधीच नाही
	<ul> <li>→IF ANS=1, 2, OR 3: skip to SLTStatus2</li> <li>→IF ANS=4 and age=16-18: skip to EVERUSE</li> <li>→IF 4 and age=19+: Unfortunately, for this study, we are only looking for regular smokeless tobacco users. Sorry, you are not eligible to participate, but thank you for your time. TERMINATE.</li> </ul>	→IF 4 and age=19+:-दुर्भाग्यवश्च, हम इस समय उन्ही लोगों को शामिल कर रहे है, जो नियमित रूपसे/ या जो धूँए रहित तंबाकू इस्तेमाल नहीं करते है। हमे खेद है हम ग्रापको इसमें शामिल नहीं कर सकते है। लेकिन ग्रापका ग्रमुल्य वक्त देने के लिए हम ग्रापके ग्राभार प्रकट करते है।	→IF 4 and age=19+:-जर वय ४ ग्रासि १९ वर्षा पेद्धा जास्त माफ करा, ग्राम्ही फक्त धुम्रविरहित ्छितो. माफ करा ग्रापरग या ग्रभ्यासासाठी पात नाही. ग्रापरग ग्रापला ग्रमुल्य वेळ दिल्या बद्दल धन्यवाद.

EVERUSE [Non-	I am now going to ask you questions	अब हम आपसे धूँए रहित ' तंबाकू का उपयोग ', के	आता आम्ही तुम्हाला तुमच्या धुम्रविरहित
users youth]	about your smokeless tobacco use.	बारे में प्रश्न पछेंगे.	तंबाखच्या वापरा विषयी प्रश्न विचारणार आहोत.
			~
	Have you <b>ever used</b> any smokeless tobacco products?	क्या आपने कभी निम्नलिखित में से किसी धूँए	तुम्ही खालील धुम्रविरहित तंबाखू उत्पादना पैकी
		रहित तंबाकू के उत्पाद का प्रयोग किया हैं?	कोणतेही उत्पादन कधी ही वापरले आहे का ?
	1 Mishri	1 मशेरी	
	2 Betel quid with tobacco (paan)	2 तंबाकू सहित पान	1 मिश्री
	3 Plain chewing tobacco	3 सादा चबाने की तंबाकू	2 सुपारी व तंबाखू असलेले पान
	4 Gutka	4 गुटका	3 साधा चघळण्याचा तंबाखू
	6 Zarda	5 खैनी	4 गुटका
	7 Tobacco toothpaste/paste	6 जर्दा	5 खना ० <del> र्न</del>
	8 Nasal/ oral snuff	7 तंबाकू दंतमंजन / पेस्ट	० जदा 7 संस्थान संस्थान्त्र ( संस्थानन
	9 Lal dantmanjan	8 नाक से या मुहें से ली जानेवाली तंबाकू पावडर /	7 तबाखू दतमजन/ दतमजन 9 नाकाटारे/ कोंटाबारे ओटागनी नाकीर
	10 Dokta	तपकीर	० नाकाद्वारा ताडावाट जाढायथा तपकार ० लाल टंतमंजन
	11 Gudhaku	9 लाल दत मजन	10 दोकता
	12 Gui 12 Other emokelese product	10 दाक्त। 14 <del>सम्पन</del>	11 गढाक
	(specify)	ी गुडाकू 19 मच	12 गुल
	14 None of the above	ाट गुल 13 अन्य धमतिरनीत उत्पादन (बताये)	13 इतर धूम्रविरहीत उत्पादन (नमूद करा):
	88 R	13 जन्म यूच्रापरहात उत्पादन (बताप) 14 उपरोक्त में से कोई नही	14 वरील पैकी कोणतेही नाही
	99 DK		88 R
		88 R	99 DK
		99 DK	
	If any products chosen skip to Agelnit.		
	If no products chosen skipt to Sproducts.		

SLTStatus3	You mentioned that you currently use	आप धूँए रहित तंबाकू का प्रयोग करते हैं	तुम्ही सध्या धुम्रविरहित तंबाखू वापरता
[Current users]	smokeless tobacco [daily/weekly/monthly].	(दैनिक /सप्ताहिक /मासिक)	(दररोज / आठवडयात/ महिन्यात)
	[Ask if SLTStatus1=1]	[Ask if Status=1]	[Ask if Status=1]
	IF DAILY USER: On average, how many times per day do you use smokeless tobacco? [enter number] 99 DK/R	IF DAILY USER: औसत रूप से प्रतिबिन ग्राप धूँए रहित तंबाकू का कितनी बार प्रयोग करते हैं? (क्रमांक)	IF DAILY USER: सरासरी प्रत्येक दिवशी तुम्ही किती वेळा धुम्रविरहित तंबाखू वापरता ? (क्रमांक)
	[Ask if SLTStatu1s=2]	[Ask if Status=2] IF WEEKLY USER:	[Ask if Status=2] IF WEEKLY USER: सरासरी प्रत्येक आठवडयात तुम्ही किती वेळा
	IF WEEKLY USER: On average, how many times per week do you use smokeless	आसतरूप स प्रात सप्ताह आप धूए राहत तबाकू का कितनी बार प्रयोग करते हैं <b>?</b> (क्रमांक)	धुम्रविरहित तंबाखू वापरता ? (क्रमांक)
	tobacco? [enter number]	[Ask if Status=3]	[Ask if Status=3]
	[Ask if SLTStatus1=3]	IF MONTHLY USER: औसतरूप से प्रति महीने आप धूँए रहित तंबाकू का कितनी बार पर्योग करते हैं 2	IF MONTHLY USER: सरासरी प्रत्येक महिन्यात तुम्ही किती वेळा धम्रविरहित तंबाख वापरता ?
	IF MONTHLY USER: On average, how many times per month do you use smokeless tobacco?	(क्रमांक)	(क्रमांक)
	[enter number]		
	If ANS=1 skip to SLTStatus3, If ANS=2 skip to AgeInit		

Age initiation [Current Users and Ever users]	How old were you when you first tried smokeless tobacco?	आपकि उम्र क्या थी जब आपने पहली बार धूँए रहित तंबाकू का उपयोग किया <b>?</b>	वयाच्या कितव्या वर्षी तुम्ही धुम्रविरहित तंबाखूचे उत्पादन वापरण्यास सुरूवात केली?
	DK/R		
Current use	Do you currently use any of the	क्या आप कभी निम्नलिखित में से किसी धूँए रहित	तुम्ही सध्या खालील धुम्रविरहित तंबाखू उत्पादना
[Current users]	following smokeless tobacco products at least once a month?	तंबाकू के उत्पाद का प्रयोग कम से कम महीने में एक बार करते हैं ?	पैकी कोणतेही उत्पादन महिन्यांतुन कमीतकमी एक वेळा वापरता का?
	[INTERVIEWER NOTE: check all that apply]	<b>साक्षात्कारकर्ता के लिय सूचनाः</b> जो लागू है उन सबकी जाच करे	प्रश्नकर्त्यासाठी सूचना: जे लागू आहे ते नमुद करा
	<ol> <li>Mishri</li> <li>Betel quid with tobacco (paan)</li> <li>Plain chewing tobacco</li> <li>Gutka</li> <li>Khaini</li> <li>Zarda</li> <li>Tobacco toothpaste/paste</li> <li>Nasal/ oral snuff</li> <li>Lal dantmanjan</li> <li>Dokta</li> <li>Gulhaku</li> <li>Gul</li> <li>Other (specify):</li> <li>None of the above</li> <li>R</li> <li>DK</li> <li>If one product is chosen skip to ReasonsForUse1,</li> <li>If multiple products chosen skip to UsualProduct,</li> <li>If no products chose skip to Susual1.</li> </ol>	1 मशेरी 2 तंबाकू सहित पान 3 सादा चबाने की तंबाकू 4 गुटका 5 खैनी 6 जर्दा 7 तंबाकू दंतमंजन / पेस्ट 8 नाक से या मुहॅं से ली जानेवाली तंबाकू पावडर / तपकीर 9 लाल दंत मंजन 10 दोक्ता 11 गुडाकू 12 गुल 13 अन्य धूम्रविरहीत उत्पादन (बताये) 14 उपरोक्त मे से कोई नही 88 R 99 DK	1 मिश्री 2 सुपारी व तंबाखू असलेले पान 3 साधा चघळण्याचा तंबाखू 4 गुटका 5 खैनी 6 जर्दा 7 तंबाखू दंतमंजन/ दंतमंजन 8 नाकाद्वारे/ तोंडावाटे ओढायची तपकीर 9 लाल दंतमंजन 10 दोकता 11 गुढाकु 12 गुल 13 इतर धूम्रविरहीत उत्पादन (नमूद करा): 14 वरील पैकी कोणतेही नाही 88 R 99 DK

Usual product	Which of these products do you use	इन उत्पाद मे से अधिकांशत आप किसका प्रयोग	यापैकी कोणते उत्पादन आपण जास्त वारंवार
[Current Users,	most frequently?	करते हैं ?	वापरता ?
>1 productj	(only one product)	(केवल एक उत्पाद)	(फक्त एक उत्पादन)
Reasons for use	INTERVIEWER NOTE: Repeat the	<b>साक्षात्कारकर्ता के लिय सूचनाः</b> जरूरत पडने पर	(प्रश्न कर्त्यासाठी सूचना: गरज पडल्यास प्रश्न परत
[Current Users]	question if necessary.	प्रश्न दोहराएं	विचारा.)
	In choosing this type of smokeless tobacco, was part of your decision based on any of the following?	इस धूँए रहित तंबाकूकेब्रांड / प्रकार के चुनने में आपका निर्णय निम्नलिखित में से किस पर आधारित था <b>?</b>	या धुम्रविरहित ब्रॅंड / प्रकाराची निवड करताना तुमच्या निर्णयाचा काही भाग खालील पैकी कोणत्याही गोष्टीवर आधारलेला होता का?
	The price.	कीमत	किंमत
	1 Yes 2 No 88 R 99 DK	1 हाँ 2 नहीं 88 R 99 DK	1 होय 2 नाही 88 R 99 DK
	This type is of high quality.	हाई क्वालिटी	उच्चदर्जा
	This type is less harmful to my health.	मेरे स्वास्थ्य के लिय यह ब्रांड/ प्रकार कम हानिकारक है ।	हा ब्रॅण्ड / प्रकार माझ्या आरोग्याला कमी हानीकारक आहे.
Susual1 [Current Users]	Do you have a particular brand of smokeless tobacco that you usually use?	क्या आपका धूँए रहित तंबाकू के उत्पाद का ब्रांड / प्रकार है, जिसे आप सामान्यत पीते हैं ?	तुमचा <b>धुम्रविरहित तंबाखू</b> उत्पादनाचा ब्रॅण्ड / प्रकार आहे का ,जो तुम्ही नेहमी वापरता ?
	1 Yes 2 No 88 R 99 DK	1 हाँ 2 नहीं 88 R 99 DK	1 होय 2 नाही 88 R 99 DK
	If ANS=1 skip to SusualSlessTob,		
	If ANS=2,3 or 4 skip to Susual3		

SusualSlessTob	What is the full name of your usual smokeless brand?	आपके सामान्य धूँए रहित तंबाकू के ब्रांडका नाम क्या है <b>?</b>	तुमच्या नेहमीच्या धूम्रविरहित तंबाखूच्या ब्रॅन्डचे नाव काय आहे ?
	<b>INTERVIEWER NOTE</b> : Prompt for name, type, brand, flavour <b>PROBE</b> : What variety, flavour or type would that be?	साक्षात्कारकर्ता के लिय सूचनाः नाम, प्रकार और स्वाद के बारे में उत्तर देने के लिय प्रवृत्त करे । जांच करे। वह कौनसा प्रकार या स्वाद है।	 <b>(प्रश्नकर्त्यासाठी सूचना:</b> नाव, प्रकार आणि स्वाद (फ्लेवर) च्या उत्तरासाठी प्रवृत्त करा. <b>विचारा,</b> तो कोणता प्रकार किंवा चव आहे.
Susual3	Do you have a <u>type</u> of smokeless tobacco that you usually use? 1 Yes 2 No 88 R 99 DK INTERVIEWER NOTE: Prompt for name, type, flavour PROBE: What variety, flavour or type would that be?	क्या आपका धूँए रहित तंबाकू के उत्पाद का प्रकार है, जिसे आप सामान्यत पीते हैं ? 1 हाँ 2 नहीं 88 R 99 DK <b>साक्षात्कार कर्ता के लिय सूचनाः</b> नाम, प्रकार और स्वाद के बारे में उत्तर देने के लिय प्रवृत्त करे ।	तुमचा धुम्रविरहित तंबाखू उत्पादनाचा प्रकार आहे का , जो तुम्ही नेहमी वापरता ? 1 होय 2 नाही 88 R 99 DK <b>(प्रश्नकर्त्यासाठी सूचना:</b> नाव, प्रकार आणि स्वाद (फ्लेवर) च्या उत्तरासाठी प्रवृत्त करा.

SPRODUCTS	In the past month, have you used	पिछले महीने में, क्या आपने इन में से किसी तंबाकू	गेल्या महिन्यामध्ये तुम्हीखालील पैकी कोणतेही
Other tobacco	any of the following smoked tobacco	वाले उत्पादन का इस्तेमाल किया हैं ?	तंबाखू उत्पादन वापरले आहे का ?
products [All]	products?		
	[Read all and check all that apply]	[सब पर्याय पढे और जो लागू हो उस पर टिक करे]	[सर्वे पर्याय वाचा आणि लागू होणा-या
		1 सिमरेट (फेक्टरी में तनामी गर्न मा नाओं से	प्रत्यंकासमार खूण करा.]
	1 Cigarettes (factory made and roll-	ति संगरत (गल्दर) में अगोया गई या हाया स तनामी गर्द)	1 सिंगारेट (फॅक्टरीमध्ये बनविले किंवा टावाने
	2 Bidis		रोल केलेली )
	3 Hookah/shisha/narghile/water pipe	2.बीडी	2 बिडी
	4 Cigars/small cigars/cigarillos		
	5 Pipe	3. हुक्का/ शीशा/ नरगिल / पानीका पाइप	4. सिगार/छोटा सिगार/सिगारीलोस
	7 Hooklis	4 सिगार / छोटी सिगार / सिगारिलो	5. पाईप
	8 Other (specify):		6. चुट्रा
	9 None of the above	5. पाइप	7. हुकलिस
	88 R		8. इतर(नमूद करा.)
	99 DK	6. चुट्टा	9. वरील पैकी कोणते ही नाही.
		7 हकलिस	88 R
	You indicated "Other". Please		99 DK
	spechy.	8. अन्य (उल्लेख करें)	
	If response=1, 2, 3, 4, 5, or 6 go to	9. उपरोक्त मे से कोई नही	
	NEXT QUESTION. If response=7,	88 R	
	skip next question	99 DK	
MultiUse	You mentioned you use both	आपने कहा कि, आप धूम्रविरहीत और धूम्रपान का	तुम्ही सांगितल्याप्रमाणे, तुम्ही धुम्रपान आणि
frequency	smokeless and smoked tobacco.	तंबाकू, दोन्होका इस्तेमाल करते है। इनमें से	धूम्रविरहीत अशा दोन्ही तंबाखू उत्पादनाचा वापर
[All dual/multi	Which do you use more often: [read	कौनसा उत्पादन अधिक बार इस्तेमाल करते हो।	करता. यापैकी तुम्ही कोणत्या उत्पादनाचा वापर
use users]	all	(सभी पढीये)	जास्त प्रमाणात करता ? (सर्व वाचा)
			1. धूम्रपानाचे तंबाखू
	1 Smoked tobacco	1. धूम्रपान का तंबाकू	2. धूम्रविरहीत तंबाखू
	2 Smokeless tobacco, or	2. धूम्रविरहीत तंबाकू	3. धूम्रपानाचे तंबाखू आणि धूम्रविरहीत तंबाखू
	3 do you use smoked and smokeless	3. धूम्रपान का तंबाकू और धूम्रविरहीत तंबाकू	यांचा वापर सम प्रमाणात करता.
		दोन्हो का उतना ही इस्तेमाल करते है ।	88 R
	99 K	88 R	99 DK
		99 DK	
Ysusfuture [Youth non- current users]	Do you think in the future you might try using smokeless tobacco? 1 Definitely not 2 Probably not 3 Probably yes 4 Definitely yes 88 R 99 DK	क्या आप मानते हैं, कि भविष्य में आप धूँए रहित तंबाकू दौरान किसी भी समय, आप धूँए रहित तंबाकू का प्रयोग कर सकते है? 1. निश्चितरूप से नहीं 2. शायद नहीं 3. शायद हां 4. निश्चित तौर पर हां 88 R 99 DK	तुम्हाला वाटते का की, भविष्यात तुम्ही कधीतरी धुम्रविरहित तंबाखूचा वापर करण्याचा प्रयत्न कराल ? १ नक्कीच नाही २ कदाचित नाही ३ कदाचित होय ४ नक्कीच होय 88 R 99 DK
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Ysusfriend [Youth non- current users]	If one of your best friends were to offer you smokeless tobacco, would you use it? 1 Definitely not 2 Probably not 3 Probably yes 4 Definitely yes 88 R 99 DK	यदी आपके किसी खास दोस्त ने आपको धूँए रहित तंबाकू पेश की, तो क्या आप उसका प्रयोग करेंगे? 1. निश्चितरूप से नहीं 2. शायद नहीं 3. शायद हां 4. निश्चित तौर पर हां 88 R 99 DK	जर तुमच्या घनिष्ट मित्रापैंकी एकाने तुम्हाला धुम्रविरहित तंबाखू दिली तर तुम्ही तिचा वापर कराल का ? १ नक्कीच नाही २ कदाचित नाही ३ कदाचित होय ४ नक्कीच होय 88 R 99 DK
Ysusyear [Youth non-current users]	At any time during the NEXT YEAR, do you think you will use smokeless tobacco? 1 Definitely not 2 Probably not 3 Probably yes 4 Definitely yes 88 R 99 DK	क्या आप मानते है, कि अगले वर्ष के दौरान किसी भी समय, आप धूँए रहित तंबाकू का प्रयोग करेंगे <b>?</b> 1. निश्चितरूप से नहीं 2. शायद नहीं 3. शायद हां 4. निश्चित तौर पर हां 88 R 99 DK	पुढील वर्षी कधी ही तुम्ही धुम्रविरहित तंबाखू ओढाल असे तुम्हाला वाटते का ? १ नक्कीच नाही २ कदाचित नाही ३ कदाचित होय ४ नक्कीच होय 88 R 99 DK

Ever quit [Current Users]	Have you ever made a serious attempt to stop using all smokeless tobacco products?	आपने कभी गंभीरता से धूए रहित तंबाकू का उपयोग न करने की कोशिश की हैं ?	धुम्रविरहित तंबाखूचे व्यसन सोडण्यासाठी तुम्ही काही गंभीर प्रयत्न केले आहेत का ?
Plan to quit	1 Yes 2 No 88 R 99 DK Are you planning to quit using	1 हाँ 2 नहीं 88 R 99 DK क्या आप धुँए रहित तंबाकू छोडने का प्रयास कर	१ होय २ नाही 88 R 99 DK तम्ही धम्रविरहित तंबाखु सोडण्याचा विचार करत
[Current Users]	smokeless tobacco 1 Within the next month 2 Within the next 6 months 3 Sometime in the future, beyond 6 months, 4 or are you Not planning to quit? 88 R 99 DK	रहे हैं 1 अगले महीने के अंदर ? 2 अगले 6 महीनों के अंदर ? 3 ६ महीनों के बाद या भविष्य में किसी भी समय? 4 छोड़ने की योजना नहीं बना रहे हैं ? 88 R 99 K	आहात का? 1 अगले महीने के अंदर ? 2 पुढील ६ महिन्यांच्या आत? 3 महिन्यांनंतर किंवा भविष्यात कधीतरी? 4 धूम्रपान सोडण्याचा तुमचा विचार नाही? 88 R 99 DK
Quit health [Current Users]	If you were to quit using smokeless tobacco permanently in the next 6 months, how much do you think it would improve your health? 1 Not at all 2 A little 3 A lot 88 R 99 DK	यदि आप आगामी 6 महीनों में धूँए रहित तंबाकू का प्रयोग करना छोड देते है, तो आपके हिसाब से, आपके स्वास्थ्य मे कितना सुधार होगा ? 1 बिल्कुल भी नहीं 2 थोड़ासा 3 काफी-ज्यादा 88 R 99 DK	जर तुम्ही पुढच्या सहा महिन्यांत धुम्रविरहित तंबाखू कायमचा सोडला तर तुम्हाला आरोग्य विषयक किती फायदे होतील असे तुम्हाला वाटते ? १ अजिबात नाही २ थोड्याशा प्रमाणात 3 ब-याच प्रमाणात 88 R 99 DK
	If Youth skip to YDEduc, If Adult skip to DEduc.		

D.Educ ( <b>19+</b> ) DE62311	<ul> <li>What is your highest level of education?</li> <li>[INTERVIEWER NOTE: DO NOT READ</li> <li>1 Illiterate</li> <li>2 Literate, no formal education</li> <li>3 Up to primary School (up to class IV)</li> <li>4 Middle School class V to VII</li> <li>5 Secondary School (ITI course, class XII/X or intermediate)</li> <li>6 Graduate (BA/ BSc/ Diploma etc.)</li> <li>7 Post Graduate/ Professional Degree</li> <li>8 Above Post Graduate degree (i.e. PhD)</li> <li>88 R</li> <li>99 DK</li> </ul>	आपकी शिक्षा का उच्चतम स्तर क्या है? (वाचू नका) 1 अशिक्षित 2 साक्षर, कोई औपचारिक शिक्षा नहीं 3 कक्षा चौथीतक 4 कक्षा पाचवी से सातवी 5 आईटीआई पाठ्यक्रम, कक्षा बारहवी / दसवीया इंटरमीडिएट 6 स्नातक (बी.ए./बी.एस.सी./डिप्लोमा इत्यादि ) 7 स्नातकोत्तर / प्रोफेशनल डिग्री (पोस्टग्रेज्युएट) 8 स्नातकोत्तर से उच्च डिग्री (अर्थात पीएचडी ) 88 R 99 DK	तुमच्या शिक्षणाची उच्चतम पातळी कोणती? [वाचू नका] 1 अशिक्षित 2 शिक्षित, औपचारिक शिक्षण नाही (शाळेत गेलो नाही) 3 प्राथमिक शाळेपर्यंत (वर्ग चौथी पर्यंत) 4 माध्यमिक शाळेपर्यंत वर्ग पाचवी ते सातवीपर्यंत 5 उच्च माध्यमिक (ITI , वर्ग बारावी/दहावी किंवा इंटरमिडिएट) 6 पदवी (BA/ BSc/ Diploma इ.) 7 पदवीत्युर पदवी/ व्यावसायिक पदवी 8 पदवीत्युर पदवीपेक्षा वरील पदवी (म्हणजेच PhD) 88 R
Income ( <b>19+)</b> DE62211	In the last year, on average, how much was the total income (in Rs.) per month of your household? 1. less than 5,000 2. 5,000-9,999 3. 10,000-14,999 4. 15,000-19,999 5. 20,000+ 88 R 99 DK	पिछले साल मे कुल मिलाकर आपका महिने का पूरा उत्पादन कितना था। (रुपयों में) 1 ५,००० से कम 2. ५,०००-९,९९९ 3. १०,०००-१४,९९९ 4. १५,०००-१९,९९९ 5. २०,०००+ 88 R 99 DK	गेल्या वर्षी एकंदरीत तुमच्या घराचे मासिक उत्पन्न किती होते. (रूपयांमध्ये) १. ५,००० पेक्षा कमी २. ५,०००-९,९९९ ३. १०,०००-१४,९९९ ४. १५,०००-१९,९९९ ५. २०,०००+ 88 R 99 DK

Y.D.Educ ( <b>16-18</b> )	What was the last year of education that you completed? (DO NOT READ) 1 Did not attend school 2 Up to primary School (up to class IV) 3 Middle School class V to VII 4 Secondary School (ITI course, class XII/X or intermediate) 5 Class XI (Higher Secondary) 6 Class XII (Higher Secondary) 7 Graduate level or More than higher secondary 88 R 99 DK	तुम्ही कोणत्या इयत्ते पर्यंत शिक्षण पूर्ण केले आहे ? (वाचू नका) 1 शाळेमध्ये गेलेच नाही 2 कक्षा चौथीतक 3 कक्षा पाचवी से सातवी 4 आईटीआई पाठ्यक्रम, कक्षा बारहवी / दसवीया इंटरमीडिएट 5 कक्षा ग्यारहवी (उच्च माध्यमिक) 6 कक्षा बारहवी (उच्च माध्यमिक) 7 पदवी 88 R 99 DK	तुम्ही कोणत्या इयत्ते पर्यंत शिक्षण पूर्ण केले आहे ? (वाचू नका) 1 शाळेमध्ये गेलेच नाही 2 प्राथमिक शाळेपर्यंत (वर्ग चौथी पर्यंत) 3 माध्यमिक शाळेपर्यंत (वर्ग पाचवी ते सातवीपर्यंत) 4 उच्च माध्यमिक (ITI , वर्ग बारावी/दहावी किंवा इंटरमिडिएट) 5 अकरावी (उच्च माध्यमिक) 6 बारावी (उच्च माध्यमिक) 7 पदवी 88 R 99 DK
Religion <b>(AII)</b> DE62662 ReligionOTH	What is your religion?         [DO NOT READ LIST]         1       Hindu         2       Muslim         3       Christian         4       Sikh         5       Buddhist         6       Jain         7       Others         88       R         99       DK         If Youth skip to PREOverallOpinion, If Adult skip to Occupation         You indicated "Other". Please	आपका धर्म क्या है? [साक्षात्कारकर्ता नोट: सूची न पढ़ें] 1 हिन्दू 2 मुस्लिम 3 ख्रिश्चन 4 सिख 5 बौद्ध 6 जैन 7 अन्य 88 R 99 DK	तुमचा धर्म कोणता? [प्रश्नकर्त्यासाठी सूचना: प्रतिसाद पर्याय मोठ्याने वाचू नका.] 1 हिंदू 2 मुस्लिम 3 ख्रिश्चन 4 शीख 5 बौद्ध 6 जैन 7 इतर 88 R 99 DK इतर करा
	specify	अन्य नमूद कर 	इतर करा

Occupation (19+)	What is your primary occupation? [Do not read list] 01 Professional, technical, and related workers 02 Administrative, executive and managerial workers 03 Clerical and related workers 04 Sales Workers 05 Service Workers 06 Farmers, fisherman, hunters, loggers and related workers 07 Craft and Related Trades 08 Plant and machine operators 09 Elementary Occupations 10 Student 11 Unemployed 12 Housewife 13 Other (specify) 88 R 99 DK	आपका प्राथमिक व्यवसाय क्या है? [सूची न पढ़ें] 01 पेशेवर, तकनीकी और संबंधित कार्य 02 प्रशासनिक, कार्यकारी और प्रबंधकीय कार्य 03 लिपिकीय और संबंधित कार्य 04 विक्रेता 05 सेवाकामगार 06 किसान, मछुआरा, शिकारी, लॉगर्स और संबंधित कार्य 07 क्राफ्ट और संबंधित ट्रेड 08 मशीन और संयंत्र प्रचालक 09 प्राथमिक व्यवसाय 10 छात्र 11 बेरोजगार 12 गृहिणी 13 अन्य (उल्लेयखकरें): 88 R 99 DK	तुमचा प्राथमिक व्यवसाय कोणता? [ <i>प्रतिसाद पर्याय मोठ्याने वाचू नका.</i> ] 01 व्यावसायिक, तांत्रिक आणि संबंधित कर्मचारी 02 प्रशासकिय, कार्यकारी आणि व्यवस्थापकीय कर्मचारी 03 कारकून आणि संबंधित कर्मचारी 04 विक्रेते कर्मचारी 05 सेवा कर्मचारी 06 शेतकरी, कोळी, शिकारी, लॉगर्स आणि संबंधित कर्मचारी 07 हस्तकला आणि संबंधित कर्मचारी 08 प्रकल्प आणि मशिन कर्मचारी 09 प्राथमिक व्यवसाय 10 विद्यार्थी 11 बेरोजगार 12 गृहिणी 13 इतर (तपशील सांगा): 88 R 99 DK
OccupationOTH	Other Occupation: Please specify	अन्य नमूद करे	इतर करा

Preoverall opinion [All]	For the next few questions, I'd like to ask for your opinion about smokeless tobacco products. There is no right or wrong answer—we are most interested in your thoughts.	अगले कुछ सवालों में हम धूँए रहित तंबाकू के कुछ उत्पाद के बारेमे आपकी राय जानना चाहते है। इनमें से कोई सही या गलत जबाब नही होगा हम सिर्फ आपका जबाब जानना चाहते है।	पुढील काही प्रश्नात मी तुम्हाला धुम्रविरहित तंबाखू विषयी तुमचे मत काय आहे ते विचारणार आहे. इथे काही चुक किंवा बरोबर नाही. आम्हाला तुमचे मत जाणून घ्यायचे आहे.
	What is your overall opinion about using smokeless tobacco? Is it	धूँए रहित तंबाकू के बारे में आपकी कुल मिलाकर राय क्या हैं <b>?</b> यह है? 1 अच्छा 2 न अच्छा और न बुरा	धुम्रविरहित तंबाखूच्या वापराबाबत तुमचे एकंदरीत काय मत आहे? ते मत? 1 सकारात्मक आहे २ सकारात्मकही नाही आणि नकारात्मकही नाही
	1 Good	3 बुरा	३ नकारात्मक आहे
	2 Neither good nor bad	88 R	88 R
	3 Bad	99 DK	99 DK
	88 R 99 DK		

Relative risk [All]	I would like to know what you think about the following smokeless tobacco products. In your opinion, please rank the following smokeless tobacco products from most to least harmful:	हमे यह जानना चाहते है कि, आपकी निम्नलिखित धूँए रहित तंबाकू के बारे में क्या राय है । आप के राय के अनुसार निम्नलिखित धूँए रहित तंबाकू के उत्पाद के ज्यादा से कम हानीकारक मे विभागणी करे	आम्हाला जाणून घ्यायचे आहे की खाली नमुद केलेल्या धुम्रविरहित तंबाखूविषयी तुम्हाला काय वाटते, तुमच्या मतानुसार जास्त ते कमी धोकादायक अशी खालील उत्पादनाची विभागणी करा.
	Answer rank [Interviewer Note: if respondent says they think all are equally harmful, ask 'if youhad to choose, which would you say is the most harmful', etc.]	[अगर साक्षात्कर्ता ने कहा की, सब एक समान हानिकारक है, तो उनसे पुछिए की, अगर उन्हे एक को चुनना हो तो वह कौनसा चुनेंगे।]	[जर साक्षात्कर्ता ने ते समप्रमाणात हानिकारक आहेत असे सांगितले तर विचारा की, जर तुम्हाला त्याची निवड करण्यास सांगितले तर त्यापैकी तुम्ही कोणते निवडाल.]
	1 Mishri 2 Betel quid with tobacco (paan) 3 Gutka 4 Zarda 5 Nasal/ oral snuff 6 Gudhaku	1 मशेरी 2 तंबाकू सहित पान 3 गुटका 4 जर्दा 5 नाक से या मुहॅं से ली जानेवाली तंबाकू पावडर / तपकीर 6 गुडाकू	1 मिश्री 2 सुपारी व तंबाखू असलेले पान 3 गुटका 4 जर्दा 5 नाकाद्वारे/ तोंडावाटे ओढायची तपकीर 6 गुढाकु
Relrisequal	All are equally harmful	सब एक तरह ही हानिकारक है।	्व सारखेच धोकादायक म्राहेत.

General	In your opinion, please tell me	आपके अनुसार आप हमे बताएं कि नीचे दिए गए े	तुमच्या मते खाली दिलेल्या विधानांपैकी प्रत्येक
	neither agree nor disagree with each of the following statements. In	विवररग से सहमत है, न तो सहमत है और न ग्रसहमत हैं, ग्रथवा ग्रसहमत हैं,।सामान्यतः	विधानांची तुम्ही सहमत आहात, सहमत नाही किवा असहमतही नाही, असहमत आहातसाधाररगतः
preGA1	general	भारतीय समाज धूँए रहित तंबाकू के प्रयोग को मान्यता	भारतीय समाजाला धुम्रविरहित तंबाखू मान्य नाही.
	Indian society disapproves of smokeless tobacco use.	नहा दता ह ।	१ सहमत ग्राहे
	1 Agree	2 ग्रसहमत है।	२ असहमत आह ३ महमतही नाही किंवा ग्रमहमतही नाही
	2 Disagree	3 न तो सहमत और न असहमत	88 R
	3 Neither agree nor disagree	88 R	99 DK
	88 R 99 DK	99 DK	
preGA2	Smokeless tobacco is highly addictive.	धूँए रहित तंबाकू एक लत हैं ।	धुम्रविरहित तंबाखू व्यसनाधीन करणाराआहे.
preGA3	It is acceptable for females to use smokeless tobacco.	औरतों का धूँए रहित तंबाकू का प्रयोग करना स्वीकार हैं।	स्त्रियांनी धुम्रविरहित तंबाखू वापरणे स्वीकृत आहे.
preGA4	Using smokeless tobacco sets a bad example for children.	धूँए रहित तंबाकूका उपयोग बच्चों के सामने बुरा उबाहररग रखता हैं ?	धुम्रविरहित तंबाखूचा वापर मुलांसमोर वाईट उदाहरण उभे करतो.
preGA5	Smokeless tobacco use is harmful to health.	धूँए रहित तंबाकू का उपयोग शरीर के लिय घातक होता हैं।	धुम्रविरहित तंबाखूचा वापर आरोग्यास धोकादायक आहे.

Current HW [All]	Thinking now about the packages for	अब धँए रहित तंबाक के उत्पाद (पेस्ट, सेशे, पैक	आता धमविरहित तंबाख उत्पादनांच्या पाकिटांचा
	smokeless tobacco products (paste,	रिन तोतल। के गैकेट के नारे में मोच कर	(ग्रेस्ट गिशला पाकिने दुवे तारल्या) विचार
	sachets, packs, tins, bottles).	$(\mathbf{x}, \mathbf{y}) \in (\mathbf{x}, \mathbf{y})$	
		जहाँ तक आप जानते हैं सक्य भारत में धुँए रहित	करता
	As far as you know, do smokeless	तंबाकू के पैकेट पर कोइ स्वास्थ्य संबंधी चेतावनी	तुम्हाला जेवढे माहित आहे त्यानुसार भारतातील
	tobacco products in <b>India</b> have	<u>ह</u> ै?	कोणत्याही धम्रविरहित तंबाखच्या पाकिटावर
	health warnings on the packages?		आरोग्य विषयक इशारे असतात का ?
		<ol> <li>हॉ (कुछ उत्पदन की यादी करे)</li> </ol>	
	1 Yes (including 'some products')	<b>~</b>	1.होय (काही पदार्थांची नोंद करा.)
	2 No	2. नहीं	२ नाही
	88 R	00 D	1
	99 DK	88 R	88 B
		99 DK	88 R
	(If USER1=1 skip to HWLastPack,		99 DK
	If USER1=2 and answer=1 skip to		
	IndiaOnly1.		
	······································		
	If USER1=2 and answer=2,3 or 4		
	skip to HWOpinion1)		
HWlastpack	On your last package of smokeless	आपने पिछली बार लिए गए धूँए रहित तंबाकू के	तुम्ही शेवटी घेतलेल्या धुम्रविरहित तंबाखूच्या
[Current Users]	tobacco, was there a health warning?	पैकेटपर कोइ स्वास्थ्य संबंधी चेतावनी पर गौर	पाकिटावर आरोग्य विषयक इशारे आढळले का ?
		किया?	
	1 Yes		
	2 No	1. हॉ	
	3 Can't remember		। १ हाय 
	88 R	2. नहा	
	99 DK	) ३ गाट ननीं	3. आठवत नाहा.
		0. 914 101	88 K
		88 K	99 DK
		99 DK	

Indiaclist_1	Can you describe what the health warnings on smokeless tobacco packages look like?	क्या आप बता सकते है आपको धूँए रहित तंबाकू के पैकेट पर कि चेतावनी दिखने मेकैसे लगतीहैं?	धुम्रविरहित तंबाखूच्या पाकिटांवरील आरोग्य विषयक इशारे कसे वाटतात?
	Interviewer checklist: 1 Don't know 2 bad/gross teeth (correct) 3 diseased mouth (correct) 4. facial tumour (correct) 5. x-ray or graphic lungs (incorrect— image on cigarette/bidi packages) 6. Scorpion/bug (incorrect image— image on old warning label) 7. man with graphic lungs (John Terry image) (incorrect—image on cigarette/bidi packages) 8 Can't recall 9 N/A - no package, homemade, borrowed, etc. 10 Other (incorrect image) – specify:	<ol> <li>पता नहीं</li> <li>खराब / साफनकिएगयेदांत (सही)</li> <li>बिमारमुँह (सही)</li> <li>चेहरे का टयुमर (सही)</li> <li>चेहरे का टयुमर (सही)</li> <li>एक्सरे या ग्राफिक फेफडे (गलत सिगरेट या बिडी के पैकेट पर का चित्र)</li> <li>बिच्छू / बग(गलतचित्र – पुराने पैकेट पर कीचेतावनी)</li> <li>ग्राफीक्स फेफडो के साथ आदमी (जॉन तेरी का चित्र) (गलत सिगरेट या बिडी के पैकेट पर का चित्र)</li> <li>याद नहीं</li> <li>पँकेट नही, घरपे बनाया गया, या उधार लिया गया,इ</li> <li>अन्य (गलतचित्र) – नमुद करे</li> </ol>	<ul> <li>१. माहितनाही</li> <li>२. खराब (वाईट)/साफ न केलेले दात (बरोबर)</li> <li>३. रोगटतोंड (बरोबर)</li> <li>4. चेह-याचा टयुमर (बरोबर)</li> <li>5 एक्सरे किंवा ग्राफीक्स फुफ्फुस (चुक- सिगारेट/बिडीच्या पाकिटांवरिल चित्र.)</li> <li>6. विंचू (स्कॉर्पियन)/बग (चुक–पुर्वीच्या इशा- यापट्टीवरिल चित्र)</li> <li>7. ग्राफीक्स फुफ्फुस असणारा व्यक्ती (जॉन तेरी चे चित्र) (चुक-सिगारेट/बिडीच्या पाकिटांवरिल चित्र.)</li> <li>8. आठवतनाही.</li> <li>9.पाकिट नाही, घरी बनविलेले किंवा उधार घेतलेले, इ.</li> <li>10. इतर (चुकीचीचित्रे):नमूदकराकरा</li> </ul>

Indiaclist_1	Can you describe what the health warnings on smokeless tobacco packages say? Interviewer checklist: 1 Don't know 2 "Tobacco kills" (correct text) 3 Some mention of "tobacco" (partially correct) 4 Smoking kills (incorrect—text for cigarette/bidi packages) 5 "tobacco causes cancer" (incorrect—text on old warning labels) 6 Can't recall 7 Not able to read 8 Other (incorrect text)—specify	धूँए रहित तंबाकू के पैकेट पर कि चेतावनीयॉक्यासुचितकरती हैं? 1. पता नहीं 2. तंबाकूजानलेवाहै(सही) 3. कहीपरसिर्फ "तंबाकू" (थोडाबहोतसही) 4. धूम्रपानजानलेवाहै(गलत – सिगरेटयाबिडीके पैकेट परकीचेतावनी) 5. "तंबाकूसेकैंसरहोताहै" (गलतचित्र – पुराने पैकेटपर कीचेतावनी) 6. याद नहीं 7. पढनहीं सकते 8. अन्य (गलतचित्र) – नमुद करे	धुम्रविरहित तंबाखूच्या पाकिटांवरिल आरोग्य विषयक इशा-या पट्टया काय सुचित करतात? १. माहित नाही. २. तंबाखूने मृत्यु होतो. ३. काही वर फक्त " तंबाखू" (थोडेसे बरोबर) ४. धुम्रपान मृत्युदायक आहे. (चुक-सिगारेट आणि बिडी पाकिटांवरिल चित्र.) ५."तंबाखूमुळे कॅन्सर होतो" (चुक-पुर्वीच्या इशा- यापट्टी वरिल चित्र) ६. आठवत नाही. ७. वाचू शकत नाही. ८. इतर(चुकीची चित्रे):नमुद
	(If USER1=1 go to IndiaOnly2, If USER1=2 skip to IndiaOnly3)		
IndiaOnly2	In the last month, have you made any effort to avoid buying smokeless tobacco packages with the health warnings on them? 1 Yes 2 No 88 R 99 DK	पिछले महीने धूँए रहित तंबाकू के पैकेट पर होनेवाले चेतावनी के कारण आपने कभी वो पैकेट न लेने का प्रयास किया हैं <b>?</b> 1. हॉ 2. नहीं 88 R 99 DK	मागील महिन्यांत धुम्रविरहित तंबाखूच्या पाकिटां वरिल इशा-या पट्टयांमुळे तुम्ही धुम्रविरहित तंबाखू विकत घेणे टाळले आहे का ? १ होय २ नाही 88 R 99 DK

IndiaOnly3	To what extent, if at all, do the health warnings on smokeless tobacco packages make you think about the health risks (health danger) of using it? 1 Not at all 2 A little 3 A lot 88 R 99 DK	किस हद तक, धूँए रहित तंबाकू के पैकेट पर होनेवाले चेतावनी आपको उसके खतरों का याद दिलाती है ? 1. बिल्कुल भी नही 2. थोडासा 3. काफी-ज्यादा 88 R 99 DK	धुम्रविरहित तंबाखूच्या पाकिटांवरिल इशा-या पट्टयांमुळे तंबाखू वापरामुळे होणा-या धोक्यांची तुम्हाला किती प्रमाणात आठवण झाली ? १ अजिबात नाही. २ थोड्याशा प्रमाणात ४ ब-याच प्रमाणात 88 R 99 DK
HW opinion1 [All]	Do you think that smokeless tobacco packages should have health warnings? 1 Yes 2 No 3 Maybe 88 R 99 DK	क्या आप मानते हैं कि धूँए रहित तंबाकू के पैकेट पर स्वास्थ्य संबंधी चेतावनी होना चाहिए ? 1. हॉ 2. नहीं 3. शायद 88 R 99 DK	तुम्हाला असे वाटते का की, धुम्रविरहित तंबाखूच्या पाकीटावर आरोग्य विषयक इशारे असले पाहिजेत? १ होय २ नाही 3 कदाचित 88 R 99 DK
HWopinion2 [All]	(IF YES) Do you think that the health warnings should include pictures? 1 Yes 2 No 3 Maybe 88 R 99 DK	(IF YES) क्या आप मानते हैं स्वास्थ्य संबंधी चेतावनी में चित्र होना चाहिए ? 1. हॉ 2. नहीं 3. शायद 88 R 99 DK	(IF YES) तुम्हाला असे वाटते का की, आरोग्य विषयक इशा- यांबरोबर चित्रदेखील असली पाहिजेत ? १ होय २ नाही 3 कदाचित 88 R 99 DK

HWp1 [Current users and 'Current HWs'=yes]	Do you think the health warnings on smokeless tobacco packages should have more health information than they do now, less information, or about the same amount as they do now?	क्या आप मानते हैं कि धूँए रहित तंबाकू के पैकेट पर इस समय जो स्वास्थ्य संबंधी सूचना दीगयी हैं उससे अधिक होना चाहिए, कम सूचना होना चाहिए, अथवा उतनी ही होना चाहिए जितनी अभी है ?	तुम्हाला असे वाटते का की, धुम्रविरहित तंबाखूच्या पॅकेट्सवर सध्या असलेल्या आरोग्यविषयक माहितीपेक्षा जास्त माहिती असावी, कमी असावी किंवा सध्या आहे तितकी पुरेशी आहे ? 1 जास्त माहिती असावी,
	1 More health information 2 Less health information 3 About the same 88 R 99 DK	1) अधिक स्वास्थ्यसंबंधी सूचना 2) कम स्वास्थ्यसंबंधी सूचना 3) अथवा उतनीही जितनी अभी है 88 R 99 DK	2 कमी असावी 3 सध्या आहे तितकी पुरेशी आहे 88 R 99 DK

HEALTH WARNING RATINGS		
<b>PROGRAMMING NOTE:</b> For the health warning ratings,		
each respondent will see 1 set of warnings, each set		
consisting of 5 different warnings: 1) oral cancer, (2)		
mouth disease, (3) heart disease, (4) addiction, and (5)		
death, for a particular executional style (one of four		
experimental conditions: 1) text-only warning, 2) pictorial		
warning with symbolic imagery, 3) pictorial warning with		
graphic health effect, and 4) pictorial warning with a		
personalized graphic health effect and testimonial). The		
experimental condition that a respondent is in should be		
randomized, but with balancing for the number of people		
assigned to each condition.		
I'm now going to show you a parise of tabassa health	। टम अन आपको तंताक के गँकेर पर जो स्तास्थ्रणगंत्रंशी	आप्नी आता आएल्याला कानी प्रतास्क्रमसंत्रंशी नजाने
I m now going to show you a series of tobacco health	हम जब जापका राबाकू के पकट पर जा स्पास्थ्यसंबदा	जाम्हा जाता जापण्याला फाहा त्यात्य्यसंबंधा इशार
warnings.	चतावनाया ह वा बातायग.	दाखवणार आहात.
	हम चाहग के आप कुछ समय लकर इन चतावनाआ	आम्हाला अस वाटत का, तुम्हा काहा काळ प्रत्यक
I'd like you to take a moment and look at each warning,	को गरि से देखिये और हम आपको उसके बारे में कुछ	इशारा नीट पहावा आणि त्यानतर आम्ही आपल्याला
after which I'll ask you several questions.	सवाल पुछेंगे ।	काही प्रश्न विचारु इच्छितो.
		तुम्हाला १ ते १० च्या स्केलचा उपयोग करुन
The questions will ask you to rate a picture using a scale	आपको १ से १० के स्केल का इस्तेमाल करके हर एक	चिञांना रेट करण्यास सांगणार आहोत, ज्या मध्ये १
from 1 to 10, where 1 is 'not at all' and 10 is 'extremely'.	चिञ को रेट करना है, जिसमे १ का मतलब	म्हणजे "काहीच नाही " आणि १० म्हणजे "खुपच".
I'm going to show you an example using this scale.	'बिल्कल नही' और १० का मतलब 'कछ ज्यादा ही' ।	आम्ही आपल्याला १ ते १० च्या स्केल चा वापर कसा
		करायचा याचे एक उदाहरण देऊ इच्छितो
	इस स्केल का इस्तेमाल करके टम आपको एक	
	रत रगत गर्म रत्ताचाल गर्दर हम जातका एक	ण केल वा नगए रूप्त आजी राजाला प्रतासण
S N.S.	उदाहरणादखायगा	या स्कल चा वापर करन आम्हा तुम्हाला उदाहरण 
-O, O		दाखवणार आह
Y		
A B		
designed and the second second		कृपया, आपण मला सांगा की हे कीटन क्यूट आहे
	कपया. आप हमें बताये की यह कीटन क्यट है ?	का?
	1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10
Please tell me whether this kitten IS CUTE.	विल्कल नहीं थोडी बहुत कल ज्यादा ही	अजितात नाही मध्यांतर खण्ज
I Z 3 4 5 6 7 8 9 10 DK/R	ાયલ્પુરલ પણા વાંકા બંદૂલ પુષ્છ ગ્યાબા हો	जाजजात गाहा मव्यातर खूपय
I INOL AL AII IN LINE IVIDULE EXTREMELY		

One means that you do not find the kitten at all cute, and ten means that you find the kitten extremely cute. Do you have any questions? Great, now we'll move on to the actual questions. You will see 5 warnings, each for a different health effect. The		१ का मतलब आपको नही लगता की यह कीटन क्यूट है और १० का मतलब आपको लगता है की यह कीटन कही ज्यादा क्यूट है। आपको कोई सवाल है?	१ म्हणजे तुम्हाला अजिबात वाटत नाही की कीटन क्यूट आहे, आणि १० म्हणजे कीटन खूपच क्यूट आहे. तुम्हाला काही प्रश्न आहे का ? ग्रेट. आता आपण महत्वाच्या प्रश्नांकडे वळयात.
same question the 1 to 10 sca	is will be repeated for each warning, using ale.	ग्रेट, अब हम मुख्य प्रश्नो पर चलते है.	तुम्हाला वेगवेगळ्या आरोग्यविषक धोक्यासंबंधी प्रत्येकी ५ इशारे दिसतील. प्रत्येक  इशा-यांसाठी १ ते
I will now show	v you the first image.	आपको अलग अलग स्वास्थ्यसंबंधी हर एक चेतावनी कि पाच चेतावणीयॉ दिखाई जायेगी।	१० च्या स्केलचा वापर करुन सारखाच प्रश्न विचारला जाईल.
[SHOW Health	nWarn1 image]		
		वहीप्रश्न १ से १० स्केल का इस्तमाल करके हर एक	आता आम्ही  तुम्हाला पहिले चित्र दाखवितो.
		चतावनी के लिए दोबारा पुछा जायगा ।	
		अब हम आपको पहला  चित्र बताऎगे।	
HW11.	On a scale of 1 to 10, where 1 is 'not at	१ से १० के एक स्केल, जिस में १ का अर्थ 'बिल्कुल	१ ते १० च्या मोजपट्टीवर, जेथे १ म्हणजे 'अजिबात
aattention	whether this warning message	नहीं' और १० का अर्थ 'कुछ ज्यादा ही' है, कृपया	नाही' आणि १० म्हणजे 'खूपच' असा अर्थ आहे, तर
		बताए कि यह चतावना सदश कितन प्रभावा ह…	कृपया सागा का हा इशारा सदश जन्मने जल नेल्न नेले
		्यागस्त श्वान सींचना नै।	तुमच लक्ष वधुन घता.
	grabs your attention	जापका व्यान खायता हा	
	grabs your attention		
HW11.	On a scale of 1 to 10, where 1 is 'not at		विश्वसनीय आहे.
bhaliava	all' and 10 is 'extremely', please tell		
bbelleve	whether this warning message	विश्वसनीय है।	
	is believable		
HW11.	On a scale of 1 to 10, where 1 is 'not at		
crolovant	all' and 10 is 'extremely', please tell		
CIElevalit	whether this warning message		
	is important to you	आपके लिए महत्त्वपूर्ण है ।	तुमच्यासाठी महत्त्वाचे आहे.

HWTT.	On a scale of 1 to 10, where 1 is not at		
	all' and 10 is 'extremely', please tell		
dalarm	whether this warning message	आश्र्चर्यजनक है।	आश्चर्यकारक आहे
		~	
	is surprising		
HW11.	On a scale of 1 to 10, where 1 is 'not at		
	all' and 10 is 'extremely', please tell		
efright	whether this warning message	<del></del>	<del>श्वी विद्यालय</del> अ <del>गरेन</del>
	5 5	डरावना हा	भातादायक आहत.
	is frightening		
HW11.	On a scale of 1 to 10, where 1 is 'not at		
	all' and 10 is 'extremely', please tell		
fdisgust	whether this warning message		
	······································	ाधनाना ह।	ातरस्कारजन्य आह.
	is disaustina		
HW11.	On a scale of 1 to 10, where 1 is 'not at		
	all' and 10 is 'extremely' please tell		
gunpleasant	whether this warning message		
<b>5 1</b>	whether the warning meedage	देखने में खराब है।	पाहण्यास अप्रिय आहे.
	is unpleasant		
HW11	On a scale of 1 to 10, where 1 is 'not at	१ से १० के एक स्केल जिस में १ का अर्थ 'तिल्कल	१ ते १० च्या मोजपटीतर जेथे १ म्टणजे 'अजितात
honcern	all' and 10 is 'extremely', please tell me	र ( ( र के देव रवर), जिस में रवन जव जिस्कुरा जनीं' और १० का अर्थ ' कल जगता नी' नै काणा	र ( रह ज्या गांज दिवर, जय र हरज जाजवात
nonocini	whether this warning message would	નદા બાર ડુંગ્ માં બચ યુદ્ધ પ્યાવા દા દા દુ, થૃપયા	गाहा आणि १० म्हणज खूपच असा अय आह, तर
		मुझ बताए कि यह चतावना सदश हागा	कृपया सागा का हा इशारा सदश
	make people more concerned about	लोगों को धूँए रहित तंबाकू से होनेवाले स्वास्थ्य	लोकांना धुम्रविरहित तंबाखूच्या आरोग्यविषयक
	the health risk of using smokeless	संबंधी खतरो के बारे में और जागरूक बनाता हैं।	धोक्यांविषयी अधिक जागरूक बनवेल.
	tobacco	~	
HW11.	On a scale of 1 to 10, where 1 is 'not at		
iprevent	all' and 10 is 'extremely', please tell me		
iprovone	whether this warning message would		
	help prevent young people from		तरूणाना धुम्रविरहित तबाखू सुरू करण्यापासुन
	starting to use smokeless tobacco	युवावर्गको धूँए रहित तंबाकू शुरू करने से रोकता	रोखण्यास मदत करेल.
		हैं।	

HW11. jquit	On a scale of 1 to 10, where 1 is 'not at all' and 10 is 'extremely', please tell me whether this warning message would make smokeless tobacco users want to quit	धूँए रहित तंबाकू का उपयोग करनेवालों को इसे छोडने के लिए प्रेरित करता हैं	…धुम्रविरहित तंबाखूचा वापर करणा-यांना ते सोडावे अशी भावना निर्माण करतात.
HW11. keffective	Overall, on a scale of 1 to 10, how effective is this health warning?	कुल मिलाकर, 1 से 10 के पैमाने पर, यह स्वास्थ्य संबंधी चेतावनी कितनी प्रभावशाली है?	एकूणच, १ ते १० च्या मोजपट्टीवर, हे आरोग्यविषयक इशारे किती प्रभावशाली आहेत?
ATTITUDES A	ND BELIEFS		
PostOverall opinion [All]	What is your overall opinion about using smokeless tobacco?	धूँए रहित तंबाकू के बारे में आपकी कुल मिलाकर राय क्या हैं ? यह हैं?	धुम्रविरहित तंबाखूच्या वापराबाबत तुमचे एकंदरीत मत काय आहे?
	1 Good 2 Neither good nor bad 3 Bad 88 R 99 DK	1 अच्छा 2 न अच्छा और न बुरा 3 बुरा 88 R 99 DK	१ सकारात्मक आहे २ सकारात्मकही नाही 3. R 99. DK
General attitudes [All]	In your opinion, please tell me whether you agree, disagree, or neither agree nor disagree with each of the following statements. In general	आपके अनुसार आप हमे बताएं कि नीचे दिए गए विवरण से सहमत हैं, न तो सहमत हैं और न असहमत हैं, अथवा असहमत हैं,। सामान्यतः	तुमच्या मते खाली दिलेल्या विधानांपैकी प्रत्येक विधानाशी तुम्ही सहमत आहात, सहमत नाही किंवा असहमतही नाही, असहमत आहात…साधारणतः
FUSIGAT	Indian society disapproves of smokeless tobacco use.	भारतीय समाज धूँए रहित तंबाकू के प्रयोग को मान्यता नहीं देता हैं । 1 सहमत है। 2 अमरमत है।	भारतीय समाजाला धुम्रविरहित तंबाखू मान्य नाही. १ सहमत आहे. २ असहमत आहे. ३ सटगतनी नानी किंता असटगतनी
	1 Agree	2 अस्तिम हो 3 न तो सहमत और न असहमत	नाही.
	2 Disagree	99 बताया नहीं	९९ सांगितले नाही
	3 Neither agree nor disagree	88 R	88 R
	88 R 99 DK	99 DK	99 DK
PostGA2	Smokeless tobacco is highly addictive.	धूँए रहित तंबाकू एक लत हैं ।	धुम्रविरहित तंबाखू व्यसनाधीन करणारा आहे.

PostGA3	It is acceptable for females to use smokeless tobacco.	औरतों का धूँए रहित तंबाकू का प्रयोग करना स्वीकार हैं ।	स्त्रियांनी धुम्रविरहित तंबाखू वापरणे स्वीकृत आहे.
PostGA4	Using smokeless tobacco sets a bad example for children.	धूँए रहित तंबाकूका उपयोग बच्चों के सामने बुरा उदाहरण रखता हैं	धुम्रविरहित तंबाखूचा वापर मुलां समोर वाईट उदाहरण उभे करतो.
PostGA5	Smokeless tobacco use is harmful to health.	धूँए रहित तंबाकू का उपयोग शरीर के लिय घातक होता हैं।	धुम्रविरहित तंबाखूचा वापर आरोग्यास धोकादायक आहे.
PERCEIVED F	RISK		
	(If USER1=1 skip to worry,		
	If USER1=2 skip to RelRisk1)		
Worry [Current Users]	How worried are you, if at all, that using smokeless tobacco WILL damage your health in the future? Are you [read first 3 options] 1 Not at all worried 2 A little worried 3 Very worried 88 R 99 DK	आप इस बातको लेकर कितने चिंतित हैं कि, धूँए रहित तंबाकू भविष्यमें आपके स्वास्थ्य को नुकसान पहुंचाएगा? हैं तो कितने? [पहले 3 पर्याय पढीये] 1 बिल्कुल भी चिंतित नहीं 2 थोड़ा चिंतित 3 काफी चिंतित 88 R 99 DK	धुम्रविरहित तंबाखू भविष्यात तुमच्या आरोग्याला हानी पोहोचवेल याविषयी तुम्हाला किती चिंता आहे? असल्यास किती ? [पहिले 3 पर्याय वाचा.] 1 मुळीच नाही 2 थोडीशी चिंता वाटते 3 फार चिंता वाटते 88 R 99 DK
RelRisk1 [All]	Compared to smoking cigarettes, do you think using smokeless tobacco is less harmful, more harmful, or no different for health? 1 less harmful 2 more harmful 3 No difference 88 R 99 DK	सिगरेट धूम्रपान की तुलनामें, क्या आप धूँए रहित तंबाकू को स्वास्थ्य के लिय कम हानिकारक, अधिक हानिकारक, अथवा कोइ अंतर नहीं मानते हैं? 1. कम हानिकारक 2. अधिक हानिकारक 3. कोइ फर्क नहीं 88 R 99 DK	सिगारेट्सचे धूम्रपान करण्याच्या तुलनेत धुम्रविरहित तंबाखू आरोग्यासाठी कमी हानीकारक , जास्त हानीकारक किंवा काहीही वेगळे नाहीत असे तुम्हाला वाटते? १. कमी हानीकारक २. जास्त हानीकारक ३. काहीही वेगळे नाही 88 R 99 DK

RelRisk2 [All]	Compared to smoking bidis, do you think	बिडी धूम्रपान  की तुलना में, क्या आप धूँए रहित	बिडयांचे धूम्रपान करण्याच्या तुलनेत धुम्रविरहित
	smokeless tobacco is less harmful, more	तंबाकू को स्वास्थ्य के लिय कम हानिकारक, अधिक	तंबाखू आरोग्यासाठी कमी हानीकारक , जास्त
	harmful or no different for health?	हानिकारक, अथवा कोइ अंतर नहीं मानते हैं ?	हानीकारक किंवा काहीही वेगळे नाहीत असे
	<ol> <li>less harmful</li> <li>more harmful</li> <li>No difference</li> <li>R</li> <li>99 DK</li> </ol>		तुम्हाला वाटते?

HEALTH WARNING LABEL RECALL		
I'm now going to ask you about the health warnings that you've seen in this study. In total there were 5 health warnings. I'd like you to take a minute and try and recall these health warnings: you can say either the words of the warnings or provide a brief description of any warnings you can remember. It is okay if you can't recall all the health warnings but please try your best.	हम अभी आपको स्वास्थ्य संबंधी चेतावनी के बारे में कुछ सवाल पूछना चाहते है, जो आपने इस स्टडी में देखे हैं। कुल मिलाकर 5 स्वास्थ्य चेतावनी हैं। हम चाहते है कि आप वो स्वास्थ्य चेतावनी को याद करने की कोशिश किजीए। आप मुझे उसके शब्द बता सकते हैं, या उस स्वास्थ्य चेतावनी का वर्णन करके बता	मी तुम्हाला आता स्वास्थ संबंधी इशारे जे तुम्ही या अभ्यासामध्ये पाहिले आहेत , त्यासंबंधी काही प्रश्न विचारणार आहे. एकूण ५ स्वास्थ संबंधी इशारे आहेत. मला वाटते कि, तुम्ही त्या इशा-यांना आठवण्याचा प्रयत्न जरूर करा. तुम्ही मला त्याचे काही शब्द सांगू शकता, किंवा त्याचे वर्णन ही करू
[Ask "Any others?…" after each response]	सकत हो, अगर आपको कुछ योद मा महो आ रहा तो अभी चिंता कि कोइ बात नहीं पर हम चाहते है की आप कोशिश जरूर किजीए।	राकतो. तुम्हाला काहा आठवल माहा तरा काहा हरकत नाही , परंतू मला असे वाटते की तुम्ही प्रयत्न जरूर करा.
below]	साक्षात्कार कर्ता के लिय सूचनाः कुछ अलग?हर एक सवाल के बाद ।	[प्रश्नकर्त्यांसाठी सूचना: "इतर काही?"प्रत्येक प्रश्नांनंतर]
Experimental condition 1: Text only		
-text: "tobacco kills" and REFUSED (common to all labels, separate item on checklist)	-पाठः तंबाकू जानलेवा है ।	-माहिती: तंबाखू मृत्युदायक आहे.
Tobacco causes oral cancer TOBACEO KILLS -text: "tobacco causes oral cancer" -other (incorrect): please specify	-पाठः "तंबाकू के सेवन से गले का कैंसर होता है।" -अन्य (गलत): नमुद करे	-माहिती: "तंबाखूच्या सेवना मुळे घशाचा कर्करोग होतो." -इतर (चूक): कृपया नमुद करा
Tobacco causes mouth disease TOBACCO KILLS -text: "tobacco causes mouth disease" -other (incorrect): please specify	-पाठः "तंबाकू के सेवन से मुँह की बिमारी होती है।" -अन्य (गलत): नमुद करे	- माहिती: "तंबाखूच्या सेवनामुळे तोंडाचा रोग होतो." -इतर (चूक) : कृपया नमुद करा

	-पाठः "तंबाक के सेवन से दिलकी बिमारी होती है।"	-माहिती: "तंबाखच्या सेवनामळे हृदयविकार होतो."
	-अन्य (गलत): नमद करे	-इतर (चक) : कपया नमद करा
I UNALLU LAUSUS		
neart disease		
TOBACCO KILLS		
-text: "tobacco causes heart disease"		
-other (incorrect): please specify		
	-पाठः " तंबाकू घातक लत है।"	-माहिती:"तंबाखू व्यसनाधिन आहे."
Tohacco is	-अन्य (गलत) : नमुद करे	-इतर (चूक) : कृपया नमुद करा
highly addictive		
migniy duurtuve		
TUBACCU KILLS		
-text: "tobacco is highly addictive"		
-other (incorrect): please specify		
Tobacco kills	-पाठः " तबाकू हररोज 2500 भारतीयों की जान लेता	-माहिती: "तबाखू दररोज २५०० भारतीयाचा जिव
	है।"	घेते."
	-अन्य (गलत) :नमुद करे	-इतर (चूक) : कृपया नमुद करा
every day		
TOBACCO KULS		
-text: "tobacco kills 2500Indians every day"		
Experimental condition 2: Symbolic imagery		
	-पाठः "तंबाकु के सेवन से गले का कैंसर होता है।"	-माहिती: "तंबाखुच्या सेवनामुळे घशाचा कर्करोग
	- चित्रः बिच्छ / बग (सही)	होतो."
Causes	- चित्र: अन्य (गलत) : नमद करे	-चित्र · विंच / खेकडा (बरोबर)
Urai		-चित्र : इतर (चक) नमट करा
		-199. 201 ( 20) UT & TE
TOBACCO KILLS		
-text: "tobacco causes oral cancer"		
-picture: scorpion/bug (correct)		
-picture: other (incorrect): please specify		

	- <b>पाठः</b> "तंबाकू के सेवन से मुँहकी बिमारी होती है।"	-माहिती: "तंबाखूच्या सेवनामुळे तोंडाचा रोग होतो."
	-चित्रः साप / कोब्रा (सही)	-चित्र : साप / कोब्रा (बरोबर)
	-चित्रः अन्य (गलत): नमुद करे	-चित्र : इतर (चूक) नमुद करा
TOBACCO KILLS		
text: "tobacco causes mouth disease"		
-picture: snake/cobra (correct)		
-picture: other (incorrect): please specify		
	-पाठः "तबाकू के सेवन से दिलकी बिमारी होती है।"	-माहिती: "तबाखूच्या सेवनामुळे हृदयविकार होतो."
	-चित्रः पिला त्रिकोन् (सही)	-चित्र: पिवळा त्रिकोन (बरोबर)
heart	-चित्रः सूची चिन्ह् (सही)	-चित्र: सुची चिन्ह (बरोबर)
disease	-चित्रः हस्ताक्षर उपज (सही)	-चित्र: हस्ताक्षर चिन्ह (बरोबर)
	-चित्रः अन्य (गलत): नमुद करे	-चित्र: इतर (चूक) नमुद करा
text: "tobacco causes beart disease"		
-picture: vellow triangle (correct)		
-picture: exclamation mark (correct)		
-picture: caution sign (correct)		
-picture: other (incorrect): please specify		
Tabacca	-पाठः " तंबाकू घातक लत है।"	- माहिती: "तंबाखू व्यसनाधिन आहे."
ie	-चित्रः लाल वर्तुळ (सही)	-चित्र: लाल वर्तुळ (बरोबर)
	-चित्रः सूची 'नहीं' (सही)	-चित्र:सुची 'नाही' (बरोबर)
	-चित्रः अन्य (गलत): नमुद करे	-चित्र: इतर (चूक)  नमुद करा
auticity		
TOBACCO KILLS		
-text: "tobacco is highly addictive"		
-picture: red circle		
-picture: 'no' symbol (correct)		
-picture: other (incorrect): please specify		

Tobacco kills 2500 Indians every day TOBACCO KILLS -text: "tobacco kills 2500 Indians every day" -picture: skull and/or crossbones (correct) -picture: poison (correct) -picture: other (incorrect): please specify	- पाठः "तंबाकू हररोज <b>2500</b> भारतीयों की जान लेता है।" चित्रः खोपडी और हडिडयां (सही) चित्रः जहर (सही) चित्रःअन्य (गलत): नमुद करे	- माहिती: "तंबाखू दररोज <b>२५००</b> भारतीयांचा जिव घेते." - चित्र : हाडे आणि कवटी (बरोबर) - चित्र : विष (बरोबर) - चित्र:इतर (चूक) नमुद करा
Experimental condition 3: Graphic health effect		
Tobacco causes oral cancer TOBACEO KILLS -text: "tobacco causes oral cancer" -picture: tumour on side of face (correct) -picture: other (incorrect): please specify	-पाठः "तंबाकू केसेवनसे मौखिक कैंसर होता है।" -चित्रः चेहरेकी तरफ टयूमर (सही) -चित्रः अन्य (गलत): नमुद करे	-माहिती:"तंबाखूच्यासेवनामुळेघशाचा कर्करोग होतो." -चित्र: चेह-याच्या बाजूला आलेली गाठ /टूमर (बरोबर) -चित्र: इतर (चूक) नमुद करा
Tobacco causes mouth disease TOBACEO KILLS -text: "tobacco causes mouth disease" -picture: diseased/gross teeth (correct) -picture: other (incorrect): please specify	-पाठः "तंबाकूके सेवनसे मुँह की बिमारी होती है।" -चित्रः रोगग्रस्त / सकलदांत (सही) -चित्रः अन्य (गलत): नमुद करे	-माहिती:"तंबाखूच्यासेवनामुळे तोंडाचा रोग होतो." -चित्र: आजारी/खराब, किडलेलेदात (बरोबर) -चित्र: इतर (चूक) नमुद करा

	-पाठः"तंबाकके सेवनसे दिलकी बिमारी होती है।"	-माहिती:"तंबाखच्यासेवनामळे हृदयविकार होतो."
Tobacco	-चित्रः खलीछाती (सही)	-चित्र: उगडीछाती (बरोबर)
causes	चित्रः मर्जरी (मनी)	चित्रः सर्जरी (तरोतर)
heart	- (पत्रः राजरा (सहा)	नेपत्र. संजरा (बराबर)
inval t	-ाचत्रः अन्य (गलत). नमुद कर	-।चत्र. इतर(यूक) नमुद करा
uisease		
TORACCO KILLS		
-text: topacco causes heart disease		
-picture: open cliest (correct)		
-picture: surgery (correct)		
-picture: other (incorrect): piease specify	गगरः "वंतरक सावक त्यव वै।"	गानिनीः"नंनाय नगानाशिन आने "
Tohacco	-पाठः तबाकू यातक लत हा जिन्हा सरो में जेन (न्यूरी)	-माहिता. तबाखू व्यसनाविन आह.
ie	$-1 \exists \pi; \eta \in H$ Signature $(H \in I)$	-ाचत्र: धश्यामध्य हाल (बराबर)
	-ाचत्रः गलपरटयूमर(सहा)	-ाचत्र: घश्यामध्य गाठ/टुमर (बराबर)
nigniy	चित्रः अन्य (गलत): नमुद करे	-चित्र: इतर(चूक) नमुद करा
addictive		
TUBACCU KILLS		
-text: "tobacco is highly addictive"		
-picture: hole in throat (correct)		
-picture: tumour on throat (correct)		
-picture: other (incorrect): please specify		
and the second sec	-पाठः "तबाकू हररोज 2500 भारतीयों की जान लेता	-माहिती:"तबाखू दररोज २५००भारतीयाचा जिव
Tobacco	है।"	घेते."
kills 2500	-चित्रः पाढ़-या कपडयाखालील शव/मृतशरीर	- चित्र: पांढ-या कपडयाखालील शव/मृतशरिर
	(बरोबर) (सही)	(बरोबर)
overy day	-चित्रःअन्य (गलत): नमद करे	-चित्र: इतर(चुक): नमुद करा
every day		
-text: "tobacco kills 2500Indians every day"		
-picture: dead body under white sheet (correct)		
-picture: other (incorrect): please specify		
Experimental condition 4: Testimonial		

Tobacco causes oral cancer <sup>1</sup> lost my jaw to oral cancer." <i>Ajay, age 38, died two weeks after this photo was taken</i> -text: "tobacco causes oral cancer" -picture: man with oral cancer (correct) -picture: missing jaw (correct) -picture: missing jaw (correct) -picture: other (incorrect): please specify -testimonial: "I lost my jaw to oral cancer". Ajay, age 38, died two weeks after this photo was taken.	-पाठः "तंबाकूके सेवन से मौखिककैंसर होता है।" -चित्रः मौखिक कैंसर के साथ आदमी (सही) -चित्रः जबडेनापता (सही) -चित्रः अन्य (गलत): नमुद करे -पाठः "मौखिक कैंसर की वजह से मैंने अपना जबडा खो दिया।" अजय, उम्र 38 साल, यह फोटो लेने के 2 हफ्ते बाद उस की मौत हो गयी।	-माहिती: "तंबाखूच्या सेवनामुळे तोंडाचा कर्करोग होतो." -चित्र: तोडांचा कर्करोग झालेला माणूस (बरोबर) -चित्र: जबडा नसलेला माणूस (बरोबर) -चित्र: इतर (चूक) नमुद करा -माहिती: "तोंडाच्या कर्करोगामुळे मी आपला जबडा गमावला." अजय, वय वर्षे३८, हा फोटो घेतल्यावर २आठवडयानंतर त्याचा मृत्यु झाला.
Tobacco causes mouth disease "Because of using biscoc, I have this disease in my mouth." Depak, age 40 TOBACCO KILLS - text: "tobacco causes mouth disease" - picture: womanman with mouth disease/tumour (correct) - picture: woman with open mouth/tongue (correct) - picture: other (incorrect): please specify - testimonial: "Because of using tobacco, I have this disease in my mouth that cannot be removed". Deepak, age 40.	-पाठः तथाकू कसवन स मुह का विमारा होता हो -चित्रः मुँहके रोग / टयूमर के साथ आदमी (सही) -चित्रः खुले मुँहवालाआदमी (सही) -चित्रः अन्य (गलत): नमुद करे -पाठः "तंबाकू का सेवन करने कि वजह से मुझे यह मुँहका टयूमर है, जो हटाया नहीं जा सकता। " दिपक उम्र 40 साल ।	-माहिता: 'तबाखूच्यासवनामुळ ताडाचा राग हाता. -चित्र: तोंडाचा रोग आणि तोंडात गाठ झालेला पुरूष (बरोबर) -चित्र: तोंड उघडे असलेला पुरूष (बरोबर) -चित्र: इतर (चूक): नमुद करा -माहिती: "तंबाखूच्या सेवनामुळे माझ्या तोंडातही गाठ झाली जी कधी ही काढता येऊ शकणार नाही." दिपक, वय वर्षे 40.

Tobacco causes heart disease "This is my second heart attack caused by tobacco use. It could be my last." Raj. age 44 TOBACECO KILLS -text: "tobacco causes heart disease" -picture: man lying down/unconscious (correct) -picture: CPR administered on man (correct) -picture: other (incorrect): please specify	-पाठः "तंबाकू केसेवनसे दिलकी बिमारी होती है।" -चित्रः नीचे / बेहोश पडा हुँआ आदमी (सही) -चित्रः सर्जरी (सही) -चित्रः अन्य (गलत): नमुदकरे -पाठः "तंबाकू के सेवन कि वजह से यह मेरा दुसरा दिल का दौरा है।" जो आखरीभी हो सकता है। राज्, उम्र 44 साल ।	-माहिती: "तंबाखूच्यासेवनामुळेहृदयविकार होतो." -चित्र: खाली पडलेला माणुस/बेसुदध पडलेला माणूस (बरोबर) -चित्र: सर्जरी(बरोबर) -चित्र: इतर(चूक):नमुद करा -माहिती: "तंबाखूच्या सेवनामुळे मला हृदयविकाराचा दुसरा झटका आला, जो कदाचित शेवटाचाही असू शकतो." राज, वय वर्षे४४.
caused by tobacco use. It could be my last."		
Tobacco is highly addictive "I thought I could quit tobacco any time I wanted. -picture: man with hole in throat (correct) -picture: other (incorrect): please specify -testimonial: "I thought I could quit tobacco any time I wanted. I was wrong." Rohit, age 45.	-पाठः "तंबाकू घातक लत है।" -चित्रः गले के छेद के साथ आदमी (सही) -चित्रः अन्य (गलत): नमुद करे पाठः "मैं सोचता था कि, मैं तंबाकू सेवन किसी भी समय छोंड सकता हुँ,लेकिन मैं गलत था।" रोहित्,उम्र 45 साल ।	-माहिती: "तंबाखूव्यसनाधिनआहे." -चित्र: घश्यामध्येछिद्रअसलेलामाणुस (बरोबर) -चित्र: इतर (चूक): नमुद करा -माहिती: "मलावाटतहोतेकि, मीतंबाखूचेसेवनकोणत्याहीक्षणीसोडूशकतो. परंतुहामाझाचुकीचासमजहोता." रोहित,वयवर्षे४५.

Tobacco kills 2500 Indians every day Tobacco use killed my husband. I feil so alone." Gita, age 36 TOBACECO KILLS -text: "tobacco kills 2500 Indians every day" -picture: woman mourning (correct) -picture: woman in white clothing (correct) -picture: other (incorrect): please specify -testimonial: "Tobacco use killed my husband. I fease an energy Cite a care 26	रावा गू हरराज 2000 गारताया का जागराता : दुखी महिला (सही) : सफेद कपडे में महिला (सही) : कपडे के नीचे लाश (सही) "तंबाकू के सेवन ने मेरे पती कि जानलेली, अब जफी अकेलापन मेहसूस होता है।" गिता, उम्र 36	भारता. सवायू प्रसाय (२०० सारसायाया घेते." - चित्र: दु:खीस्त्री (बरोबर) -चित्र: कपडयाखाली असलेले शव/मृतशरिर/ धड (बरोबर) -चित्र: इतर (चूक) नमुद करा -माहिती: "तंबाखूच्या सेवनामुळे माझ्या पतीचा मृत्यु झाला. आता मला फार एकटे वाटते आहे." गिता, वय वर्षे३६.
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HEALTH BEL	LIEFS		
	I am going to read you a list of health effects and diseases that may or may not be caused by using smokeless tobacco. Based on what you know or believe, does smokeless tobacco use cause	मैं स्वास्थ्यपर प्रभाव और बीमारियों की सूची पढ रहा हुँ, जोकि धूँए रहित तंबाकू के कारण हो सकती है, यानहीं भी हो सकती है । आपकी जानकारीसे, क्या धूँए रहित तंबाकू से होता है?	मी तुम्हाला धूम्रविरहित तंबाखूचे धूम्रपान केल्यामुळे होऊ शकणा-या किंवा न होऊ शकणा-या आरोग्यावरील परिणामांची आणि आजारांची एक यादी वाचुन दाखवेन. तुम्हाला जी माहिती आहे किंवा तुम्हाला जे वाटते त्या आधारे धूम्रविरहित तंबाखूच्या धूम्रपानामुळेहोऊ शकतो का?
	<b>INTERVIEWER NOTE</b> : if respondent unsure	[साक्षात्कर्ता के लिए सूचनाः प्रतिवादी को अगर	<b>[प्रशनकर्त्यासाठी सूचनाः</b> माहितीदात्याला जर रोग
	of what the health outcome is, select "don't	बिमारी कौनसी है, यह पता ना हो तो "पता नहीं"	कोणता आहे हे माहित नसेल तर "माहित नाही" हा
	know"	यह पर्याय का स्विकार करे। ]	पर्याय स्विकारा]
HBOral	Oral cancer?	मूँह का कैंसर ?	तोंडाचा कर्करोग?
	1. Yes	1. हाँ	1. होय
	2. No	2. नहीं	2. नाही
	3. DK	3. DK	3. DK
	99. R	99. R	99. R
HBMouth	Mouth disease?	मुँहकी बिमारी?	तोंडाचा रोग?
	1. Yes	1. हाँ	1. होय
	2. No	2. नहीं	2. नाही
	3. DK	3. DK	3. DK
	99. R	99. R	99. R
HBHeart	Heart disease?	दिल की बीमारी ?	हदयविकार?
	1. Yes	1. हाँ	1. होय
	2. No	2. नहीं	2. नाही
	3. DK	3. DK	3. DK
	99. R	99. R	99. R
HBdeath	Death?	मौत?	मृत्यू?
	1. Yes	1. हाँ	1. होय
	2. No	2. नहीं	2. नाही
	3. DK	3. DK	3. DK
	99. R	99. R	99. R

HEALTH WA	RNING LABEL RANKING TASK		
PROGRAMMER NOTE: For the ranking task, each respondent s		t should be assigned to one of the 5 health	effects (with balancing for number
assigned to e	ach). This is NOT the same as experimental con	dition. The respondent will view all 4 warni	ngs (in all 4 executional styles) for one
health effect			
HWranktas	I am now going to show you four health	अब हम आपको 4 स्वास्थ्यसंबंधी चेतावणीयाँ	आता आम्ही तुम्हाला ४ आरोग्यविषयक इशारे
k_1_1_1	warnings about [health effect]. I am going to	दिखायेंगे [स्वास्थ्यसंबंधी परिणाम] उसकी एक	दाखवणार आहोत [आरोग्यावरिल परिणाम.] आम्ही
	ask you to compare the warnings to each	दुसरेके साथ तुलना करने के लिए हम आपको	तुम्हाला त्याची एक दुस-यांबरोबर तुलना
	ouler.	बतायेगे।	
	Overall, which warning do you think is the most	आपके अनुसार, कौनसी स्वास्थ्यसंबंधी चेतावनी	एकूणच, तुमच्या मते कोणता इशारा धूम्रविरहित
	effective for discouraging the use of smokeless	धूँए रहित तंबाकूका उपयोग ना करनेके लिए	तंबाखूचा वापर थांबवण्यासाठी प्रभावशाली आहे.
	tobacco?	हतोत्साहित करेगी ।	
	Overall, which warning is the <u>next most</u>	इन में से, कौन सी चेतावनी धूम्रपान छोड़ने को	धूम्रपान करणा-यांना ते सोडावे यासाठी त्यांना
	<u>effective</u> ?	प्रेरित करने के लिए सबसे अधिक प्रभावी चेतावनी	प्रेरणा देईल असा तुमच्या मते दुसरा कोणता सर्वात
	[Interviewer. Repeat until all warnings in the set have been selected]	है?	प्रभावी इशारा आहे?
		(साक्षात्कारकर्ता :सेट की सभी चेतावनियों के चुने	(मुलाखतकाराला सूचनाः या संचातील सर्व इशा-
		जाने तक दोहराएं)	यांबाबत विचारणा होईपर्यंत हा प्रश्न पुनःपुन्हा
			विचारा.)
CURRENT IMAGES RANKING TASK			
PROGRAMM	ER NOTE: For this ranking task, each		
respondent w	ill view 5 warning label images:		
-4 current hea	alth warnings		
-1 old health warning that was on smokeless tobacco			
HWranktask	Lam now going to show you five different		
1 acutal	warnings, and ask you to compare the	म अब आपका पांच स्वास्थ्यसंबंधा चतावना ि	मा आता तुम्हाला पाच इशार दाखवून त्याचा
1_doutai	warnings, and dok yed to compare the	ादखाकर उसका एक दुसर क साथ तुलना करन क ———————	एकमकाबराबर तुलना करण्यास सागणार आह.
		ालए कहुगा/गा	
	Overall, which warning do you think is the	आपक अनुसार, कौनसी स्वास्थ्यसंबंधी चेतावनी	तुमच्या मत कोणता इशारा धूम्रविरहित तबाखूचा
	smokeless tobacco?	धूएराहत तबाकूका उपयोग ना करने के लिए	वापर थाबवण्यासाठी प्रभावशाली आहे.
		हातोत्साहित करेगी ?	

DEIMBUDSE	Overall, which warning is the <u>next most</u> <u>effective</u> ? [Interviewer: Repeat until all warnings in the set have been selected]	इन में से, कौन सी चेतावनी धूम्रपान छोड़ने को प्रेरित करने के लिए सबसे अधिक प्रभावी चेतावनी है? (साक्षात्कारकर्ता :सेट की सभी चेतावनियों के चुने जाने तक दोहराएं)	धूम्रपान करणा-यांना ते सोडावे यासाठी त्यांना प्रेरणा देईल असा तुमच्या मते दुसरा कोणता सर्वात प्रभावी इशारा आहे? (मुलाखतकाराला सूचनाः- या संचातील सर्व इशा- यांबाबत विचारणा होईपर्यंत हा प्रश्न पुनःपुन्हा विचारा.)
That's everyth	ning for today. Thank you very much for your		$\rightarrow \pi f + \pi f$
participation. appreciation of your reimburs	Here is a small gift valued at 100 rupees) in of your time. To confirm that you've received sement, I'll need you to sign this form.	यह आज का दन कालए हूँ । आपने जा वक्त हम दिया उसके लिए धन्यवाद और आपको उसके बदले में 100 रु. तक का उपहार दिया जाएगा ।	ह सव काहा आजच्या दिवसासाठा आह. तुम्हा सहभागी झाल्याबद्दल धन्यवा. तुम्ही दिलेल्या वेळेबद्दल तुम्हाला एक छोटीशी भेट (१०० रुपयापर्यत) देण्यात येईल. यासाठी तुमची सही
[Interviewer   Remuneratior	<b>note:]</b> Have participant sign/initial n Form.	साक्षात्कारकर्ता के लिए सूचनाः सहभागी को तोहफा देकर उनके हस्ताक्षर लिजिए	घेण्यात येईल. मुलखतकर्त्यासाठी सूचनाः माहितीदात्याला भेट वस्तू देऊन त्याची सही घ्या.
That's all the c a feedback let	questions I have for you today. I'll now go over ter with you.	आज के लिए यह सारे सवाल थे। अब हम आपको एक प्रतिक्रीया पञ देने जा रहे है ।	आजच्यासाठी हे सर्व प्रश्न होते आपण आता तुमच्याकडे माहिती पञक आहे त्याविषयी बोलू या.
[INTERVIEWE main points:]	<b>ER NOTE</b> : Hand out Feedback Letter, go over	साक्षात्कारकर्ता के लिए सूचनाः जानकारी पञक दे कर उसके मुद्दोपर चर्चा करेसर्वेक्षण में शामील होने	प्रश्नकर्त्यासाठी सूचनाः मुख्य देऊन पञक माहिती - पहा महे
Thank you for help.	participating in our study – we appreciate your	के लिए धन्यवाद सर्वेक्षण में शामील होने के लिए धन्यवाद ।	आपण या अभ्यासामध्ये सहभागी झाल्याबद्दल आम्ही आपले आभारी आहोत.
- As we m opinions	entioned earlier, we are interested in people's about health warnings on tobacco packaging.		- आम्ही पुर्वी सांगितल्याप्रमाणे तंबाखूच्या , लोकांचे बहल चेतावनी स्वास्थ्यसंबंधी पाकिटावरील
- We were health wa perceptio overall e emotiona	e interested in the impact of different types of arnings and how they affect people's ons of believability, personal relevance, and ffectiveness as well as eliciting negative al arousal.	-जेसे हमने आपको पहले बताया की तंबाकू के पॅंकेटपर स्वास्थ्यसंबंधी जो चेतावनीयाँ है उसके , है चाहते जानना राय की लोगों हम संबंधी - हम यह जानना चाहते है की, अलग-अलग तरह की स्वास्थ्यसंबंधी चेतावनीयाँ लोगों की धारणा	रस आम्हाला घेण्यात जाणून हे आहेत काय मत .आहे - आम्ही हे जाणून घेऊ इच्छितो की वेगळया-वेग , य-इशा आरोग्यविषयकांबद्दल लोकांचे मत ,

-	We were also interested in the impact of different health	व्यक्तीगत प्रासंगिकता और समग्र प्रभाव के रूप में	प्रभावाच्या एकञित आणि प्रासंगिकता व्यक्तीगत
	warnings on the credibility of health warning messages,	तथा नकारात्मक भावनाओं पर क्या असर पडता है	यांच्या-इशा ,भावना नकारात्मक तसेच रुपात
	tobacco	1	पोहचविण्यासाठी संदेश आरोग्यविषयी धूम्रपानाबद्दल
			.आहेत विश्वसनीय किती
_	Participants were shown different types of health	-हम यह जाननेमें भी उत्सुक है कि धूँएरहित तंबाकू	
	warnings for five different health effects: either text-only	के स्वास्थ्यसंबंधी चेतावनीया स्वास्थ्य का संदेश	- आम्हाला आरोग्याविषयक दशा-यांचा प्रभाव
	warnings, pictorial warnings with graphic health effects,	देने के लिए कितनी विशवसनिय हैं और धूँएरहित	आरोग्य विषयकदशा-यांच्या संदेशावर किती
	or pictorial warnings with personal testimonials, in order	तंबाकूके दुष्परीनामों के लिए कितनी विशवसाहर्ता	निश्त्वयनिय थादे थाणि धम्तिरदित
	to compare responses to each type of warning.	हैं।	तंबाजनाप्रगायातिषयी काय समज आहे हे जाणन
	As a reminder, no personal information (name, address	- साक्षात्कारकर्ता के लिए 5 अलग-अलग	राषाञ्चरागरण्याप्रभया काय रागण जाह ह जाणूग स्नामने आहे
-	contact information. etc.) will be collected, other than a	स्वास्थ्यसंबंधी चेतावनीयाँ दिखायी जायेगी उसमे	व्यापय आह.
	signature or initial to confirm that the small gift was	कही में सिर्फ पट होगा या कहीमें चित्रभी होगे,	- मुलाखतकाराला पाच वेगवेगळे आरोग्यविषयक
	received. For your protection, we will assign you a	कहीमें ग्राफिक स्वास्थ्य प्रभाव होगाया फिर कही में	ू धोक्यांचे इशारे दाखवण्यात येतील: फक्त माहिती,
	number that will be used to label all information and no personal identifiers will be linked to your data	चित्र के साथ स्वकथा (टेस्टीमोनिअलस) होगी,	इशा-यांची चित्र किंवा स्व:कथा
		क्रममें प्रत्येक चेतावनी के प्रकार कि तुलना करने	(पर्सनलटेस्टीमोनिअल), प्रत्येकाबरोबरची
_	This study has been reviewed by and received ethics	के लिए कहा जायेगा	प्रतिक्रियांची तूलना करा.
	clearance through the University of Waterloo and the		5
	Healis - Sekhsaria Institute for Public Health.If you have	- आपको यह बताया जा रहा है की, कोई भी	<ul> <li>तुम्हाला हे सांगण्यात येत आहे की, काही</li> </ul>
	any comments or concerns resulting from your	व्यक्तीगत जानकारी ( नाम, पता, संपर्क	व्यक्तीगत माहिती ( नाव, पत्ता, संपर्क संबंधी
	Healis whose contact information is listed in your letter	जानकारी, अन्य) आपके पाससे ली नही	माहिती, इत्यादी) व्यक्तीगत माहिती घेतली जाणार
	[point out contact	जायेगी । आपको यह भेट दी जा रही है,	नाही. तुम्हाला आमच्याकडून छोटीसी भेट मिळाली हे
		इसके पुस्ती के लिए सिर्फ एक हस्ताक्षर लिए	जाणून घेण्यासाठी फक्त एक हस्ताक्षर घेतले
		जायेंगे । आपके सुरक्षा के लिए आपको एक	जाईल. तुमच्या संरक्षणासाठी तुम्हाला एक नंबर
		नंबर दिया जायेगा आपकी सारी जानकारी	दिला जाईल, ज्या समोर तुमची सर्व माहिती नमूद
		वह नंबर के सामने होगी । जहा पर कोई भी	केली असेल आणि कोणतीही व्यक्तीगत माहिती
		व्यक्तीगत जानकारी जोडी नही जायेगी ।	त्याबरोबर जोडली गेली नसेल.
		- इस अध्ययन की यूनिव्हसिटी ऑफ वॉटलू	- या अभ्यासासाठी समीक्षा आणि नैतीकतेची
		और हिलीस-सेक्सारिया इन्स्टिटयूट फॉर	मंजुरी यूनिव्हर्सिटी ऑफ वॉटर्लू आणि हिलीस-
		पब्लोक हेल्थ के नैतिकता समिती से समीक्षा	इं सेक्सारियास्टिट्यूट फॉर पब्लीक हेल्थ यांच्याकडून
		की गई है । अगर आपको सहभाग से लेकर	मिळाली आहे प्रश्न काही सहभागानंतर तुम्हाला .

	कोई सवाल है तो हिलीस में डॉ. गुप्ता नैतिकता समिती से संपर्क कर सकते है ।	गुप्ता .डॉ तर असेल टिप्पणी किंवाहिलीसशी संपर्क साधा की ज्याचा पत्ता तुमच्या पत्रकावर आहे .
	(जानकरी पञ पर जो संपर्क के बारे जानकारी है	(.दाखवा माहीती संपर्काची पत्रकावरिल त्यांच्या)
	वो दिखाईये ।)	
That's eventthing for today. Thank you again for your		
naticipation	अजि के लिए यह कीफी है, सहमाग के लिए हम	आजच्या दिवसासाठा इतक पुर .माहिता दिल्याबद्दल
	आपके आभार प्रकट करते है	आम्ही आपले आभारी आहोत.
Please insert any notes about the participant or interview:	अगर सर्वेक्षण के बारे में कोई भी टिप्पणी हो ,तो	कृपया करून सहभागी किंवा मुलाखतदाराबद्दलची
	यहा नमूद करे ।	माहिती लिहा.

## APPENDIX C. Codebook for India

RESPNUM	Respondent Number on Machine starting at 1	1-
Status	System variable for status	4 Complete 3 Not Complete
Interviewtime	System variable for interview length	Number
StudyID	5-digit number that combines RESPNUM with the computerID	######
Intersite	Site of Interview (entered by interviewer)	1,2,3,4,5,6,7,8,9,10,11,12,13,14,15
InterID	Interviewer ID (entered by interviewer)	Number (1-6)
iPadnum	Number of iPad used (entered by interviewer)	Text
RevisedSite	Site of Interview (determined by date of survey completed)	1,2,3,4,5,6,7,8,9,10,11,12,13,14,15
Date_of_Interview	Date of Interview	MMDDYYYY
Intstart	Start Time of interview	HHMMSS
Agegroup	Variable to store age group based on D_Age	1 YOUTH (16 - 18 YEARS) 2 ADULT (19+ YEARS)
User1	Variable to store smoking status based on Sstatus	<ol> <li>User (if sstatus=1,2 or 3)</li> <li>Non-User (if sstatus=4)</li> </ol>
Date_end_Interview	Date Interview Ended—Only present if made it to final screen	MDDYYYY
Intfinish	Time interview Ended—Only present if made it to final screen	HHMMSS
sLanguage		1 English 2 Hindi 3 Marathi
Country	Code for Country	IND
AGP	Age Group Selected by Interviewer at beginning of survey	<ol> <li>Youth (16 - 18 YEARS)</li> <li>Adult (19+ YEARS)</li> </ol>
Consen	Does Respondent Consent to doing the survey:	1 Yes, continue to survey 2 No, Thank you for your time
DGender	Gender	1 Female 2 Male
D_Age	To begin, may I ask how old you are?	Number (1-99)
SLTSTATUS1	In the last 30 days, how often did you use any smokeless tobacco products? (If ANS=1,2 or 3 skip to SLTStatus2, If ANS=4 (Youth ONLY) skip to EVERUSE) I am now going to ask you questions about your smokeless tobacco use. Have you EVER USED any smokeless tobacco products?	<ol> <li>Every day</li> <li>At least once a week</li> <li>At least once in the last month</li> <li>Not at all</li> </ol>
	Some examples are	

	(Check all that apply)	
EVERUSE_1	Mishri	$\overline{\checkmark} = 1$
		$\Box = 0$
EVERUSE_2	Betel quid with tobacco (paan)	$ \underline{\nabla}  = 1$
EVEDUSE 2	Dlain abowing tabagag	$\Box = 0$
EVERUSE_5	Fiam chewing tobacco	
EVERUSE 4	Gutka	$\overrightarrow{\nabla} = 1$
		$\Box = 0$
EVERUSE_5	Khaini	$\overline{\mathbf{v}} = 1$
		$\Box = 0$
EVERUSE_6	Zarda	$\overline{\mathbf{v}} = 1$
EVEDLICE 7		$\Box = 0$
EVERUSE_/	I obacco toothpaste/paste	$\boxed{\mathbf{v}} = 1$
EVERUSE 8	Nasal/ oral snuff	$\overrightarrow{V} = 1$
		$\Box = 0$
EVERUSE 9	Lal dantmanjan	
_		$\Box = 0$
EVERUSE_10	Dokta	= 1
		$\Box = 0$
EVERUSE_11	Gudhaku	
EVEDLICE 12	Cal	$\Box = 0$
EVERUSE_12	Gui	$[\underline{\mathbf{v}}] = 1$
EVERUSE 13	Other smokeless product	$\overrightarrow{V} = 1$
	o the shickers product	$\Box = 0$
EVERUSEOTH	Other smokeless product - specify	Text
EVERUSE_14	None of the above	$\overline{\mathbf{v}} = 1$
		$\Box = 0$
EVERUSE_15	R	$\overline{\mathbf{v}} = 1$
EVEDLICE 16	DV	$\Box = 0$
EVERUSE_10	DK	$[\underline{\mathbf{v}}] = 1$
	If any products chosen skip to	
	AgeInit	
	If no products chosen skip to	
	Sproducts	
SLTSTATUS2	You mentioned that you currently	1 Enter Number
	use smokeless tobacco	2 DK/R
	do you use smokeless	
	tobacco?	
	(Daily, Day if SLTStatus1=1)	
	(Weekly, Week if SLTStatus1=2)	
	(Monthly, Month if SLTStatus1=3)	
	(II AINS=1 skip to SLTStatus3, If ANS=2 skip to Ago(nit)	
SI TSTATUS2	II ANS-2 SKIP to AgeInit)	Number $(0.999)$
SLISIAIUSS	use smokeless tobacco	Number (0-997)
	On average, how many times per	
	do you use smokeless	
	tobacco?	

	(Daily, Day if Sstatus=1) (Weekly, Week if Sstatus=2)	
	(Monthly, Month if Sstatus=3)	
AgeInit	How old were you when you first tried smokeless tobacco?	1 Enter Age 2 DK/R
	(If ANS=1 skip to AgeInitiation, If ANS=2 and User=1 skip to CurrentUse, If ANS=2 and User=2 skip to	
	Sproducts)	
AgeInitiation	How old were you when you first tried smokeless tobacco?	Number (0-99)
	(If User=1 skip to CurrentUse, If User=2 skip to Sproducts)	
	Do you currently use any of the	
	following smokeless tobacco	
	products at least once a month?	
	(Check all that apply)	
CURRENTUSE_1	Mishri	$\square = 1$ $\square = 0$
CURRENTUSE_2	Betel quid with tobacco (paan)	
		$\Box = 0$
CURRENTUSE_3	Plain chewing tobacco	$[\mathbf{v}] = 1$ $[\mathbf{n}] = 0$
CURRENTUSE 4	Gutka	$\overrightarrow{\mathbf{V}} = 1$
-		$\Box = 0$
CURRENTUSE_5	Khaini	$\square = 1$ $\square = 0$
CURRENTUSE 6	Zarda	$\square = 1$
		$\Box = 0$
CURRENTUSE_7	Tobacco toothpaste/paste	$\mathbf{\nabla} = 1$
CURRENTUSE 8	Nasal/ oral snuff	$\Box = 0$ $\nabla = 1$
condition_0		$\Box = 0$
CURRENTUSE_9	Lal dantmanjan	$\boxed{\square} = 1$
CURRENTUSE 10	Delte	$\Box = 0$
CURRENTUSE_10	Dokta	$\bigcup_{i=1}^{ v_i } = 0$
CURRENTUSE 11	Gudhaku	$\square = 0$ $\square = 1$
		$\Box = 0$
CURRENTUSE_12	Gul	$\square = 1$ $\square = 0$
CURRENTUSE_13	Other smokeless product	
CUDDENTUSEOTU	Other ampledate and the market	$\Box = 0$
CURKENIUSEUIH	Vene of the above	$\frac{1 \text{ ext}}{\sqrt{1-1}}$
CURRENTUSE_14	none of the above	$\Box = 0$
CURRENTUSE_15	R	$\boxed{\overrightarrow{v}} = 1$

CURRENTUSE 16	DK	$\checkmark = 1$
		$\Box = 0$
	If one product is chosen skip to	
	ReasonsForUse1,	
	If multiple products chosen skip	
	to UsualProduct,	
	If no products chosen skip to	
	Susual1	
UsualProduct	Which of these products do you use	Number (1-4)
	most frequently?	(See CUSEDLIST and T CUSEDLIST
	1 5	variables)
CUSEDLIST 1	Code used in Constructed list for	156, 172, or 188 Mishri
_	selected first in CURRENTUSE	157, 173, or 189 Betel quid with
	used in UsualProduct	tobacco (paan)
		158, 174, or 190 Plain chewing
		tobacco
		159, 175, or 191 Gutka
		160, 176, or 192 Khaini
		161, 177, or 193 Zarda
		162, 178, or 194 Tobacco
		toothpaste/paste
		163, 179, or 195 Nasal/ oral snuff
		164, 180, or 196 Lal dantmanjan
		165, 181, or 197 Dokta
		166, 182, or 198 Gudhaku
		167, 183, or 199 Gul
		168, 184, or 200 Other smokeless
		product
CUSEDLIST_2	Code used in Constructed list for	156, 172, or 188 Mishri
	selected second in CURRENTUSE	157, 173, or 189 Betel quid with
	used in UsualProduct	tobacco (paan)
		158, 174, or 190 Plain chewing
		tobacco
		159, 175, or 191 Gutka
		160, 176, or 192 Khaini
		161, 177, or 193 Zarda
		162, 178, or 194 Tobacco
		toothpaste/paste
		163, 179, or 195 Nasal/ oral snuff
		164, 180, or 196 Lal dantmanjan
		165, 181, or 197 Dokta
		166, 182, or 198 Gudhaku
		167, 183, or 199 Gul
		168, 184, or 200 Other smokeless
CUCEDUCT 2	Code wood in Constructed list for	product
CUSEDLISI_3	Code used in Constructed list for	156, 1/2, or 188 Mishri 157, 172, or 180 Detail and with
	selected initia in CURRENTUSE	157, 173, of 189 Betel quid with
	used in UsualProduct	159 174 or 100 Plain abarrier
		tobacco
		150 175 or 101 Guthe
		159, 175, 01191 Guika 160, 176, or 102 Khoini
		100, 170, 01 192 Knaini 161, 177, or 102, Zordo
		101, 1//, 01 195 Zarda 162, 178, or 104 Teheoro
		102, 178, 01 194 100acco
		162 170 or 105 Negel/ orel spuff
		1 163 1/9 or 195 Nasal/ oral shuff
		164, 180, or 196 Lal dantmanian
------------------	---------------------------------------	------------------------------------
		165 181 or 197 Dokta
		166, 182  or  198  Gudhaku
		167, 183, or 199, Gul
		168 184 or 200 Other smokeless
		product
	Colored in Constructed List for	product
CUSEDLISI_4	Code used in Constructed list for	156, 1/2, or 188 Mishri
	selected fourth in CURRENTUSE	157, 173, or 189 Betel quid with
	used in UsualProduct	tobacco (paan)
		158, 174, or 190 Plain chewing
		tobacco
		159, 175, or 191 Gutka
		160, 176, or 192 Khaini
		161, 177, or 193 Zarda
		162, 178, or 194 Tobacco
		toothpaste/paste
		163, 179, or 195 Nasal/ oral snuff
		164, 180, or 196 Lal dantmanjan
		165, 181, or 197 Dokta
		166, 182, or 198 Gudhaku
		167, 183, or 199 Gul
		168, 184, or 200 Other smokeless
		product
T CUSEDLIST 1	Derived Variable with text version	Text
	of CUSEDLIST 1	
T CUSEDUST 2	Derived Variable with text version	Text
	of CUSEDUST 2	Text
T CUSEDUST 2	Derived Verichle with text version	Text
I_CUSEDLISI_5	of CUSEDUST 2	Text
	OF CUSEDLIST_5	T
I_CUSEDLISI_4	Derived variable with text version	lext
	of CUSEDLIST_4	
T_UsualProduct	Derived Variable that displays the	Text
	text for what the respondent selected	
	in usual product question OR if they	
	only selected one product in	
	CURRENTUSE displays that	
	product	
Reasonsforuse1	In choosing this type of smokeless	1 Yes
	tobacco, was part of your decision	2 No
	based on any of the following?	3 R
		4 DK
	The price.	
Reasonsforuse2	In choosing this type of smokeless	1 Yes
	tobacco was part of your decision	2 No
	based on any of the following?	3 R
		4 DK
	This type is of High Quality	
Reasonsforuse?	In choosing this type of smokeless	1 Ves
iceasonisionuses	tobacco was part of your decision	2 No
	based on any of the fellowing?	2 NO 2 D
	based on any of the following?	
	This ( as is less h = 0.1)	4 DK
	I his type is less harmful to my	
	health.	

Susual1	Do you have a particular brand of	1 Yes
Subuili	smokeless tobacco that you usually	2 No
	shokeless tobacco that you usually	2 NO 2 D
	use?	3 K A DV
		4 DK
	(If ANS=1 skip to SusualSlessTob,	
	If ANS=2,3 or 4 skip to Susual3)	
SusualSlessTob	What is the full name of your usual	Text
	smokeless brand?	
	If answered skin to Sproducts	
Sucuel2	Do you have a TVPE of smokeless	1 Vac
Susuals	bo you have a TITE of smokeless	
	tobacco that you usually use?	2 NO 2 D
		3 R
	(If ANS=1 skip to	4 DK
	SusualSlessType,	
	If ANS=2,3 or 4 skip to Sproducts)	
SusualSlessType	Do you have a TYPE of smokeless	Text
	tobacco that you usually use?	
	In the past month have you used	
	any of the following smoked	
	tobacco products	
	tobacco products	
	(Check all that apply)	
SPRODUCTS_1	Cigarettes (factory made and roll-	$\square = 1$
	your-own)	$\Box = 0$
SPRODUCTS 2	Bidis	$\boxed{\mathbf{V}} = 1$
—		$\Box = 0$
SPRODUCTS 3	Hookah/ shisha/ narghile/ water pipe	$\overline{\mathbf{V}} = 1$
STRODUCTS_5	noonani, sinsha, narginie, water pipe	$\Box = 0$
SPRODUCTS 4	Cigars/small aigars/ aigarillas	$\Box = 0$
SFRODUCTS_4	Cigars/sinan cigars/ cigarnos	$ \mathbf{v}  = 1$
	D.	
SPRODUCTS_5	Pipe	
		$\Box = 0$
SPRODUCTS_6	Chutta	= 1
		$\Box = 0$
SPRODUCTS 7	Hooklis	$\boxed{\checkmark} = 1$
—		$\Box = 0$
SPRODUCTS 8	Other (Specify)	$ \nabla  = 1$
STRODUCTS_0	other (speeny)	$\Box = 0$
SpredOTU	Other Specify	Tart
	Other Specify	
SPRODUCTS_9	None of the above	
		$\Box = 0$
SPRODUCTS_10	R	$\mathbf{V} = 1$
		$\Box = 0$
SPRODUCTS 11	DK	$\boxed{\checkmark} = 1$
—		$\Box = 0$
	If User1=2 skip to Vsusfuture	
	If User1=1 AND any product is	
	chosen skin to multiuse	
	If Least 1 AND - a read - at :	
	II User1=1 AND no product is	
	chosen skip to EverQuit.	
MultiUse	You mentioned you use both	1 Smoked tobacco
	smokeless and smoked tobacco.	2 Smokeless tobacco
	Which do you use more often:	3 do you use smoked and smokeless
	-	tobacco about the same

	(Skip to EverQuit)	4 R
		5 DK
Ysusfuture	Do you think in the future you might	1 Definitely not
	try using smokeless tobacco?	2 Probably not
		3 Probably yes
		4 Definitely yes
		5 R
		6 DK
Ysusfriend	If one of your best friends were to	1 Definitely not
	offer you smokeless tobacco, would	2 Probably not
	you use it?	3 Probably yes
		4 Definitely yes
		5 R
X7		
Ysusyear	At any time during the NEX I	1 Definitely not
	YEAR, do you tillik you will use	2 Probably not
	smokeless tobacco?	A Definitely yes
	(Skin to VDE due)	4 Definitely yes
	(Skip to 1 DEduc)	
Everavit	Have you over made a serious	
Everquit	attempt to stop using all smokeless	
	tobacco products?	2 NO 3 R
	tobacco products?	
Plantoquit	Are you planning to quit using	1 Within the next month
Tantoquit	smokeless tobacco	2 Within the next 6 months
	shiokeless tobacco	3 Sometime in the future beyond 6
		months
		4 or are you Not planning to quit?
		5 R
		6 DK
Quithealth	If you were to quit using smokeless	1 Not at all
	tobacco permanently in the next 6	2 A little
	months, how much do you think it	3 A lot
	would improve your health?	4 R
		5 DK
	(If Youth skip to YDEduc,	
	If Adult skip to DEduc)	
Deduc	What is your highest level of	1 Illiterate
	education?	2 Literate, no formal education
		3 Up to primary School (up to class
		4 Middle School class V to VII
		5 Secondary School (111 course, class
		XII/X or intermediate)
		6 Graduate (BA/ BSc/ Diploma etc.)
		/ Post Graduate/ Professional Degree
		8 Above Post Graduate degree (i.e.
		7 K 10 DK
Income	In the last year, on average how	1 less than 5 000
	much was the total income (in Pa)	2 5 000_9 999
	ner month of your household?	3 10 000-14 999
	per month of your nousehold?	4 15 000 10 000

	(Skip to Religion)	5 20.000+
	(Surp to Hongion)	6 B
		7 DK
Vdadua	What was the last year of advection	/ DK
raeduc	what was the last year of education	1 Did not attend school
	that you completed?	2 Up to primary School (up to class
		3 Middle School (class V to VII)
		4 Secondary School (ITI course, class
		XII/X or intermediate)
		5 Class XI (Higher Secondary)
		6 Class XII (Higher Secondary)
		7 Graduate level or more than higher
		secondary
		8 R
		9 DK
Religion	What is your Religion?	1 Hindu
reingion	What is your reingion.	2 Muslim
	(If Vouth skip to	3 Christian
	DDFOvorallOninion	4 Sill
	I REOveranOpinion,	4 SIKII 5 Duddhiat
	II Adult skip to DE022500)	
		6 Jain
		/ Others
		8 K
		9 DK
ReligionOTH	What is your Religion – Other	Text
	Specify	
Occupation	What is your primary occupation?	1 Professional, technical, and related
		workers
		2 Administrative, executive and
		managerial workers
		3 Clerical and related workers
		4 Sales Workers
		5 Service Workers
		6 Farmers, fisherman, hunters, loggers
		and related workers
		7 Craft and Related Trades
		8 Plant and machine operators
		9 Elementary Occupations
		10 Student
		11 Unemployed
		12 Housewife
		12 Housewhe $12 \text{ Other } (\text{max}(f))$
		13 Other (specify)
		14 K
	xx 71	15 DK
OccupationOTH	w nat is your primary occupation –	1 ext
	Other specify	
Preoverallopinion	For the next few questions, I'd like	1 Good
	to ask for your opinion about	2 Neither good nor bad
	smokeless tobacco products. There	3 Bad
	is no right or wrong answer —we	4 R
	are most interested in your thoughts.	5 DK
	What is your overall opinion about	
	using smokeless tobacco? Is it	

relativeriskA	I would like to know what you think about the following smokeless tobacco products. In your opinion, please rank the following smokeless tobacco products from most to least harmful: (If ANS=1 skip to RelativeRisk, If ANS=2 skip to preGA1)	1 Answer Rank 2 R 3 DK
	I would like to know what you think about the following smokeless tobacco products. In your opinion, please rank the following smokeless tobacco products from most to least harmful:	
relativeRisk_1_1	Most harmful	<ol> <li>Mishri</li> <li>Betel quid with tobacco (paan)</li> <li>Gutkha</li> <li>Zarda</li> <li>Nasal/oral suff</li> <li>Gudhaku</li> </ol>
relativeRisk_1_2	Second most harmful	<ol> <li>Mishri</li> <li>Betel quid with tobacco (paan)</li> <li>Gutkha</li> <li>Zarda</li> <li>Nasal/oral suff</li> <li>Gudhaku</li> </ol>
relativeRisk_1_3	Third most harmful	<ol> <li>Mishri</li> <li>Betel quid with tobacco (paan)</li> <li>Gutkha</li> <li>Zarda</li> <li>Nasal/oral suff</li> <li>Gudhaku</li> </ol>
relativeRisk_1_4	Fourth most harmful	<ol> <li>Mishri</li> <li>Betel quid with tobacco (paan)</li> <li>Gutkha</li> <li>Zarda</li> <li>Nasal/oral suff</li> <li>Gudhaku</li> </ol>
relativeRisk_1_5	Fifth most harmful	<ol> <li>Mishri</li> <li>Betel quid with tobacco (paan)</li> <li>Gutkha</li> <li>Zarda</li> <li>Nasal/oral suff</li> <li>Gudhaku</li> </ol>
relativeRisk_1_6	Sixth most harmful	<ol> <li>Mishri</li> <li>Betel quid with tobacco (paan)</li> <li>Gutkha</li> <li>Zarda</li> <li>Nasal/oral suff</li> <li>Gudhaku</li> </ol>
Relrisequal	all are equally harmful	
	In your opinion, please tell me whether you agree, disagree, or	

	neither agree nor disagree with each of the following statements. In general	
preGA1	Indian society disapproves of smokeless tobacco use.	<ol> <li>Agree</li> <li>Disagree</li> <li>Neither agree nor disagree</li> <li>R</li> <li>DK</li> </ol>
preGA2	Smokeless tobacco is highly addictive.	<ol> <li>Agree</li> <li>Disagree</li> <li>Neither agree nor disagree</li> <li>R</li> <li>DK</li> </ol>
preGA3	It is acceptable for females to use smokeless tobacco.	<ol> <li>Agree</li> <li>Disagree</li> <li>Neither agree nor disagree</li> <li>R</li> <li>DK</li> </ol>
preGA4	Using smokeless tobacco sets a bad example for children.	<ol> <li>Agree</li> <li>Disagree</li> <li>Neither agree nor disagree</li> <li>R</li> <li>DK</li> </ol>
preGA5	Smokeless tobacco use is harmful to health.	<ol> <li>Agree</li> <li>Disagree</li> <li>Neither agree nor disagree</li> <li>R</li> <li>DK</li> </ol>
CurrentHW	Thinking now about the packages for smokeless tobacco products (paste, sachets, packs, tins, bottles) As far as you know, do smokeless tobacco products in India have health warnings on the packages? (If USER1=1 skip to HWLastPack, If USER1=2 and answer=1 skip to IndiaOnly1, If USER1=2 and answer=2,3 or 4 skip to HWOpinion1)	<ol> <li>Yes (including `some products`)</li> <li>No</li> <li>R</li> <li>DK</li> </ol>
HWlastpack	On your last package of smokeless tobacco, was there a health warning?	1 Yes 2 No 3 Can't remember 4 R 5 DK
	IndiaOnly1	
	Can you describe what the health warnings on smokeless tobacco packages look like?	
Indiaclist1_1	Don't know	$ \overrightarrow{\square} = 1 $
Indiaclist1_2	Bad/gross teeth (correct)	$ \overrightarrow{\square} = 1 $

Indiaclist1_3	Diseased mouth (correct)	$\overrightarrow{\nabla} = 1$ $\square = 0$
Indiaclist1_4	Facial tumour (correct)	$\overrightarrow{\nabla} = 1$ $\square = 0$
Indiaclist1_5	X-ray or graphic lungs incorrect— image on cigarette/bidi packages)	$\overrightarrow{\nabla} = 1$ $\square = 0$
Indiaclist1_6	Scorpion/bug (incorrect image— image on old warning label)	$ \overrightarrow{\square} = 1 $ $ \overrightarrow{\square} = 0 $
Indiaclist1_7	Man with graphic lungs (John Terry image) (incorrect—image on cigarette/bidi packages)	$\overrightarrow{\square} = 1$ $\overrightarrow{\square} = 0$
Indiaclist1_8	Can't recall	$\overrightarrow{\square} = 1$ $\square = 0$
Indiaclist1_9	N/A - no package, homemade, borrowed, etc.	$ \overrightarrow{\square} = 1 $ $ \overrightarrow{\square} = 0 $
Indiaclist1_10	Other (incorrect image) – specify:	
Indiaclist10TH	Other (incorrect image) – specify:	Text
	Can you describe what the health warnings on smokeless tobacco packages say?	
Indiaclist2_1	Don't know	$\overrightarrow{\square} = 1$ $\overrightarrow{\square} = 0$
Indiaclist2_2	'Tobacco kills' (correct text)	$\overrightarrow{\square} = 1$ $\overrightarrow{\square} = 0$
Indiaclist2_3	Some mention of 'tobacco' (partially correct)	$ \overrightarrow{\square} = 1 $ $ \overrightarrow{\square} = 0 $
Indiaclist2_4	Smoking kills (incorrect—text for cigarette/bidi packages)	$ \overrightarrow{\square} = 1 $ $ \overrightarrow{\square} = 0 $
Indiaclist2_5	'Tobacco causes cancer' (incorrect— text on old warning labels)	$\overrightarrow{\square} = 1$ $\overrightarrow{\square} = 0$
Indiaclist2_6	Can't recall	$ \overrightarrow{\square} = 1 $ $ \overrightarrow{\square} = 0 $
Indiaclist2_7	Not able to read	$ \overrightarrow{\square} = 1 $ $ \overrightarrow{\square} = 0 $
Indiaclist2_8	Other (incorrect image)	$ \overrightarrow{\square} = 1 $ $ \overrightarrow{\square} = 0 $
Indiaclist2OTH	Other (incorrect image) – specify:	Text
	(If USER1=1 skip to IndiaOnly2, If USER1=2 skip to IndiaOnly3)	
La dia Orale 2	In the last month, have seen mode	1 Vez
IndiaOnly2	In the last month, have you made	
	any enort to avoid buying	2 INO 2 D
	the health warnings on them?	3 R 4 DV
India Only?	To what extent if at all do the	4 DK
IndiaOniy3	health warnings on smokeless	$\begin{array}{c} 1  \text{Not at all} \\ 2  \text{A little} \end{array}$
	tobacco packages make you think	3 A lot
	about the health risks (health	4 R
	danger) of using it?	5 DK
HWopinion1	Do you think that smokeless tobacco	1 Yes
	packages should have health	2 No
	warnings?	3 Maybe
		4 R
		5 DK

HWopinion2	Do you think that the health	1 Yes
	warnings should include pictures?	2 No
		3 Maybe
		4 R
		5 DK
HWp1	Do you think the health warnings on	1 More health information
	smokeless tobacco packages should	2 Less health information
	have more health information than	3 About the same
	they do now, less information, or	4 K
	now?	5 DK
HWMtestkit	Please tell me whether this kitten	1 Not at all
	IS CUTE	2
	One means that you do not find the	3
	kitten at all cute, and ten means that	4
	you find the kitten extremely cute.	5
	5	In The Middle
		6
		7
		8
		9
		10 Extremely
		11 Don't know/Refused
Randgroup1	Randomly assigned group	1 Text Only
		2 Symbolic Imagery
		3 Graphic Imagery
		4 Personalized Graphic and
		Testimonial
HW11_aattention	Please tell me whether this warning	1 Not at all
	message:	2
		3
	GRABS YOUR ATTENTION	4
		In The Middle
		0
		/
		0
		7 10 Extremely
		11 DK/R
HW11 bbelieve	Please tell me whether this warning	1 Not at all
	message:	2
		$\overline{3}$
	IS BELIEVABLE	4
		5
		In The Middle
		6
		7
		8
		9
		10 Extremely
		11 DK/R
HW11_crelevant	Please tell me whether this warning	1 Not at all
	message:	2
		3
1	IS IMPORTANT TO YOU	4

		5
		In The Middle
		6
		7
		0
		8
		9
		10 Extremely
		11 DK/D
		11 DK/K
HW11 dsurprise	Please tell me whether this warning	1 Not at all
_ 1	message.	2
	message.	2
		3
	IS SURPRISING	4
		5
		Le The Middle
		In The Wilddle
		6
		7
		0
		8
		9
		10 Extremely
		11 DV/D
		11 DK/K
HW11_efright	Please tell me whether this warning	1 Not at all
	message.	2
	message.	2
		3
	IS FRIGHTENING	4
		5
		In The Middle
		In The Middle
		6
		7
		8
		0
		9
		10 Extremely
		11 DK/R
HW11_fdisgust	Please tell me whether this warning	I Not at all
	message:	2
	e	3
	IC DISCUSTING	4
	15 DISGUSTING	4
		5
		In The Middle
		6
		0
		7
		8
		0
		10 Extremely
		11 DK/R
HW11 gunnleasant	Please tell me whether this warning	1 Not at all
	rieuse ten me whether this warning	2
	message:	2
		3
	IS UNPLEASANT	4
		5
		<i>S</i>
		In The Middle
		6
		Ť
		/
		8
		9
		10 Extromaly
		10 Extremely
		11 DK/R

HW11_hconcern	Please tell me whether this warning	1 Not at all
	message would.	$\frac{2}{3}$
	MAKE PEOPLE MORE	4
	CONCERNED ABOUT THE	5
	HEALTH RISK OF USING	In The Middle
	SMOKELESS TOBACCO	6
		7
		8
		7 10 Extremely
		11 DK/R
HW11 iprevent	Please tell me whether this warning	1 Not at all
	message would:	2
		3
	HELP PREVENT YOUNG	4
	PEOPLE FROM STARTING TO	5 Le The Middle
	USE SMOKELESS IOBACCO	
		0 7
		8
		9
		10 Extremely
		11 DK/R
HW11_jquit	Please tell me whether this warning	1 Not at all
	message would:	2
		3
	MAKE SMUKELESS	4
	OUIT	J In The Middle
	QUII	6
		7
		8
		9
		10 Extremely
		11 DK/R
HW11_keffective	Overall, on a scale of 1 to 10, how	1 Not at all
	effective is this health warning?	$\frac{2}{2}$
		5 A
		5
		In The Middle
		6
		7
		8
		9
		10 Extremely
Repeated from HW11 to	HW11 refers to the Health Effect 1	
HW51 for each of the 5 health	image in the set.	
effects using randomly	HW21 refers to the Health Effect 2	
assigned condition. Health	image in the set.	
affect groups were asked in	HW31 refers to the Health Effect 3	
random order.	image in the set.	
	HW41 refers to the Health Effect 4	
	image in the set.	

	HW51 refers to the Health Effect 5	
	image in the set.	
PostOverallOpinion	What is your overall opinion about using smokeless tobacco?	<ol> <li>Good</li> <li>Neither good nor bad</li> <li>Bad</li> <li>R</li> <li>DK</li> </ol>
	In your opinion, please tell me whether you agree, disagree, or neither agree nor disagree with each of the following statements. In general	
PostGA1	Indian society disapproves of smokeless tobacco use.	<ol> <li>Agree</li> <li>Disagree</li> <li>Neither agree nor disagree</li> <li>R</li> <li>DK</li> </ol>
PostGA2	Smokeless tobacco is highly addictive.	<ol> <li>Agree</li> <li>Disagree</li> <li>Neither agree nor disagree</li> <li>R</li> <li>DK</li> </ol>
PostGA3	It is acceptable for females to use smokeless tobacco.	<ol> <li>Agree</li> <li>Disagree</li> <li>Neither agree nor disagree</li> <li>R</li> <li>DK</li> </ol>
PostGA4	Using smokeless tobacco sets a bad example for children.	<ol> <li>Agree</li> <li>Disagree</li> <li>Neither agree nor disagree</li> <li>R</li> <li>DK</li> </ol>
PostGA5	Smokeless tobacco use is harmful to health. (If USER1=1 skip to worry, If USER1=2 skip to RelRisk1)	<ol> <li>Agree</li> <li>Disagree</li> <li>Neither agree nor disagree</li> <li>R</li> <li>DK</li> </ol>
Worry	How worried are you, if at all, that using smokeless tobacco WILL damage your health in the future? Are you	1 Not at all worried 2 A little worried 3 very worried 4 R 5 DK
Relrisk1	Compared to smoking cigarettes, do you think using smokeless tobacco is less harmful, more harmful, or no different for health?	1 less harmful 2 more harmful 3 no difference 4 R 5 DK
Relrisk2	Compared to smoking bidis, do you think smokeless tobacco is less harmful, more harmful or no different for health?	<ol> <li>less harmful</li> <li>more harmful</li> <li>no difference</li> <li>R</li> <li>DK</li> </ol>
	Asked If Randgroup1=1 Health Warning Label Recall	

	Expermintal condition 1: Text only	
HWLrec1a_1	text: 'tobacco causes oral cancer'	$\overrightarrow{\square} = 1$ $\square = 0$
HWLrec1a_2	other (incorrect): please specify	$\overrightarrow{\square} = 1$ $\overrightarrow{\square} = 0$
HWLrec1aOTH	Text Specify	Text
HWLrec1b_1	text: 'tobacco causes mouth disease'	$\boxed{\square} = 1$ $\boxed{\square} = 0$
HWLrec1b_2	other (incorrect): please specify	$\overrightarrow{\square} = 1$ $\overrightarrow{\square} = 0$
HWLrec1bOTH	Text Specify	Text
HWLrec1c_1	text: 'tobacco causes heart disease'	$\overrightarrow{\square} = 1$ $\overrightarrow{\square} = 0$
HWLrec1c_2	other (incorrect): please specify	$\overrightarrow{\square} = 1$ $\square = 0$
HWLrec1cOTH	Text Specify	Text
HWLrec1d_1	text: 'tobacco is highly addictive'	$\overrightarrow{\square} = 1$ $\overrightarrow{\square} = 0$
HWLrec1d_2	other (incorrect): please specify	$ \overrightarrow{\square} = 1 $ $ \overrightarrow{\square} = 0 $
HWLrec1dOTH	Text Specify	Text
HWLrecle 1	text: 'tobacco kills 2500 Indians	$\overrightarrow{V} = 1$
	every day'	$\Box = 0$
HWLrec1e_2	other (incorrect): please specify	$\overrightarrow{\square} = 1$ $\overrightarrow{\square} = 0$
HWLrecleOTH	Text Specify	Text
HWLrec1f_1	tobacco kills	$\overrightarrow{\square} = 1$ $\overrightarrow{\square} = 0$
HWLrec1f_2	Refused	$\overrightarrow{\square} = 1$ $\overrightarrow{\square} = 0$
	Asked if Randgroup1=2	
	Health Warning Label Recall	
	Expermintal condition 2:	
	Symbolic imagery	
HWLrec2a_1	text: 'tobacco causes oral cancer'	
HWLrec2a_2	picture: scorpion/bug (correct)	
HWLrec2a_3	picture: other (incorrect): please	= 1
	specify	$\Box = 0$
HWLrec2aOTH	Text Specify	Text
HWLrec2b_1	text: 'tobacco causes mouth disease'	$\overrightarrow{\square} = 1$ $\overrightarrow{\square} = 0$
HWLrec2b_2	picture: snake/cobra (correct)	
HWLrec2b_3	picture: other (incorrect): please specify	$\overrightarrow{\square} = 1$ $\overrightarrow{\square} = 0$
HWLrec2bOTH	Text Specify	Text
HWLrec2c_1	text: 'tobacco causes heart disease'	$\overrightarrow{\square} = 1$ $\overrightarrow{\square} = 0$
HWLrec2c_2	picture: yellow triangle (correct)	$\overrightarrow{\square} = 1$ $\square = 0$
HWLrec2c_3	picture: exclamation mark (correct)	$\overrightarrow{\square} = 1$ $\overrightarrow{\square} = 0$

HWLrec2c_4	picture: caution sign (correct)	
HWLrec2c_5	picture: other (incorrect): please specify	
HWLrec2cOTH	Text Specify	Text
HWLrec2d_1	text: 'tobacco is highly addictive'	$ \overrightarrow{\square} = 1 $ $ \overrightarrow{\square} = 0 $
HWLrec2d_2	picture: red circle	$\overrightarrow{\square} = 1$ $\overrightarrow{\square} = 0$
HWLrec2d_3	picture: 'no' symbol (correct)	$\overrightarrow{\square} = 1$ $\overrightarrow{\square} = 0$
HWLrec2d_4	picture: other (incorrect): please specify	$\overrightarrow{\mathbf{v}} = 1$ $\overrightarrow{\mathbf{u}} = 0$
HWLrec2dOTH	Text Specify	Text
HWLrec2e_1	text: 'tobacco kills 2500 Indians every day'	$\overrightarrow{\square} = 1$ $\square = 0$
HWLrec2e_2	picture: skull and/or crossbones (correct)	$\overrightarrow{\square} = 1$ $\overrightarrow{\square} = 0$
HWLrec2e_3	picture: poison (correct)	$ \overrightarrow{\square} = 1 $ $ \overrightarrow{\square} = 0 $
HWLrec2e_4	picture: other (incorrect): please specify	$ \overrightarrow{\square} = 1 $ $ \overrightarrow{\square} = 0 $
HWLrec2eOTH	Text Specify	Text
HWLrec2f_1	tobacco kills	$ \overrightarrow{\square} = 1 $ $ \overrightarrow{\square} = 0 $
HWLrec2f_2 Refused		$ \overrightarrow{\square} = 1 $ $ \overrightarrow{\square} = 0 $
	Asked if Randgroup1=3	
	Asked if Randgroup1=3 Health Warning Label Recall	
	Asked if Randgroup1=3 Health Warning Label Recall Expermintal condition 3: Graphic health effect	
HWLrec3a_1	Asked if Randgroup1=3 Health Warning Label Recall Expermintal condition 3: Graphic health effect text: 'tobacco causes oral cancer'	$\boxed{\checkmark} = 1$ $\boxed{\square} = 0$
HWLrec3a_1 HWLrec3a_2	Asked if Randgroup1=3 Health Warning Label Recall Expermintal condition 3: Graphic health effect text: 'tobacco causes oral cancer' picture: tumour on side of face (correct)	
HWLrec3a_1 HWLrec3a_2 HWLrec3a_3	Asked if Randgroup1=3Health Warning Label RecallExpermintal condition 3: Graphichealth effecttext: 'tobacco causes oral cancer'picture: tumour on side of face (correct)picture: other (incorrect): please specify	
HWLrec3a_1 HWLrec3a_2 HWLrec3a_3 HWLrec3aOTH	Asked if Randgroup1=3Health Warning Label RecallExpermintal condition 3: Graphichealth effecttext: 'tobacco causes oral cancer'picture: tumour on side of face (correct)picture: other (incorrect): please specifyText Specify	
HWLrec3a_1         HWLrec3a_2         HWLrec3a_3         HWLrec3aOTH         HWLrec3b_1	Asked if Randgroup1=3 Health Warning Label Recall Expermintal condition 3: Graphic health effect text: 'tobacco causes oral cancer' picture: tumour on side of face (correct) picture: other (incorrect): please specify Text Specify text: 'tobacco causes mouth disease'	
HWLrec3a_1         HWLrec3a_2         HWLrec3a_3         HWLrec3aOTH         HWLrec3b_1         HWLrec3b_2	Asked if Randgroup1=3Health Warning Label RecallExpermintal condition 3: Graphichealth effecttext: 'tobacco causes oral cancer'picture: tumour on side of face (correct)picture: other (incorrect): please specifyText Specifytext: 'tobacco causes mouth disease'picture: diseased/gross teeth (correct)	
HWLrec3a_1         HWLrec3a_2         HWLrec3a_3         HWLrec3b_1         HWLrec3b_2         HWLrec3b_3	Asked if Randgroup1=3Health Warning Label RecallExpermintal condition 3: Graphichealth effecttext: 'tobacco causes oral cancer'picture: tumour on side of face (correct)picture: other (incorrect): please specifyText Specifytext: 'tobacco causes mouth disease'picture: diseased/gross teeth (correct)picture: other (incorrect): please specify	
HWLrec3a_1         HWLrec3a_2         HWLrec3a_3         HWLrec3b_1         HWLrec3b_2         HWLrec3b_3         HWLrec3bOTH	Asked if Randgroup1=3Health Warning Label RecallExpermintal condition 3: Graphichealth effecttext: 'tobacco causes oral cancer'picture: tumour on side of face(correct)picture: other (incorrect): pleasespecifyText Specifytext: 'tobacco causes mouth disease'picture: diseased/gross teeth(correct)picture: other (incorrect): pleasespecifyText Specifytext: 'tobacco causes mouth disease'Text Specifypicture: other (incorrect): pleasespecifyText SpecifyText Specify	
HWLrec3a_1         HWLrec3a_2         HWLrec3a_3         HWLrec3b_1         HWLrec3b_1         HWLrec3b_2         HWLrec3b_3         HWLrec3c_1	Asked if Randgroup1=3Health Warning Label RecallExpermintal condition 3: Graphichealth effecttext: 'tobacco causes oral cancer'picture: tumour on side of face(correct)picture: other (incorrect): pleasespecifyText Specifytext: 'tobacco causes mouth disease'picture: other (incorrect): pleasepicture: diseased/gross teeth(correct)picture: other (incorrect): pleasespecifyText Specifytext: 'tobacco causes heart disease'	$\boxed{\mathbf{y}} = 1$ $= 0$ $\boxed{\mathbf{x}} = 1$ $= 0$ $\boxed{\mathbf{y}} = 1$ $= 0$
HWLrec3a_1         HWLrec3a_2         HWLrec3a_3         HWLrec3aOTH         HWLrec3b_1         HWLrec3b_2         HWLrec3b_3         HWLrec3c_1         HWLrec3c_2	Asked if Randgroup1=3Health Warning Label RecallExpermintal condition 3: Graphichealth effecttext: 'tobacco causes oral cancer'picture: tumour on side of face (correct)picture: other (incorrect): please specifyText Specifytext: 'tobacco causes mouth disease'picture: diseased/gross teeth (correct)picture: other (incorrect): please specifytext: 'tobacco causes mouth disease'picture: other (incorrect): please specifytext: 'tobacco causes heart disease'picture: open chest (correct)	$ \overrightarrow{\nabla} = 1 $ $ \overrightarrow{\Box} = 0 $ $ \overrightarrow{\nabla} = 1 $ $ \overrightarrow{\Box} = 0 $ $ \overrightarrow{\nabla} = 1 $ $ \overrightarrow{\Box} = 0 $ $ \overrightarrow{Text} $ $ \overrightarrow{\nabla} = 1 $ $ \overrightarrow{\Box} = 0 $ $ \overrightarrow{\nabla} = 1 $ $ \overrightarrow{\Box} = 0 $ $ \overrightarrow{\nabla} = 1 $ $ \overrightarrow{\Box} = 0 $ $ \overrightarrow{Text} $ $ \overrightarrow{\nabla} = 1 $ $ \overrightarrow{\Box} = 0 $ $ \overrightarrow{Text} $ $ \overrightarrow{\nabla} = 1 $ $ \overrightarrow{\Box} = 0 $ $ \overrightarrow{Text} $ $ \overrightarrow{\nabla} = 1 $ $ \overrightarrow{\Box} = 0 $ $ \overrightarrow{Text} $
HWLrec3a_1         HWLrec3a_2         HWLrec3a_3         HWLrec3aOTH         HWLrec3b_1         HWLrec3b_2         HWLrec3b_3         HWLrec3c_1         HWLrec3c_3	Asked if Randgroup1=3Health Warning Label RecallExpermintal condition 3: Graphichealth effecttext: 'tobacco causes oral cancer'picture: tumour on side of face (correct)picture: other (incorrect): please specifyText Specifytext: 'tobacco causes mouth disease'picture: diseased/gross teeth (correct)picture: other (incorrect): please specifytext: 'tobacco causes mouth disease'picture: other (incorrect): please specifytext Specifytext: 'tobacco causes heart disease'picture: other (incorrect): please specifytext: 'tobacco causes heart disease'picture: open chest (correct)picture: surgery (correct)	$ \overrightarrow{\nabla} = 1 $ $ \overrightarrow{\Box} = 0 $ $ \overrightarrow{\nabla} = 1 $ $ \overrightarrow{\Box} = 0 $ $ \overrightarrow{\nabla} = 1 $ $ \overrightarrow{\Box} = 0 $ $ \overrightarrow{Text} $ $ \overrightarrow{\nabla} = 1 $ $ \overrightarrow{\Box} = 0 $ $ \overrightarrow{\nabla} = 1 $ $ \overrightarrow{\Box} = 0 $ $ \overrightarrow{\nabla} = 1 $ $ \overrightarrow{\Box} = 0 $ $ \overrightarrow{Text} $ $ \overrightarrow{\nabla} = 1 $ $ \overrightarrow{\Box} = 0 $ $ \overrightarrow{Text} $ $ \overrightarrow{\nabla} = 1 $ $ \overrightarrow{\Box} = 0 $ $ \overrightarrow{\nabla} = 1 $ $ \overrightarrow{\Box} = 0 $ $ \overrightarrow{\nabla} = 1 $ $ \overrightarrow{\Box} = 0 $ $ \overrightarrow{\nabla} = 1 $ $ \overrightarrow{\Box} = 0 $ $ \overrightarrow{\nabla} = 1 $ $ \overrightarrow{\Box} = 0 $ $ \overrightarrow{\nabla} = 1 $ $ \overrightarrow{\Box} = 0 $
HWLrec3a_1         HWLrec3a_2         HWLrec3a_3         HWLrec3aOTH         HWLrec3b_1         HWLrec3b_2         HWLrec3b_3         HWLrec3c_1         HWLrec3c_2         HWLrec3c_3         HWLrec3c_4	Asked if Randgroup1=3Health Warning Label RecallExpermintal condition 3: Graphichealth effecttext: 'tobacco causes oral cancer'picture: tumour on side of face (correct)picture: other (incorrect): please specifyText Specifytext: 'tobacco causes mouth disease'picture: diseased/gross teeth (correct)picture: other (incorrect): please specifytext: 'tobacco causes heart disease'picture: other (incorrect): please specifytext: 'tobacco causes heart disease'picture: open chest (correct)picture: other (incorrect): please specifypicture: open chest (correct)picture: other (incorrect): please specify	$ \overrightarrow{\nabla} = 1 $ $ = 0 $ $ \overrightarrow{\nabla} = 1 $ $ = 0 $ $ \overrightarrow{\nabla} = 1 $ $ = 0 $ $ \overrightarrow{\nabla} = 1 $ $ = 0 $ $ \overrightarrow{\nabla} = 1 $ $ = 0 $ $ \overrightarrow{\nabla} = 1 $ $ = 0 $ $ \overrightarrow{\nabla} = 1 $ $ = 0 $ $ \overrightarrow{\nabla} = 1 $ $ = 0 $ $ \overrightarrow{\nabla} = 1 $ $ = 0 $ $ \overrightarrow{\nabla} = 1 $ $ = 0 $ $ \overrightarrow{\nabla} = 1 $ $ = 0 $ $ \overrightarrow{\nabla} = 1 $ $ = 0 $ $ \overrightarrow{\nabla} = 1 $ $ = 0 $ $ \overrightarrow{\nabla} = 1 $ $ = 0 $ $ \overrightarrow{\nabla} = 1 $ $ = 0 $ $ \overrightarrow{\nabla} = 1 $ $ = 0 $

HWLrec3d_1	text: 'tobacco is highly addictive'	
HWLrec3d_2	picture: hole in throat (correct)	$\overrightarrow{\mathbf{U}} = 1$
HWLrec3d_3	picture: tumour on throat (correct)	$\overrightarrow{\mathbf{U}} = 1$ $\overrightarrow{\mathbf{U}} = 0$
HWLrec3d_4	picture: other (incorrect): please	$ \overrightarrow{\nabla} = 1 $
HWLrec3dOTH	Text Specify	Text
HWLrec3e_1	text: 'tobacco kills 2500 Indians every day'	$ \overrightarrow{\nabla} = 1 $ $ \overrightarrow{\Box} = 0 $
HWLrec3e_2	picture: dead body under white sheet (correct)	$ \overrightarrow{\nabla} = 1 $ $ \overrightarrow{\Box} = 0 $
HWLrec3e_3	picture: other (incorrect): please specify	$ \overrightarrow{\nabla} = 1 $ $ \overrightarrow{\Box} = 0 $
HWLrec3eOTH	Text Specify	Text
HWLrec3f_1	tobacco kills	$ \overrightarrow{\nabla} = 1 $ $ \overrightarrow{\Box} = 0 $
HWLrec3f_2	Refused	
	Asked if Randgroup1=4	
	Health Warning Label Recall	
	Expermintal condition 4: Testimonial	
HWLrec4a_1	text: 'tobacco causes oral cancer'	$\overrightarrow{\mathbf{v}} = 1$ $\overrightarrow{\mathbf{u}} = 0$
HWLrec4a_2	picture: man with oral cancer (correct)	
HWLrec4a_3	picture: missing jaw (correct)	$\overrightarrow{\mathbf{v}} = 1$ $\overrightarrow{\mathbf{u}} = 0$
HWLrec4a_4	picture: other (incorrect): please specify	$\overrightarrow{\square} = 1$ $\overrightarrow{\square} = 0$
HWLrec4a_5	testimonial: "I lost my jaw to oral cancer". Ajay, age 38, died two weeks after this photo was taken.	
HWLrec4aOTH	Text Specify	Text
HWLrec4b_1	text: 'tobacco causes mouth disease'	$\overrightarrow{\square} = 1$ $\overrightarrow{\square} = 0$
HWLrec4b_2	picture: woman with mouth disease/tumour (correct)	$\overrightarrow{\mathbf{v}} = 1$ $\square = 0$
HWLrec4b_3	picture: woman with open mouth (correct)	$\overrightarrow{\square} = 1$ $\overrightarrow{\square} = 0$
HWLrec4b_4	picture: other (incorrect): please specify	$\overrightarrow{\square} = 1$ $\overrightarrow{\square} = 0$
HWLrec4b_5	testimonial: "Because of using tobacco, I have this disease in my mouth that cannot be removed". Deepak, age 40.	
HWLrec4bOTH	Text Specify	Text
HWLrec4c_1	text: 'tobacco causes heart disease'	$\overrightarrow{\mathbf{v}} = 1$ $\overrightarrow{\mathbf{u}} = 0$
HWLrec4c_2	picture: man lying down/unconscious (correct)	$\overrightarrow{\square} = 1$ $\overrightarrow{\square} = 0$
HWLrec4c_3	picture: CPR administered on man (correct)	$\overrightarrow{\square} = 1$ $\overrightarrow{\square} = 0$

	nistano atlan (in sama at), alassa	$\square = 1$
HwLfec4c_4	picture: other (incorrect): please	$[\mathbf{v}] = 1$
	specify	
HWLrec4c_5	testimonial: "This is my second	
	heart attack caused by tobacco use.	$\Box = 0$
	It could be my last." Raj, age 44.	
HWLrec4cOTH	Text Specify	Text
HWLrec4d_1	text: 'tobacco is highly addictive'	$\mathbf{V} = 1$
		$\Box = 0$
HWLrec4d_2	picture: man with hole in throat	$\overline{\checkmark} = 1$
	(correct)	$\Box = 0$
HWLrec4d 3	picture: other (incorrect): please	$\overrightarrow{v} = 1$
_	specify	$\Box = 0$
HWLrec4d 4	testimonial: "I thought I could guit	$\boxed{\checkmark} = 1$
—	tobacco any time I wanted. I was	$\Box = 0$
	wrong." Rohit, age 45.	
HWLrec4dOTH	Text Specify	Text
HWLrec4e 1	text: 'tobacco kills 2500 Indians	$ \overline{\mathbf{v}}  = 1$
	every day'	$\Box = 0$
HWI rec4e 2	picture: woman mourning (correct)	$  \vec{\nabla}   = 1$
	pieture: woman mourning (correct)	$\Box = 0$
HWI rec4e 3	nicture: woman in white clothing	$\overline{\nabla} = 1$
	(correct)	$\Box = 1$
HWI roods 4	nicture: hody under sheet (correct)	$\Box = 0$
HwLlec4e_4	picture. body under sneet (correct)	$\nabla = 1$
HWI roods 5	nicture: ether (incorrect): plaga	$\Box = 0$
HwLlec4e_5	specify	$\nabla = 1$
UWU reada 6	tastimonial: "Tabaaaa waa killad mu	$\Box = 0$
HwLlec4e_6	hushand I faal aa alana' Cita aga	$ \underline{\nabla}  = 1$
	nusband. I feel so alone . Ona, age	
HWI rec/eOTH	Ju. Text Specify	Tayt
HWL rec4f 1	tobago kills	$\sqrt{1-1}$
		$\Box = 1$
HWI rec/f 2	Refused	$\overrightarrow{\mathbf{V}} = 1$
	Refused	$\Box = 1$
	Lam going to read you a list of	
	health effects and diseases that may	
	or may not be caused by using	
	smokeless tobacco. Based on what	
	vou know or believe does	
	smalkalass tabaaaa usa aausa	
UDaml	Sillokeless tobacco use cause	1 Ver
нвога	Oral cancer?	
		2 NO 2 Dept Know
		3 Don't Know
		4 R
HBmouth	Mouth disease?	1 Yes
		2 NO
		3 Don't Know
		4 K
HBheart	Heart disease?	
		2 INO
		3 Don't Know
		4 K
HBdeath	Death?	1 Yes
		2 No
		3 Don't Know

	4 R	
Health warning label ranking task	I am now going to show you four health warnings about [health effect]. I am going to ask you to compare the warnings to each other.	
Randgroup2	Randomly Assigned Health Affect for Ranking Question	<ol> <li>oral cancer</li> <li>mouth disease</li> <li>heart disease</li> <li>addiction</li> <li>death</li> </ol>
HWranktask1_1_1	Position on screen that was picked first	<ol> <li>Top left</li> <li>Top right</li> <li>Bottom left</li> <li>Bottom right</li> </ol>
HWranktask1_1_2	Position on screen that was picked second	<ol> <li>Top left</li> <li>Top right</li> <li>Bottom left</li> <li>Bottom right</li> </ol>
HWranktask1_1_3	Position on screen that was picked third	<ol> <li>Top left</li> <li>Top right</li> <li>Bottom left</li> <li>Bottom right</li> </ol>
HWranktask1_1_4	Position on screen that was picked fourth	<ol> <li>Top left</li> <li>Top right</li> <li>Bottom left</li> <li>Bottom right</li> </ol>
LR1_5DKREF	Don't know or refuse the rank question	1 DK 2 R
RankHW1	image/label number shown in position 1 (top left)	1 Image I1 2 Image I2 3 Image I3 4 Image I4
RankHW2	image/label number shown in position 2 (top right)	1 Image I1 2 Image I2 3 Image I3 4 Image I4
RankHW3	image/label number shown in position 3 (bottom left)	<ol> <li>Image I1</li> <li>Image I2</li> <li>Image I3</li> <li>Image I4</li> </ol>
RankHW4	image/label number shown in position 4 (bottom right)	<ol> <li>Image I1</li> <li>Image I2</li> <li>Image I3</li> <li>Image I4</li> </ol>
HWranktask1_actual	Actual image/label ranked first	1 Image I1 2 Image I2 3 Image I3 4 Image I4
HWranktask2_actual	Actual image/label ranked second	<ol> <li>Image I1</li> <li>Image I2</li> <li>Image I3</li> <li>Image I4</li> </ol>
HWranktask3_actual	Actual image/label ranked third	1 Image I1 2 Image I2

		3 Image I3
		4 Image I4
HWranktask4_actual	Actual image/label ranked fourth	1 Image I1
		2 Image I2
		3 Image I3
		4 Image I4
HWfirst_label_rank	Rank of the image/label 1	Number (1-4)
HWsecond_label_rank	Rank of the image/label 2	Number (1-4)
HWthird_label_rank	Rank of the image/label 3	Number (1-4)
HWfourth_label_rank	Rank of the image/label 4	Number (1-4)
Current Images Ranking	For this ranking task, each	
Task	respondent will view 5 warning	
	label images:	
	-4 current health warnings	
	-1 old health warning that was on	
	smokeless tobacco packages until	
	Dec 2011. (total of 5 warnings)	
FINranktask1_1_1	Position on screen that was picked	1 Top left
	first	2 Top Middle
		3 Top right
		4 Bollom lell 5 Dettem right
EINtrophytock 1 1 2	Position on screen that was nicked	1 Top left
FINIAIIKtaSK1_1_2	second	2 Top Middle
	second	3 Top right
		4 Bottom left
		5 Bottom right
FINranktask1 1 3	Position on screen that was picked	1 Top left
	third	2 Top Middle
		3 Top right
		4 Bottom left
		5 Bottom right
FINranktask1_1_4	Position on screen that was picked	1 Top left
	fourth	2 Top Middle
		3 Top right
		4 Bottom left
		5 Bottom right
FINranktask1_1_5	Position on screen that was picked	1 Top left
	11111	2 Top Mildale
		A Bottom left
		5 Bottom right
LR2 5DKREF	Don't know or refuse the rank	1 R
	question	2 DK
RankFIN1	image/label number shown in	1 Image I1
	position 1 (top left)	2 Image I2
		3 Image I3
		4 Image I4
		5 Image I5
RankFIN2	image/label number shown in	1 Image I1
	position 2 (top middle)	2 Image I2
		3 Image I3
		4 Image I4

		5 Image I5
RankFIN3	image/label number shown in	1 Image I1
	position 2 (top right)	2 Image I2
		3 Image I3
		4 Image I4
		5 Image I5
RankFIN4	image/label number shown in	1 Image I1
	position 3 (bottom left)	2 Image I2
		3 Image I3
		4 Image I4
		5 Image I5
RankFIN5	image/label number shown in	1 Image I1
	position 5 (bottom right)	2 Image I2
		3 Image I3
		4 Image 14
		5 Image 15
FINranktask1_actual	Actual image/label ranked first	1 Image 11
		2 Image 12
		3 Image 13
		4 Image 14
EDIregiste al 2 e etcal	A studies as /label realised second	5 Image 15
FINTAIRtask2_actual	Actual image/label ranked second	1 Image I1
		2 Image 12
		J Image IJ
		5 Image 15
FINranktask3 actual	Actual image/label ranked third	1 Image I1
The function of the function o	rotuur mugorusor runkou umu	2 Image 12
		3 Image I3
		4 Image I4
		5 Image 15
FINranktask4 actual	Actual image/label ranked fourth	1 Image I1
_	e	2 Image I2
		3 Image 13
		4 Image I4
		5 Image I5
FINranktask5_actual	Actual image/label ranked fifth	1 Image I1
		2 Image I2
		3 Image I3
		4 Image I4
		5 Image 15
FINfirst_label_rank	Rank of the image/label 1	Number (1-5)
FINsecond_label_rank	Rank of the image/label 2	Number (1-5)
FINTHIR label rank	Rank of the image/label 3	Number (1-5)
FINTOURTH_label_rank	Rank of the image/label 4	Number (1-5)
	Kalik of the image/label 3	
comments	Open ended comments field	text
	open ended comments field	
XEVERUSE	Number of products chosen in	Number
	Everuse	
XCURRENTUSE	Number of products chosen in	Number
	Currentuse	
XSPRODUCTS	Number of products chosen in	Number
	Sproducts	

XICL1	Number of products chosen in Indiaclist1	Number
XICL2	Number of products chosen in Indiaclist2	Number
	G#p# - G# goes from G1-G4 for each of the 4 groups, p# goes from p1-p5 for each image in the group	
G#p#aattention	HW Section questions organized by	1 Not at all
G#p#bbelieve	group	2
G#p#crelevant		3
G#p#dsurprise		4
G#p#efright		5
G#p#fdisgust		In The Middle
G#p#gunpleasant		6
G#p#hconcern		7
G#p#iprevent		8
G#p#jquit		9
G#p#keffective		10 Extremely
		11 Don't know/Refused

## APPENDIX D. Study questionnaire and codebook (Bangladesh)

INTRODUCTION AND SCREENING SCRIPT		
Introduction: "Hi, we're from the University of Dhaka and we are conducting a survey about different types of health warnings on tobacco packaging, in conjunction with the University of Waterloo in Canada. The survey takes about 20 minutes. You will receive t-shirt as a token of our thanks. Do you think you might be interested in hearing more about participating in the study?"	সূচনা: "আসসালামু আলাইকুম! আমরা ঢাকা বিশ্ববিদ্যালয় (খকে এমেছি একটি জরীপের জন্য কাজে আপনার কাছে কিছু গ্রন্ন করার জন্য । তামাক জাতীয় দ্রব্যের মোড়কের উপর বিভিন্ন ধরনের স্বাস্থ্য সতর্কীকরণ সম্পর্কে ঢাকা বিশ্ববিদ্যালয় ও কানাডার ওয়াটারলু ইউনিতার্সিটি যৌখতাবে এই জরীপটি পরিচালনা করছে । এর জন্য বড় জোর ২০ মিনিট সময় লাগবে । সময় দেয়ার জন্য ধন্যবাদ স্বরুপ আপনাকে আমরা একটি গেঞ্জি উপহার দেবো । এই জরীপে অংশগ্রহণ সম্পর্কিত বিভিন্ন বিষয় সম্পর্কে জানতে আপনি কি আগ্রহী?"	
Screening Script:	বাছাই পর্ব:	
[INTERVIEWER NOTE: Only ask if respondent appears less than 30 years of age. IF respondent looks over 30 go directly to past month smoking question.]	[সাক্ষাওকার গ্রহণকারীদের জন্য নোট: উত্তরদাভার বয়স ৩০ বছরের কম মনে হলে তবেই প্রশ্ন করুন। যদি উত্তরদাভার বয়স ৩০ বছরের বেশি মনে হয় তাহলে সরাসরি গত মাসের সিগারেট খাওয়ার প্রশ্নে চলে যান।] "আপনার বয়স কি ১৯ বছর বা তার বেশী?"	
"Are you 19 years of age or older?"	হ্যাঁ → উত্তর 'হ্যাঁ': হলে সরাসরি গত মাসের ধৃমপান সম্পর্কিত প্রশ্নে	
Yes →IF YES: Continue to past month smokeless tobacco use question	চলে যান না <b>→ উত্তর 'লা'</b> : হলে জিজ্ঞাসা করুন "আপনার বয়স কি ১৬ বছর বা ভাব বেশী"?	
No→ IF NO: "Are you 16 years of age or older?"	1 হ্যাঁ → উত্তর 'হ্যাঁ' হলে উত্তরদাতাকে প্রশ্নোত্তর দিতে অগ্রসর	
<ol> <li>Yes →IF YES: Invite participant to continue on iPad.</li> <li>No→ IF NO (age&lt;16) – "Unfortunately, we can only include people age 16 and older in this study. Sorry, you are not eligible to participate, but thank you for your time." TERMINATE.</li> </ol>	হওয়ার জন্য আমন্ত্রণ জানান 2 না → ভার বয়স ১৬ - এর নিচে হলে তাঁকে বলুন "যদি কিছু মনে না করেন, আপনি আমাদের জরীপে অংশগ্রহণের জন্য সঠিক ব্যক্তি নন কারণ যাদের বয়স ১৬ বা ভার বেশী শুধু তারাই এডে অংশ নিতে পারে। তবুও আপনাকে ধন্যবাদ আমাদের সময় দেবার জন্য ।" এই ব্যক্তির	
→IF REFUSED: "Unfortunately, we need to know your age to determine your eligibility for the study." IF STILL NO RESPONSE, TERMINATE.	সাক্ষাৎকার এথানেই শেষ করুন । → যদি অধীকৃতি জানায়: ভাকে বলুন, "যদি কিছু মনে না করেন, এই জরীপে অংশগ্রহণের জোগ্যভা যাচাইয়ের জন্য আগনার বয়সটা একটু জানা দরকার"। এ কথা শোনার পরেও যদি উত্তর দিভে অশ্বীকৃতি জানায় ভাহলে ভার সঙ্গে সাক্ষাৎকার এথানে শেষ করুন।	

<b>SMOKELESS TOBACCO USE:</b> "For the purpose of this study, we will consider "smokeless tobacco" to include any of the following. These are products that are not burned or smoked, but instead are usually put in the mouth or are sniffed. Some examples are Zarda, Paan with tobacco leaf, Gul, Sadapata, Pan masala, and Nasshi"		ধোঁমাবিহীন তামাকের একটি অন্তর্ভুক্ত করার  ব্যবহারের জন্য এগুলে হয় না বরং এগুলো মু গন্ধ টানা হয় জর্দা, সাণ এই ধোঁমাবিহীন তামাকে	া <b>ব্যবহার:</b> "এই গবেষন) জন্য ধোঁয়াবিহীন ভামাক ৷ পোড়ানো বা এগুনো গে থে দিয়ে চিবানো হয় বা নাগাভা গুল, গান মসনা, ন র উদাহরণ।"	টিভে নিম্ন যে কোন স শব্দটি ব্যবহার করবো ধকে ধোঁয়া বের করা নাক দিয়ে সজোরে নস্যি ইড্যাদি	
Zarda	Sadapata		জর্দা	সাদা পাতা	-
Paan with tobacco leaf	Pan masala		তামা(কর শান গুল	শাল ক্সণা নসিং	•
Gul	Nasshi		অন্যান্য	-110	
Other smokeless product					1
<ul> <li>[Ask only if 19 years or older:]</li> <li>"Have you used smokeless tobacco in the past month?"</li> <li>1 Yes→IF YES: Invite participant to continue on iPad.</li> <li>2 No→ IF age=19+ - "Unfortunately, for this study, we are only looking for people who use smokeless tobacco. Sorry, you are not eligible to participate, but thank you for your time." TERMINATE.</li> </ul>		[৬ওরণাঙার বর্ষ ১৯ <b>"আপনি কি গত মামে</b> 1 হ্যাঁ <b>→ উত্তর 'হ্যাঁ</b> ": জানান   2 না <b>→ যদি বয়স</b> = আপনি আমাদের জ যারা ধোঁয়াবিহীন ড নিতে পারবে   তবুও  " এই ব্যক্তির সাক্ষা কোটা	বা ভার বেশা হলে জিল ধোঁ <b>য়াবিহীন তামাক ব্য</b> হলে তাকে অংশগ্রহন চা ১৯+- হয় তাকে বলুন রীপে অংশগ্রহনের জন্য হ তামাক ব্যবহার করেন শু আগনাকে ধন্যবাদ আমা ৎকার একহাতেই শেষ ক	গ্রাসা কর্মল: ] বহার করেছেন?" লিযে যেতে আমন্ত্রণ "যদি কিছু মনে করেন, নঠিক ব্যক্তি নন কারণ দ্র্ব তারাই এতে অংশ দের কথা শোনার জন্য রুনন।	
Adult smokeless users: 250 males, 250 females - smokeless tobacco use=1 and age >18 Youth: 250 males, 250 females (age 16-18, both smokeless tobacco users and non-users)		ব <u>যস্ক</u> ধোঁয়াবিহীন <u>তামা</u> - ধোঁয়াবিহীন তামাক ব <u>ুবক বয়সের </u> ধোঁয়াবিহী - বয়স ১৬-১৮	<u>ক ব্যবহারকারী</u> : ২৫০ পুর ্যবহার = ১ এবং বয়স > ন <u>ভামাক ব্যবহারকারী</u> : :	কষ, ২৫০  মহিল্য ১৮ ২৫০  পুরুষ, ২৫০ মহিল্য	
IF QUOTAS ARE FULL: For age: "Unfortunately, at this time, we are only looking for people [aged 16 to 18/ age 19 or over]. Sorry, you are not eligible to participate, but thank you for your time." For smokeless tobacco use: "Unfortunately, at this time, we are looking for people who [use smokeless tobacco / people who do not use smokeless tobacco]. Sorry, you are not eligible to participate, but thank you for your time."		যদি কোটা পূর্ণ হয়ে বয়স: "এই জরীপের জ বেশী শুধু তারাই অ সমযের জন্য ধন্যবাদ। ধোঁয়াবিহীন তামাক ব আগনি অংশ নিতে পার যারা ধোঁয়াবিহীন তামাক জন্য। আগনার সমযের	<b>যায়:</b> ন্য যাঁদের বয়স ১৬ [(খ ংশ নিতে পারবে। তবুও " <b>যবহার জন্য:</b> "দুর্ভাগ্যদসড ছেন না কারণ এই জরী ব্যবহার করেন অখবা ব জন্য তবুও আগনাকে ধন	কে ১৮-১৯] বা তার আগনাকে আগনার চ: আমাদের এই জরীপে প গরেন না শুধু তাদের ন্যবাদ  "	
[INTERVIEWER: If eligible, Select age group: YOUTH user (16 - 18 YEAI YOUTH non-user (16 - 18 Y	, continue on iPad.] RS)		[সাক্ষাৎকার গ্রহণকারী বিবেচিত হয় তাহলে আ বয়মের স্ক্রীলার দিয়ে ব রয়ম গ্রহণ নির্বাচন কর যুবক: তামাক ব্যবহারক যুবক: তামাক ব্যবহারক	<b>দের জন্য নোট</b> : উত্তরদাদ ইপ্যাডে ভাকে নিযে অগ্রু মসের iPad চেক করুন ।] হ <b>ন:</b> রী (১৬-১৮ বছর) রী ব্য (১৬-১৮ বছর)	তা যদি যোগ্য ার হোন এবং 

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Great – thank you for your interest. I'm now going to go over an information letter with you, and this copy is yours to keep. Once you have received the details of the study, I'll ask you whether or not you are willing to participate' and then we will begin the interview.	আগনার অংশগ্রহণের জন্য অনেক ধন্যবাদ আমি এখন এই গবেষণা সংক্রান্ত একটি ভখ্য পত্র আগনাকে পড়ে শোনাব এবং এই ভখ্য পত্রটি আগনি আগনার কাছে রেখে দিতে পারবেন।সব কিছু শোনার পরও যদি আগনার জরীপে অংশ নিতে চান তাহলেই আমি সাঙ্কাৎকার নিয়ে শুরু করবো।
[INTERVIEWER NOTE: Give participant the Information Letter.]	[ <b>সাক্ষাৎকার গ্রহণকারীদের জন্য নির্দেশনা</b> : উত্তরদাতাকে তথ্য পত্রটি দিয়ে দিন ]
Please follow along and interrupt me with any questions you may have:	আমি এখন যে কথাগুলো আপনাকে বলভে যাচ্চি তা দয়া করে মনোযোগ দিয়ে শুনুন এবং কোখাও কোনো প্রশ্ন থাকলে আমাকে তা জিজ্ঞাসা করুন:
<ul> <li>You are being asked to participate in a research study that asks for people's opinions about health warnings on smokeless tobacco packaging.</li> </ul>	-ভামাকের মোড়কের উপর স্বাস্থ্যসভর্কীকরণ সম্পর্কে মানুষের মভামত জানার জন্য পরিচালিত একটি গবেষণায় অংশ নেয়ার জন্য আগনাকে আমরা অনুরোধ করছি।
<ul> <li>You would participate in a 20 minute interview.</li> <li>First you will be asked questions about you and your tobacco use, and then you will be shown a number of health warnings and asked about your opinions of each.</li> </ul>	-২০ মিনিটের এই সাক্ষাৎকারপর্বে প্রথমে আগনার ভামাক বাবহার সম্পর্ক জানভে চাওয়া হবে।ভারপর আগনাকে অনেকগুলো স্বাস্থ্যসভর্কীকরণ বার্ভা দেখানো হবে এবং সেগুলো সম্পর্কে আগনার মভামভ জানভে চাওয়া হবে।
<ul> <li>You must be 16 years of age or older to participate in this study.</li> </ul>	-এই জরীপে অংশ নেয়ার জন্য আগনাকে অবশ্যই ১৬ বছর বা তার বেশি বয়সের হতে হবে
	-এতে অংশগ্রহন সম্পূর্ণ ঐচ্চিক এবং বিশেষ কোনো প্রশ্নের উত্তর দিতে
- Participation is voluntary and you may decline to	আগনি অশ্বীকৃতি জানাতে পারেন।
<ul> <li>We need to warn you that, as part of this study, you'll be asked to view health warnings on cigarette packaging and some of the pictures are quite graphic and may upset some people. If this</li> </ul>	-আগনাকে আমরা আগে থেকে বলে নিভে চাই যে, আগনাকে দেখানো স্বাস্থ্য সভর্কীকরণের কিছু ছবি বিদঘুটে মনে হতে পারে যা আগনার একটু থারাগ লাগতে পারে।অবস্য, আমরা আশা করি আগনার এই মনের অবস্থা থুবই স্কনস্থায়ী হবে।
would be temporary	্রাপনার সময়ের জন্য ধনরোদসকগ রামরা রাপনাকে ৭কটি গেঞ্চি
<ul> <li>In appreciation of your time, you will receive t-shirt as a token of our thanks.</li> </ul>	উপহার দেবো।
	–আগনার পরিচিত এবং প্রদত্ত তত্ত্ব সম্পূর্ণ গোপন দেখা হবে:
<ul> <li>All of the information you provide in this study will be kept strictly confidential - only the investigators</li> </ul>	কেবলমাত্র গবেষক ও তাদের সহকারীরা এই তথ্য দেখতে পাবে।
and research assistants directly associated with the study will have access to this information.	-আপনার নাম বা ঠিকানা সম্পর্কে কোনো ভখ্য রাখা হবে না।আপনি যে গেঞ্জি গ্রহণ করেছেন তার প্রমানশ্বরুপ কেবলমাত্র আপনার স্বাক্ষর গ্রহণ করা হবে।
<ul> <li>No personal information such as name or address will be collected, other than a signature or initial to confirm that your t-shirt was received. Your survey responses will not include any identifying</li> </ul>	-জরিপে অংশ নেয়া আপনি যে কোনো মুহুর্তে বন্ধ করে দিতে পারেন কারণ এতে অংশ নেয়া না নেয়া সম্পূর্ণ আগনার ইচ্ছার বাপার।

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information.	তাহলেও আগনাকে একটি গোঞ্জ উপহার দেবো
<ul> <li>You are free to choose whether or not to continue participation in this study, and you can choose to stop being a part of it at any time. If you choose to stop the survey at any point, you will still receive the t-shirt.</li> </ul>	-ওয়াটারলু ইউনিভার্সিটি এবং বাংলাদেশ মেডিকাল রিসার্চ কাউন্সিল এই গবেষণাটি পরিচালনার জন্য নৈতিকতার ছাড়গত্র প্রদান করেছে।এতে অংশ নেয়ার ব্যাপারে বা অন্য কোনো প্রশ্ন বা উদ্বেগের বাগার খাকলে ঢাকা বিশ্ববিদালযের শিক্ষিকা ড. নিগার নার্গিসের সাখে যোগাযোগ করুন।
- This study has been reviewed by and received ethics clearance through the University of Waterloo and the Bangladesh Medical Research Council. If you have any comments or concerns resulting from your involvement please contact the Director of the Office of Research Ethics at the University of Waterloo.	-এই গবেষণা সম্পর্কে কোনো প্রশ্ন থাকলেও ড. নার্গিসের সাথে কথা বলভে পারেন। এথন বলুন, আমাকে সাঙ্কাৎকার দিভে আগনার কোনো দ্বিধা আছে কি? না থাকলে, এই জরীপে অংশ নিভে আগনার সম্মতি দিবেন কি?
<ul> <li>If you have any questions about the study you can also contact Dr. Nigar Nargis at the University of Dhaka.</li> </ul>	
Do you have any questions? If not, we'd like to ask you to give your consent if you would like to participate in the study.	
[INTERVIEWER NOTE: Read out loud exactly as written.]	[সাক্ষাৎকার গ্রহণকারীদের জন্য নির্দেশনা: নিচে যা লেখা আছে তা
	জোরে পড়ে শোনান:]
Based on the information you received in the Information letter, do you agree to take part in this research study being conducted by the University of Dhaka and the University of Waterloo?	ভখ্য পত্রে উল্লেখিত সব কিছু জানার পর এই গবেষণায় আপনি কি এখন অংশ নিতে ইচ্ছুক?
Yes → IF YES, continue to survey	
No $\rightarrow$ <b>IF NO</b> , "Thank you for your time."	হ্যাঁ> সাক্ষাৎকার চাণিয়ে যান
TERMINATE	না> ''সমযের জন্য আগনাকে ধন্যবাদ''
TOBACCO USE AND DEMOGRAPHICS	
[PROGRAMMING NOTE: Some of the smokeless tobacco use questions are different, depending on whether they are for adults or youth (universe noted). The rest of the survey is the same.]	[শ্রোগ্রামিং নেট: উত্তরদাতা বয়স্ক না যুব বয়সের তার উপর নির্ভয় করে ধোঁয়াবিহীন তামাক ব্যবহার সংক্রান্ত প্রশ্ন ভিন্ন ভিন্ন হবে জরীপের বাকী অংশ এক রকম ]
Before we begin I'd like to let you know that there are no right or wrong answers to any of these questions. We are just interested in your personal opinion.	শুরু করার আগেই আপনাকে জানানো দরকার যে জরীপের প্রশ্নগুলির কোনটাতেই ঠিক বা ভূল উত্তর বলে কিছু নেই।আমরা শুধু আগনার ব্যক্তিগত মতামত জানতে আগ্রহী।
Please be assured that all your responses will be kept entirely confidential.	আপনি নিশ্চিন্ত থাকতে পারেন যে আপনার দেয়া সমস্ত তথ্য সম্পূর্ণ
To begin, I'm going to ask you some questions about yourself and your smokeless tobacco use.	গোপন থাকবে। শুরুতেই আপনার নিজের ও আপনার ধোঁয়াবিহীন তামাক ব্যবহার সম্পর্কে কিছু গ্রন্ন করতে চাই।

D.gender	Select gender of respondent: (DO NOT READ)	উত্তরদাতার শিঙ্গ নির্বাচন করুন: (পড়বেন না)	
	FEMALE	মহিলা	
	MALE	পুরুষ	
D. age	To begin, may I ask how old you are?	এখন তাহলে শুরু করা যাক আগনার ব্যুস কতো যদি একটু বলেন 	
CI TETATURI	In the last 20 days, how often did	জন ৬০ দিন খেঁজনিষ্ঠান নামক পৰা কান্য মন মন মাৰন	
SEISTATUST	you use any smokeless tobacco products?	গভ ভঠ শিলে বোৰা।বিখল ভাল।ক শণ) কডো বল বল সেবল করেছেন? 1. প্রতিদিন	
	2 At least once a week	2. সম্ভাহে অতন্তঃ একবার	
	3 At least once in the last month	3. গত এক মাসে অতন্তঃ একবার	
	4 Not at all	4. একেবারেং লা	
SLTStatus2 [Users]	You mentioned that you currently use smokeless tobacco [daily/weekly/monthly].	আগনি উল্লেখ করেছেন যে আগনি ধোঁয়াবিহীন ভামাক [প্রভিদিন/প্রভি সপ্তাহে/প্রভি] মাসে ব্যবহার করেন।	
		[জিজ্ঞাসা করুন যদি স্টাটাস = 1]	
	[Ask if Status=1]	যদি প্রতিদিন ব্যবহার করেন:	
	IF DAILY USER:	দৈনিক আগনি কতবার ধোঁয়াবিহীন তামাক ব্যবহার করেন?	
	day do you use smokeless	[সংখ্যাট বসান  ] 1 (enter number)	
	tobacco?		
	1 [enter number]		
	2 DK/R		
	[Ask if Status=2]	[জিজ্ঞাসা করুল যদি স্টাটাস=2]	
	IF WEEKLY USER:	যদি প্রতি সপ্তাহে ব্যবহার করেন:	
	On average, how many times per	সপ্তাহে আগনি কতবার ধোঁয়াবিহীন তামাক ব্যবহার করেন?	
	week do you use smokeless tobacco?	[সংখ্যাটি বসাল  ]	
	[enter number]		
	[Ask if Status=3]	জিজ্যায়া কব্যন যদি সঁনান্যস = ३ ।	
	IF MONTHLY USER:	যদি প্রতি মাসে ব্যবহার করেন:	
	On average, how many times per month do you use smokeless tobacco?	মাসে আগনি কভবার ধোঁয়াবিহীন ভামাক ব্যবহার করেন? [সংখ্যাটি বসান]]	
	[enter number]		
Ever use [Non-Users Youth]	I am now going to ask you questions about your smokeless tobacco use.	আমি এখন আমনাকে ধোঁয়াবিহীন ভামাক ব্যবহার সম্পর্কে কিছু প্রশ্ন করবো :	
	Have you <b>ever used</b> any smokeless tobacco products? These are products that are not burned or smoked, but instead are usually put in the mouth or are	আপনি কি কখনও ধোঁয়াবিহীন ডামাক পণ্য ব্যবহার করেছেন? ধোঁয়াবিহীন ডামাক পণ্য হলে সেই দ্রব্য পোড়ালো হয় না বা যা খেকে ধোঁয়া বের হয় না বরং এগুলো মুখে নিয়ে চিবানো না যাক দিয়ে গন্ধ টানা হয়, যেমন: জর্দা ভামাক পাডাসহ, গুল, সাদাপাডা, পানমসলা,	

	sniffed. Some examples are Zarda, Paan with tobacco leaf, Gul, Sadapata, Pan masala, and Nasshi.	নস্যি ইত্যাদি	
	[INTERVIEWER NOTE: check all that apply] 1 Yes	[ <b>গ্রন্নকর্তার জন্য নির্দেশনা</b> : (য সব উত্তর প্রযোজ্য তার সবগুলিতে দাগ দিন]	
	2 No 88 R 99 DK	1. হাঁ 2. না 88 R	
Age initiation [EVER users]	At what age did you start using smokeless tobacco?	া রঙ । এন আগনি কতো বছর বয়সে ধোঁয়াবিহীন তামাক ব্যবহার শুরু করেছেন? 	
	99 DK/R	99 DK/R	
Current use [All]	Do you currently use any of the following smokeless tobacco products at least once a month? [INTERVIEWER NOTE: check all that apply]	আপনি কি নিম্নে উল্লেখিত ধোঁয়াবিহীন তামাকপণ্যগুলির যে কোন একটি মাসে অন্তত একবার ব্যবহার করেন? [প্রশ্নকর্তার প্রতি নির্দেশনা: নিম্নে প্রযোজ্য সবগুলিতে জাগ দিন  ]	
	<ul> <li>Zarda</li> <li>Paan with tobacco leaf</li> <li>Gul</li> <li>Sadapata</li> <li>Pan masala</li> <li>Nasshi</li> <li>Other smokeless product</li> <li>None of the Above</li> <li>88 R</li> <li>99 DK</li> </ul>	<ul> <li>জর্ডা</li> <li>ভামাকগ্যভাসহ গান</li> <li>গুল</li> <li>গুল</li> <li>সাদাপাতা</li> <li>গান মসলা</li> <li>নস্যি</li> <li>অন্যান্য ধোঁয়াবিহীন তামাক</li> <li>88 R</li> <li>99 DK</li> </ul>	
Usual product [Users, >1 product]	[INTERVIEWER NOTE: Ask this question if respondent uses more than one product in the question above.]	[ <b>প্রম্নকর্তার প্রতি নির্দেশোনা</b> : উত্তরদাতা যদি উপরে উল্লেখিত পণ্যগুলির একটির বেশি ব্যবহার করেন তাহলে তাকে নিচের প্রশ্নটি করুন ]]	
	Which of these products do you use most frequently? (only one product)	এই পণ্যগুলির মধ্যে সবচেয়ে বেশি ব্যবহার করেন কোনটা? (মাত্র একটি পণ্য)	

Reasons for	[INTERVIEWER NOTE: Repeat the	[প্রম্নকর্তার প্রতি নির্দেশোনা: প্রশ্নটি, প্রযোজন হলে আবার জিজ্ঞাসা
use [Users]	question in necessary.j	করুন []
	In choosing this type of smokeless tobacco, was part of your decision	এই ধরনের ভামাকপণ্য ব্যবহার করার সিদ্ধান্তের পিছনে নিম্নের কোন করবর্গী মর্যায়ে কাল করেছে:
	based on any of the following?	ক্রণাট সবচেবে কাতা করেছে?
	The price.	মূল্য
	1 Yes	1 ====
	2 No	।. २)। २ जा
	88 R	88 R
	33 DK	99 DK
	This type is of high quality.	উচ্চ গুনগত মান সম্পন্ন
	This type is less harmful to my health.	এটাস্বাস্থ্যর জন্য সবচেয়ে কম স্কৃতিকর
Regular	Do you have a particular brand of	আপনি কি কোনো নিদিষ্ট রান্ডের ধোঁয়াবিহীন ভামাক সেবন করে
[Users]	smokeless tobacco that you usually use?	থা(কল?
		1. হ্যাঁ
	1 Yes	<ol> <li>ना</li> </ol>
	88 R	88 R
	99 DK	99 DK
		[উত্তর যদি হ্যাঁ হয়ে: ]
	[IF YES: ]	সেই রান্ডের পুরা নাম কি?
	What is the full name of your usual smokeless brand?	[ <b>প্রস্নকর্তার প্রতি নির্দেশোনা</b> : পণ্যটির নাম, ধরন, ব্যান্ড ও গন্ধ
		(লখার জায়গায় চলে যান]
	[INTERVIEWER NOTE: Prompt for name, type, brand, flavour]	
		PROBE: এটা কোনো ধরনের বা গন্ধের হতে পারে?
	PROBE: What variety, flavour or	
	type would that be?	েওওর খাপ 2 থরে, ভারণে পরের এর ।অঙ্গাশ করুল। আপনি কি সাধারনত: কোনো নিদিষ্ট]
	[If response =2, ask respondent	ধবনের দেখাঁগ্রিমীন ভাগাক ব্যবহার করেন্য
	the following.]	বরলের (বে!রা।বিবাল ডালাক ব্যবহার করেল? 1. হার্ট
	Do you have a type of smokeless	2. ना
	tobacco that you usually use?	88 R
	1 Yes	99 DK
	2 NO 88 R	
	99 DK	
	[INTERVIEWER NOTE: Prompt for	<b>।পমকর্তার পতি নির্দেশোনা</b> পণ্টির নাম, ধরন, ও গন্ধ লেখাব
	name, type, flavour]	জায়গায় চলে যান]

Other tobacco products [All]	In the past month, have you used any of the following tobacco products? [Check all that apply]	গভ মাসে আপনি কি নিম্নলিখিভ ভামাক পণ্য গুলোর কোনো একটি ব্যবহার করেছেন? [এথানে প্রযোজ্য সব উত্তর পড়ুন ও দাগ দিন ]		
	<ol> <li>Cigarettes (factory made and roll-your-own)</li> <li>Bidis</li> <li>Hookah/shisha/narghile/water pipe</li> <li>Other (specify):</li> <li>None of the above</li> <li>R</li> <li>DK</li> </ol>	<ol> <li>সিগারেট ফেন্টারীভে ভৈরি অখবা নিজের হাতে বানানো)</li> <li>বিড়ি</li> <li>হের্কা/শিশা/নারঘিল/উয়াতার পাইপ</li> <li>অন্যান্য (উল্লেখ করুন)</li> <li>উপরের একটাও না</li> <li>৪৪ R</li> <li>99 DK</li> </ol>		
	You indicated "Other". Please specify: [If response=1, 2, 3, 4, 5, or 6 go to NEXT QUESTION. If response=7, skip next question]	উপরে যদি "অন্যান্য" চিশিহত করেন তাহলে নিদিষ্ট করে নাম বলুন [উত্তর যদি 1, 2, 3,4, 5 বা 6 হয়ে তাহলে পরে প্রশ্নে চলে যান।উত্তর যদি 7 হয়ে তাহলে পরের প্রশ্নটি বাদ দিয়ে চলে যান।]		
Multi-use frequency [All dual/multi use users]	You mentioned you use both smokeless and smoked tobacco. Which do you use more often: [read all] 1 Smoked tobacco 2 Smokeless tobacco, or 3 do you use smoked and smokeless tobacco about the same 88 R 99 DK	আগনি উল্লেখ করেছেন যে আগনি ধোঁয়াবিহীন ও ধোঁয়াযুক্ত উভয় প্রকার ভামাক ব্যবহার করেন।(কানটি বেশি ব্যবহার করেন। [সবক্তলো গরে শুনান] 1. ধোঁয়াযুন্ড 2. ধোঁয়াবিহীন ভামাক, অখবা 3. ধোঁয়াযুক্ত ও ধোঁয়াবিহীন ভামাক সমান ভাবে 88 R 99 DK		
Youth susceptibility [Youth non- users]	Do you think in the future you might try using smokeless tobacco? 1 Definitely not 2 Probably not 3 Probably yes 4 Definitely yes 88 R 99 DK	আগনি কি মনে করেন ভবিষতে আগনি ধোঁয়াবিহীন ভামাক ব্যবহার করে দেখবেন? 1. অবশ্যই না 2. সম্ভবনা না 3. সম্ভবনা হাাঁ 4. অবশ্যই হাাঁ 88 R 99 DK		
Youth susceptibility [Youth non- users]	If one of your best friends were to offer you smokeless tobacco, would you use it? 1 Definitely not 2 Probably not 3 Probably yes 4 Definitely yes 88 R 99 DK	আপনের সবচে ঘৰিষ্ট বন্ধুদের কেউ আপনাকে কোনো ধোঁয়াবিহীন ভামাক দ্রব্য দিলে আপনি কি ভাব্যবহার করবেন? 1. অবশ্যই না 2. সম্ভবনা না 3. সম্ভবনা হাাঁ 4. অবশ্যই হ্যাঁ 88 R 99 DK		

Youth	At any time during the NEXT	আগনি কি মনে করেন যে কোনো সময়	
Youth non-	smokeless tobacco?	আগনি ধোঁয়াবিহীন তামাক ব্যবহার করবেন?	
users]	1 Definitely not	1. অবশ্যই না	
	2 Probably not	2. সম্ভবনা না	
	3 Probably yes	3. সম্ভবনা হ্যাঁ	
	4 Definitely yes	4. অবশ্যই হয়াঁ	
	88 R	88 R	
	99 DK	99 DK	
QUITTING AT	TEMPTS		
Ever quit	Have you ever made a serious	আপনি কি কখনও ধোঁয়াবিহীন ভামাক ঢাড়ার জন্য জোর প্রচেষ্টা	
[Users]	attempt to stop using all smokeless	চালিয়েছেন?	
	1 Ves	1. হ্যাঁ	
	2 No	2. ना	
	88 R	88 R	
	99 DK	99 DK	
Plan to quit	Are you planning to quit using	আপনি কি ধোঁয়াবিহীন তামাক ছেড়ে দেয়ার পরিকন্ননা করছেন?	
[Users]	smokeless tobacco	[প্রথম চারটি উত্তর পড়ুল]	
	[read first four options]		
	1 Within the next month	1. পরবর্তী ১ মাসের মধ্যে	
	2 Within the next 6 months	2. পরবর্তী ৬ মাসের মধ্যে	
	3 Sometime in the future, beyond 6	3. প্রতি ৬ মাস পর, ভবিষ্যতে কোনো এক সময়	
	months,	4. অথবা আগান ধুমগান চড়ার গারকল্পনা করছেন না	
	4 or are you Not planning to quit?	88 K	
	99 DK		
Quit health	If you were to quit using smokeless	যদি আগামী ৬ মাসের মধ্যে	
[Users]	tobacco permanently in the next 6	আপনি ধোঁয়াবিহীন ভামাক ব্যবহার পুরোপুরি ছেড়ে দেন ভাহলে আপনার	
	months, how much do you think it	শ্বাস্থের কতটা উন্নত হবে বলে আপনি মনে করেন?	
	would improve your nearth		
	1 Not at all	া গকদমই না	
	2 A little	2 किन्दा	
	3 A lot	3 আনক	
	88 R	88 R	
	99 DK	99 DK	

DEMOGRAPHICS			
D.Educ ( <b>19+</b> ) DE62311	<ul> <li>What is your highest level of education? (DO NOT READ)</li> <li>1 Illiterate</li> <li>2 Literate, no formal education</li> <li>3 Primary (1-5 years)</li> <li>4 Secondary (6-8 years)</li> <li>5 SSC (9-10 years)</li> <li>6 HSC (11-12 years)</li> <li>7 Bachelor's degree (14-16 years)</li> <li>8 Master's degree (15-17 years)</li> <li>9 Above Master's degree (i.e. PhD)</li> <li>88 R</li> <li>99 DK</li> </ul>	আপনি কতদূর পর্যন্ত লেখাপড়া করেছেন? (পড়বেন না) 1. নিরক্ষর 2. অক্ষর জ্ঞান সম্পূর্ণ কিন্তু প্রতিষ্ঠানিক শিক্ষা নেই 3. প্রাথমিক (১ থেকে ৫ বছর) 4. মাধ্যমিক (৫ থেকে ৮ বছর) 5. এস. এস. সি (৯ থেকে ১০ বছর) 6. এইচ. এস. সি (১১ থেকে ১২ বছর) 7. স্নাতক/ডিগ্রী (১৪ থেকে ১৬ বছর) 8. মাস্টার্স ডিগ্রী (১৬ থেকে ১৭ বছর) 9. মাস্টার্স এর উধের্ব (পি. এইচ.ডি) 88 R	
Income ( <b>19+)</b> DE62211	In the last year, on average, how much was the total monthly income of your household? 1 Less than 5,000 Taka 2 5,000-9,999 Taka 3 10,000-14,999 Taka 4 15,000-19,999 Taka 5 20,000+ Taka 88 R 99 DK	99 DK আপনার পরিবারের মোট মাসিক আয় কত্ত? 1. ৫,০০০ টাকা 2. ৫,০০০ - ৯,৯৯৯ টাকা 3. ১০,০০০ - ১৪,৯৯৯ টাকা 4. ১৫,০০০ - ১৯,৯৯৯ টাকা 5. ২০,০০০ এর বেশি 8 R 9 DK	
Y.D.Educ (16-18)	What was the last year of school that you completed? (DO NOT READ) 1 Illiterate 2 Literate, no formal education 3 Primary (1-5 years) 4 Secondary (6-8 years) 5 SSC – Year 9 6 SSC- Year 9 6 SSC- Year 10 7 HSC – Year 11 8 HSC – Year 11 8 HSC – Year 12 9 More than HSC 88 R 99 DK	ত্যাপনি কতদূর লেখাপড়া শেষ করেছেন? (পড়বেন না) 1. অশিষ্ণিত 2. অশিষ্ণিত জ্ঞান সম্পূর্ণ কিন্তু প্রতিষ্ঠানিক শিক্ষা নেই 3. প্রাথমিক (১ থেকে ৫ বছর) 4. মাধ্যমিক (৫ থেকে ৮ বছর) 5. এস. এস. সি (৯ বছর) 6. এইচ. এস. সি (৯ বছর) 7. এইচ. এস. সি (১১ বছর) 8. এইচ. এস. সি (১১ বছর) 9. এইচ. এস. সি এর বেশি 88 R 99 DK	
Religion (All) DE62662	What is your religion? 1 Muslim 2 Hindu 3 Christian 4 Buddhist 5 Other (specify) 88 R 99 DK	আগনার ধর্ম কি? 1. মুমনমান 2. হিন্দু 3. খ্রীস্টান 4. বৌদ্ধ 5. অন্যান্য (উলেখ করুন) 8 R 9 DK	

Occupation	<ul> <li>What is your primary occupation?</li> <li>1 Owner farmer</li> <li>2 Tenant farmer</li> <li>3 Self-employed in non-farm agricultural activities (e.g., cattle, poultry raising, fisheries, plantation)</li> <li>4 Self-employed in non- agricultural activities (e.g., rickshaw pulling, tailoring, hair cutting, restaurant, grocery shop, tea stall)</li> <li>5 Farm wage laborer</li> <li>6 Non-farm agricultural wage laborer</li> <li>7 Non-agricultural wage laborer (e.g., industrial, construction, transport)</li> <li>8 Professional (e.g., physician, engineer, lawyer, teacher, researcher)</li> <li>9 Managerial, administrative or clerking service</li> <li>10 Student</li> <li>11 Unemployed</li> <li>12 Housewife/Housekeeper/ Household manager</li> <li>13 Other (specify)</li> <li>88 R</li> <li>99 DK</li> </ul>	আপনার প্রাথমিক পেশা কি? 1. নিজ জমিতে কৃষক 2. বর্গা চাষী 3. অকৃষিকাজে (যেমন: পশুপালন, মাছ চাষ, সবজি ও ফল চাষ) শ্বনিয়োজিত 4. কৃষিক্ষেত্রের বাইরে (যেমন: রিক্সা চালানো, সেলাই, থাবারের (দাকান, চুল কাটা, মুদির দোকান, চায়ের (দাকান) শ্বনিয়োজিত 5. কৃষি শ্রমিক 6. অকৃষি (যেমন: পশুপালন, মাছ চাষ, সবজি ও ফল চাষ) শ্রমিক 7. কৃষিক্ষেত্রের বাইরে (যেমন: রিক্সা চালানো, সেলাই, থাবারের (দোকান, চুল কাটা, মুদির দোকান, চায়ের দোকান) শ্রমিক 8. (পশাজীবি (যেমন: ডাক্তার, ইঞ্জিনিয়ার, আইনজীবি, শিক্ষক, গবেষক) 9. প্রশাসনিক, ব্যবস্থাপনা বা অফিসকর্মী/কর্মকর্তা 10.ছাত্র 11. বেকার 12. গৃহিনী/গৃহস্থালী 13. অন্যান্য (নাম উল্লেখ করুন)
		88 R 99 DK
ATTITUDES A	ND BELIEFS	
For the next few questions, I'd like to ask for your opinion about smokeless tobacco products. There is no right or wrong answer—we are most interested in your thoughts.		পরবর্তীকয়েকটি প্রশ্নে আমি ধোঁয়াবিহীন তামাক সম্পর্কে আপনার মতামত জানতে চাইব।এথানে কোন সঠিক বা ভুল নেই-আমরা আপনার মতামতটুকু সম্পর্কেই জানতে আগ্রহী।
Overall opinion [All]	What is your overall opinion about using smokeless tobacco? 1 Good 2 Neither good nor bad 3 Bad 88 R 99 DK	ধোঁয়াবিহীন ভাষাকজাত দ্রব্য ব্যবহার সম্পর্কে আগনার সার্বিক মতামত কি? 1. তাল 2. তালও না, থারাগও না 3. থারাগ 88 R 99 DK

Relative risk [All]	I would like to know what you think about the following smokeless tobacco products. In your opinion, please rank the following smokeless tobacco products from most to least harmful: [Interviewer note: If respondent says they think all are equally harmful, ask 'if you had to choose which would you say is the most harmful, etc.'		নিম্লোক্ত ধোঁয়াবিহীন তামাকদ্রব্য সম্পর্কে আগনার ধারণা কি তা জানতে চাইব।আগনার মতে ই তামাক দ্রব্যগুলি সবচেয়ে বেশী থেকে সবচেয়ে কম এইতাবে সাজান" স্কৃতিকর [সাক্ষাৎকার গ্রহণকারীদের জন্য জ্ঞাতব্যঃ যদি উত্তরদাতা বলে যে, সে মনে করে সবগুলেই সমান স্কৃতিকর তবে জিপ্ঞেস করুন "যদি যাচাই করতে বলা হয় তবে কোনটিকে আগনি সবচেয়ে স্কৃতিকর বলে বেছে নিতেন।"]		
	Zarda	Sadapata			
	Paan with	Pan masala	জদা	সাদা পাতা	
	tobacco leaf		৩)মা(কর পান জল	শ।ল ৯সণ। নিয়া	
	Gui	Nasshi	01	(1)	
	- all are equally har	mful	- সবগুলে্ই সমান ক্ষতিকর ।		
	1 Answer Rank		1 Answer Rank		
	2 R		2 R		
content in the	3 DK	10000000			
General attitudes [All]	In your opinion, please tell me whether you agree, disagree, or neither agree nor disagree with each of the following statements. In general		আপনি জি নিম্নোক্ত বিসয়গুলোতে	একমত বা ভিন্নমত পোষণ করেন?	
	1 Agree		1. একমত		
	2 Disagree		2. ভিন্নমত		
	3 Neither agree nor	r disagree	3. একমত বা ভিন্নমত কোলটাই নয়		
	88 R		88 R		
	99 DK		99 DK		
tobacco use.	ciety disapproves of s	smokeless	বাংলাদেশা সমাজ ধোয়াাবহান ভ	গমাকের ব্যবহার ভালো (চাথে দেখে না।	
Smokeless tobacco is highly addictive.		ধোঁয়াবিহীন তামাকপণ্য ব্যবহার	রক প্রকার (লশা।		
It is acceptable for females to use smokeless tobacco.		মহিলাদের ধোঁয়াবিহীন তামাকপণ্য	ব্যবহার গ্রহণযোগ্য।		
Using smokeless tobacco sets a bad example for children.		(ধাঁ্যাবিহীন তামাকপণ্য ব্যবহার ব	াঙদের জন্য একটি থারাপ দৃষ্টান্ত স্থাপন		
		করে			
Smokeless tobacco use is harmful to health.		ধোঁয়াবিহীন তামাকপণ্য ব্যবহার	দ্বাষ্টের জন্য থারাগ।		

HEALTH WARNINGS				
Current HWs [All]	Thinking now about the packages for smokeless tobacco products (paste, sachets, packs, tins, bottles)	এখন ধোঁয়াবিহী তামাকদ্রব্যের প্যাকেট সম্পর্কে জানতে চাইব, যেমন, কোটা, মিনিশাক, বোতল।		
	As far as you know, do smokeless tobacco products in Bangladesh have health warnings on the packages? 1 Yes (including 'some products') 2 No 88 R 99 DK	আগনি কি জানেন যে বাংলাদেশে ভামাকদ্রব্যের প্যাকেটের গায়ে কোনো শ্বাস্থ্য সতকীকরণ বাণী আছে কিনা? 1. হ্যাঁ (কোন কোন দ্রব্যে) 2. না 88 R 99 DK		
HW on last package [Users]	On your last package of smokeless tobacco, was there a health warning? 1 Yes 2 No 3 Can't remember 88 R 99 DK	আপনি শেষবার যে ধোঁয়াবিহীন তামাকদ্রব্য কিনেছিলেন তার গাযে কিস্বাস্থ্য সতর্কবাণী ছিল? 1. হ্যাঁ 2. না 3. মনে করতে পারছি না। 88 R 99 DK		
HW opinion [All]	Do you think that smokeless tobacco packages should have health warnings? 1 Yes 2 No 3 Maybe 88 R 99 DK	আপনি কি মনে করেন যে খোঁয়াবিহীন ভামাক দ্রব্যের প্যাকেটের গায়ে স্বাস্থ্য সভর্কবাণী থাকা উচিত? 1. হ্যা 2. না 3. হয়ত বা 88 R 99 DK		
	(If YES:) Do you think that the health warnings should include pictures? 1 Yes 2 No 3 Maybe 88 Refused (Don't read) 99 Don't Know (Don't read)	(যদিহ্যাঁ হয়:) আগনি কি মনে করেন যে শ্বাস্থ্য সতর্কবানীর সঙ্গে ছবিও থাকা উচিত? 1. হ্যাঁ 2. না 3. হয়ত বা 88 R 99 DK		
HEALTH WAR	HEALTH WARNING LABEL RATINGS			
<b>PROGRAMMING NOTE:</b> For the health warning ratings, each respondent will see 1 set of warnings, each set consisting of 5 different warnings: 1) oral cancer, (2) mouth disease, (3) heart disease, (4) addiction, and (5) death, for a particular executional style (one of four experimental conditions: 1) text-only warning, 2) pictorial warning with symbolic imagery, 3) pictorial warning with graphic health effect, and 4) pictorial warning with a personalized graphic health effect and testimonial). The experimental condition that a respondent is in should be randomized, but with balancing for the number of people assigned to each condition.				

I'm now going to show you a series of tobacco health	<u> এখন আমি ভামাকের ব্যাপারে</u>	অনেকগুলি সভকীকবণ বার্জা
5 5		

warnings.		দেখাতে চাই আগনি যদি দয়া করে এর প্রতিটির দিকে একটু	
		ভালো করে তাকান, তাহলে এসব সম্পর্কে বেশ কিছু প্রশ্ন	
I'd like you to take a moment and look at each warning, after which I'll ask you several questions		করব	
which the ask you	several questions.		
		আগনি ১ থকে ১০ স্কেলে প্রতিটি ছবি মূল্যায়ন করবেন।১	
The questions wil	I ask you to rate a picture using a scale from	অর্থ হলো 'একদম না' এবং ১০ অর্থ হলো ' অত্যন্তু বেশী'	
1 to 10, where 1 is	s 'not at all' and 10 is 'extremely'. I'm going	আমি একটি উদাহরণ দিছি।	
to show you arrea	kample using this scale.		
Please tell me wh	ether this kitten IS CUTE.	এই বিডালের বাচ্চাটি কি সন্দর?	
1 2 2 4		5 3 9 8 6 9 9 8 3 50	
Notatall In the	5 6 7 8 9 10 DK/R Middle Extremely	্রকদম না মাঝামাঝি অত্যন্ন বেশী	
		১ অর্থ আগনি মনে করেন 'বিড়ালের বাচ্চাটি একদম সুন্দর	
One means that y	ou do not find the kitten at all cute, and ten	না' এবং ১০ অর্থ হলো আপনি মনে করেন 'বিড়ালের বাষ্ডাটি	
means that you fil	nd the kitten extremely cute.	অত্যন্ত সুন্দর'	
Do you have any	questions?	আপনার কি কোনো প্রশ্ন আছে?	
Great, now we'll n	nove on to the actual questions. You will	আচ্চা, আমি এখন মূল প্রশ্ন দিকে দাব আপনি ৫	
see one set of 5 v	varnings, each for a different health effect.	টি শ্বাস্থ্যসতকীকরণ বার্তা দেখতে পাবেন যার প্রতিটির তিন্ন	
the 1 to 10 scale	ons will be repeated for each warning, using	প্রভাব আছে।প্রতিটি সত্তর্কীকরণের জন্য ১ থেকে ১০ স্সেলে	
		একই প্রশ্ন পুন: জিজ্ঞাস করা হবে	
		আমি আগলাকে এখন প্রথম ইমেজাটি দেখাবো	
I will now show vo	ou the first image		
i will now show ye	du the moti muge.		
HWM.attention	On a scale of 1 to 10, where 1 is 'not at all'	১ থেকে ১০ এর পরিমপকে (স্কেল) যেথালে ১ হচ্ছে একদম	
	and 10 is 'extremely', please tell whether	না এবং ১০ হচ্ছে অত্যন্ত বেশী; দয়া করে বলুন যে এই	
	this warning message	সতর্কীকরণ বিজ্ঞপ্তিগুলো	
	grabs your attention	আপনার মনোযোগ আকর্ষণ করে	
	1 2 3 4 5 6 7 8 9 10 DK/R	() 10 8 6 4 9 12 3 La	
	Not at all In the Middle Extremely	2 4 9 0 4 9 1 8 9 20	
	<ul> <li>Constitution</li> <li>Line of the commutation of the constitution of the constitution</li> </ul>	এক্দম না মাঝামাঝি অত্যন্ত বে <mark>শী</mark>	
HWM.believe	is believable	বিশ্বাস যোগ্য	
HWM.relevant	is important to you	আগলার সাথে সম্পর্কিত	
HWM.alarm	is surprising	আন্চর্যজনক	
HWM.fright	is frightening	ত্রস্কর	
HWM.disgust	is disgusting	বিরন্তিকর	
HWM.unpleasa	is unpleasant	দেখতে খারাপ দেখায	
nt			

HWM.concern	On a scale of 1 to 10, where 1 is 'not at all' and 10 is 'extremely', please tell me whether this warning message would make people more concerned about the health risk of using smokeless tobacco 1 2 3 4 5 6 7 8 9 10 DK/R Not at all In the Middle Extremely		১ থেকে ১০ এর পরিমপকে (স্কেল) যেথালে ১ হচ্ছে একদম না এবং ১০ হচ্ছে অত্যন্ত বেশী; দয়া করে বলুন যে এই সতর্কীকরণ বিজ্ঞস্তিগুলো মানুষকে ধোঁয়াবিহীন তামাক ব্যবহারজনিত স্বাস্থ্যর স্কৃতি সম্পর্কে চিন্তিত করে। ১ ২ ৩ ৪ ৫ ৬ ৭ ৮ ৯ ১০ একদম না মাঝামাঝি অতন্ত বেশী	
HWM.prevent	help prevent young people from starting to use smokeless tobacc	o	যুবকদের ধোঁয়াবিহীন তামাক ব্যবহার থেকে বিরত থাকতে সহায়তা করে	
HWM.quit	make smokeless tobacco users want to quit		ধোঁয়াবিহীন ভামাক ব্যবহারকারীকে তা ব্যবহার ত্যাগ করতে সহায়তা করে	
HWM.effective	Overall, on a scale of 1 to 10, how effective is this health warning?		সর্বোগরি, ১ থেকে ১০ এর পরিমাপকে, এই সতকীকরণ কতটুকু কার্যকরী?	
(POST) ATTITU	DES AND BELIEFS			
Overall opinion [All] General attitudes [All]	What is your overall opinion about using smokeless tobacco? 1 Good 2 Neither good nor bad 3 Bad 88 R 99 DK In your opinion, please tell me whether you agree, disagree, or neither agree nor disagree with each of the following statements. In general 1 Agree 2 Disagree 2 Neither agree per disagree	(ধাঁমাবিহীন ভামাকজাভ দ্রব্য ব্যবহার সম্পর্কে আপনার সার্বিক মড ? কি? 1. ভাল 2. ভালও না, থারাগও না 3. থারাগ 88 R 99 DK আপনি কি নিম্নোক্ত বিষয়গুলোভে একমভ বা ভিন্নমভ পোষণ করে 1. একমভ 2. ভিন্নমভ		
	3 Neither agree nor disagree 88 R 99 DK	<ol> <li>একমত বা তিন্নমত কোনটাই নয়</li> <li>88 R</li> <li>99 DK</li> </ol>		
Bangladeshi society disapproves of smokeless tobacco use.		বাংলাদেশী সমাজ ধোঁয়াবিহীন ভামাকের ব্যবহার ভালো চোখে দেখে না		
Smokeless tobacco is highly addictive.		(ধাঁয়াবিহীন তামাকপণ্য ব্যবহার এক প্রকার (নশা।		
It is acceptable for females to use smokeless tobacco.		মহিলাদের	র ধোঁয়াবিহীন তামাকপণ্য ব্যবহার   গ্রহণযোগ্য।	
Using smokeless tobacco sets a bad example for children.		ধোঁয়াবিহ স্থাপন ক	টন ভামাকপণ্য ব্যবহার বাষ্ডাদের জন্য একটি খারাপ দৃষ্টান্ত তরে।	
Smokeless tobacco use is harmful to health.		ধোঁমাবিহীন ভামাকপণ্য ব্যবহার স্বাস্থ্যর জন্য থারাগ		

Worn/ICurrent	How worried are you, if at all	ধেঁমারিমীন ভাষাক ব্যবহার করিয়াতে সামাহানি ঘটারে ৫ রাগারে
Users]	that using smokeless tobacco	עראראין ארא איזער איזערא איזערא איזער א איזער איזער איזער איזעראיז
	WILL damage your health in the	আপাল কওখালে ওগেয় :
	future? Are you	[সব ডতর পড়ুল]
	[read all]	1. একেবারেই চিন্তিত নই
	1 Not at all worried	2. কিছুটা চিণ্ডিত
	2 A little worried	3. খব চিন্নিত
		88 R
	99 DK	99 DK
Relative risk	Compared to smoking	আগনি কি মনে করেন সিগারেটের খলোনায ধোঁযাবিহীন তামাক
[Dual/multi users:	cigarettes, do you think using	দব্য স্বাস্থ্যব জন্য কম স্কুজিকব বেশি স্কুজিকব অথবা কোন পার্থক্য
Cigs]	smokeless tobacco is less	जने वारोज जनों) में काउम्ज, (ना काउम्ज जनना (मान) तानम) (जरेंग
	harmful, more harmful, or no	
	different for health?	1. ଦଧ୍ୟାତଦମ 
	1 Less harmful	2. (4) 340044
	2 More narmful	3. কোন পাৰ্থক্য নেই
		88 R
	99 DK	99 DK
Relative risk	Compared to smoking bidis, do	আপনি কি মনে করেন বিডির তলনয ধোঁযাবিহীন তামাকজাত
[Dual/multi users:	you think smokeless tobacco is	দ্রব্য স্থাস্থরে জন্য কম স্ক্রতিকর বেশি স্ক্রতিকর অথবা কোন পার্থক্য নেই?
Bidis]	less harmful, more harmful or no	1 কম স্কৃতিকর
	different for health?	1. দশ অতিদন ০ বেশি মাজিকব
	1 Less harmful	2. (4) 1-36 (4) A
	2 More narmful	<ol> <li>(কাল শাখক) (লহ</li> </ol>
	3 No difference	88 R
	99 DK	33 DK
HEALTH WARN	NG LABEL RECALL	
[INTERVIEWER NOTE: Please turn screen toward		[ষ্বাঙ্কাৎকার গ্রহণকারীর দিকে আইপ্যাডটি ফেরাল।]
I'm now going to ask you about the health warnings		আগান যে স্বাস্থ্য সতকীকরণ বানীগুলো দেখেছেন আমি একন
that you've seen in this study. In total there were 5		। সেগুলো সম্পর্কে জিজ্ঞাসা করব। মোট ৫ টি সভর্কীকরণ বাণী ছিল।
health warnings. I'd like you to take a minute and try		কিচস্কণ সময় নিয়ে সেগুলো মনে কবাব চেষ্টা ককন।
and recall these he	ealth warnings: you can say either	আগনি সতর্কীকরণ বাণীর কোনো শব্দ দলতে পারেন অথবা এর বণ
and recall these he the words of the w	ealth warnings: you can say either arnings or provide a brief	আপনি সতকীকরণ বাণীর কোনো শব্দ দলতে পারেন অথবা এর বণ দিতে পারেন।মনে করতে না পারলে অসবিধা নাই।তবে আপনার
and recall these he the words of the w description of any okay if you can't re	ealth warnings: you can say either arnings or provide a brief warnings you can remember. It is warl all the health warnings but	আগনি সতকীকরণ বাণীর কোনো শব্দ দলতে পারেন অথবা এর বণ দিতে পারেন।মনে করতে না পারলে অসুবিধা নাই।তবে আগনার যথাসাধ্য চেষ্টা করুন।
and recall these he the words of the w description of any okay if you can't re please try your be	ealth warnings: you can say either arnings or provide a brief warnings you can remember. It is scall all the health warnings but st.	আপনি সতকীকরণ বাণীর কোনো শব্দ দলতে পারেন অখবা এর বণ দিতে পারেন মনে করতে না পারলে অসুবিধা নাই তবে আপনার যখাসাধ্য চেষ্টা করুন
and recall these he the words of the w description of any okay if you can't re please try your bes	ealth warnings: you can say either arnings or provide a brief warnings you can remember. It is scall all the health warnings but st.	আপনি সতকীকরণ বাণীর কোনো শব্দ দলতে পারেন অখবা এর বণ দিতে পারেন।মনে করতে না পারলে অসুবিধা নাই।তবে আপনার যখাসাধ্য চেষ্টা করুন। [সাক্ষাৎকার গ্রহণকারীদের জন্য নির্দেশনা: "আর কিছ? প্রতেকে
and recall these he the words of the w description of any okay if you can't re please try your be	ealth warnings: you can say either arnings or provide a brief warnings you can remember. It is ecall all the health warnings but st.	আপনি সতকীকরণ বাণীর কোনো শব্দ দলতে পারেন অথবা এর বণ দিতে পারেন।মনে করতে না পারলে অসুবিধা নাই।তবে আপনার যথাসাধ্য চেষ্টা করুন। [সাক্ষাৎকার গ্রহণকারীদের জন্য নির্দেশনা: "আর কিছু? প্রত্যেক উত্তবের পার রলন।
and recall these he the words of the w description of any okay if you can't re please try your bes [Interviewer: "Any	ealth warnings: you can say either arnings or provide a brief warnings you can remember. It is ecall all the health warnings but st. y others?" after each response]	আগনি সভকীকরণ বাণীর কোনো শব্দ দলভে পারেন অখবা এর বণ দিভে পারেন।মনে করতে না পারলে অসুবিধা নাই।ভবে আগনার যথাসাধ্য চেষ্টা করুন। [সাক্ষাৎকার গ্রহণকারীদের জন্য নির্দেশনা: "আর কিছু? প্রভ্যেক উত্তরের পরে বলুন]
and recall these he the words of the w description of any okay if you can't re please try your bes [Interviewer: "Any [PROGRAMMER I	ealth warnings: you can say either arnings or provide a brief warnings you can remember. It is ecall all the health warnings but st. y others?" after each response] NOTE: Create checklist with each	আগনি সভকীকরণ বাণীর কোনো শব্দ দলভে পারেন অখবা এর বণ দিভে পারেন।মনে করতে না পারলে অসুবিধা নাই।ভবে আপনার যখাসাধ্য চেষ্টা করুন। [সাক্ষাৎকার গ্রহণকারীদের জন্য নির্দেশনা: "আর কিছু? প্রভ্যেক উত্তরের পরে বলুন] [PROGRAMMER NOTE: Create checklist with each item
and recall these he the words of the w description of any okay if you can't re please try your bes [Interviewer: "Any [PROGRAMMER I item below]	ealth warnings: you can say either arnings or provide a brief warnings you can remember. It is ecall all the health warnings but st. y others?" after each response] NOTE: Create checklist with each	আগনি সভকীকরণ বাণীর কোনো শব্দ দলভে পারেন অথবা এর বণ দিভে পারেন।মনে করতে না পারলে অসুবিধা নাই।ভবে আপনার যথাসাধ্য চেষ্টা করুন। [সাক্ষাৎকার গ্রহণকারীদের জন্য নির্দেশনা: "আর কিছু? প্রভ্যেক উত্তরের পরে বলুন] [PROGRAMMER NOTE: Create checklist with each item below]
and recall these he the words of the w description of any okay if you can't re please try your bes [Interviewer: "Any [PROGRAMMER I item below]	ealth warnings: you can say either arnings or provide a brief warnings you can remember. It is ecall all the health warnings but st. y others?" after each response] NOTE: Create checklist with each	আগনি সভকীকরণ বাণীর কোনো শব্দ দলভে পারেন অথবা এর বণ দিভে পারেন।মনে করতে না পারলে অসুবিধা নাই।ভবে আপনার যথাসাধ্য চেষ্টা করুন। [সাক্ষাৎকার গ্রহণকারীদের জন্য নির্দেশনা: "আর কিছু? প্রত্যেক উত্তরের পরে বলুন] [PROGRAMMER NOTE: Create checklist with each item below] সাক্ষাৎকার গ্রহণকারীর চেকলিস্ট নোট: "ভমাক মৃভ্যুর কারণ" এই

Experimental Condition 1: TEXT ONLY			
Health Warning	Interviewer Checklist	Interviewer Checklist	
তামাক মুখের ক্যান্সারের জন্য দায়ী তামাক মৃত্যুর কারণ	-text: "tobacco causes oral cancer" -other (incorrect): please specify	<ul> <li>টেকস্ট: "ভামাক মুথের ক্যান্সারের জন্য দায়ী"  </li> <li>অন্যান্য (সঠিক নয়): উল্লেখ করুন</li> </ul>	
তামাক মাড়ির রোগের জন্য দায়ী তামাক মত্যর কারণ	-text: "tobacco causes mouth disease" -other (incorrect): please specify	<ul> <li>টেকস্ট: "ভামাক মাড়ির রোগের জন্য দায়ী"  </li> <li>অন্যান্য (সঠিক নয়): উল্লেখ করুন</li> </ul>	
তামাক হৃদরোগের জন্য দায়ী তামারু মত্যর কারণ	-text: "tobacco causes heart disease" -other (incorrect): please specify	<ul> <li>টেকস্ট: "ভামাক হৃদরোগের জন্য দায়ী"  </li> <li>অন্যান্য (সঠিক নয়): উল্লেখ করুন</li> </ul>	
তামাক প্রচন্ড রকম নেশা সৃষ্টিকারী তামাক মত্যুর কারণ	-text: "tobacco is highly addictive" -other (incorrect): please specify	<ul> <li>টেকস্ট: "ভামাক প্রচন্ত্র রকম (লশা সৃষ্টিকারী"  </li> <li>অন্যান্য (সঠিক নয়): উল্লেখ করুন</li> </ul>	
তামাক গড়ে প্রতিদিন ১৫৬ জন বাংলাদেশীর মৃত্যুর কারণ তামাক মৃত্যুর কারণ	-text: "tobacco kills 156 Bangladeshis every day" -other (incorrect): please specify	<ul> <li>টেকস্ট: "ভামাক গড়ে প্রতিদিন ১৫৬ জন বাংলাদেশীর মৃত্যুর কারণ"  </li> <li>অন্যান্য (সঠিক নয়): উল্লেখ করুন</li> </ul>	
Experimental Condition 2: SYMBOLIC IMAGERY			
তামাক মৃদের জন্য দায়ী তামাক মৃত্যুর কারণ	-text: "tobacco causes oral cancer" -picture: scorpion/bug (correct) -picture: other (incorrect): please specify	<ul> <li>টেকস্ট: ""তামাক মুখের ক্যান্সারের জন্য দার্যী"  </li> <li>ছবি: বৃশ্চিক (সঠিক)</li> <li>ছবি: অন্যান্য (সঠিক নর্য): দর্যা করে উল্লেখ করুন</li> </ul>	
তামাক মাড়ির রোগের জন্য দায়ী তামাবক মৃত্যুর কারণ	-text: "tobacco causes mouth disease" -picture: snake/cobra (correct) -picture: other (incorrect): please specify	<ul> <li>টেকস্ট: "তামাক মাড়ির রোগের জন্য দার্য়ী"  </li> <li>ছবি: সাগ/গোখর (সঠিক)</li> <li>ছবি: অন্যান্য (সঠিক নর্য): দর্যা করে উল্লেখ করুন</li> </ul>	
তামাক উদরোগের জন্য দায়ী তামাক মৃত্যুর কারণ	-text: "tobacco causes heart disease" -picture: yellow triangle (correct) -picture: exclamation mark (correct) -picture: caution sign (correct) -picture: other (incorrect): please specify	<ul> <li>টেকস্ট: "ভামাক হৃদরোগের জন্য দায়ী"  </li> <li>ছবি: হলুদ ত্রিভুজ (সঠিক)</li> <li>ছবি: বিশ্বয়বরোধক চিহ্ন (সঠিক)</li> <li>ছবি: সাবধানভার চিহ্ন (সঠিক)</li> <li>ছবি: অন্যান্য (সঠিক নয়): দয়া করে উল্লেখ করুন</li> </ul>	
তামাক প্রচড রক্ম বেশা সৃটিকারী তামাক মৃত্যুর কারণ	-text: "tobacco is highly addictive" -picture: red circle -picture: 'no' symbol (correct) -picture: other (incorrect): please specify	<ul> <li>টেকস্ট: "ভামাক প্রচন্ড রকম লেশা সৃষ্টিকারী"  </li> <li>ছবি: লাল বৃও</li> <li>ছবি: কোন চিহ্ন নয় (সঠিক)</li> <li>ছবি: অন্যান্য (সঠিক নয়): দয়া করে উল্লেখ করুন</li> </ul>	
তামাক গড়ে ১৫৬ জন বাংলাদেশীর মৃত্যুার কারণ তামাক মৃত্যুার কারণ	-text: tobacco kills 156 Bangladeshis every day" -picture: skull and/or crossbones (correct) -picture: poison (correct) -picture: other (incorrect): please specify	<ul> <li>েড কন্ট: "ভামাক গড়ে প্রাতাদন ১৫৬ জন বাংলাদেশীর মৃত্যুর কারণ"।</li> <li>ছবি: মাথার খুলি এবং হাড় (সঠিক)</li> <li>ছবি: বিষ (সঠিক)</li> <li>ছবি: অন্যান্য (সঠিক নয়): দয়া করে উল্লেখ করুন</li> </ul>	
Experimental Condition 3: GRAPHIC IMAGERY			
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তামাক মুখের আমারের অন্য দারী তামাক মৃত্যুর কারণ	-text: "tobacco causes oral cancer" -picture: tumour on side of face (correct) -picture: other (incorrect): please specify	<ul> <li>টেকস্ট: "ভামাক মুথের ক্যান্সারের জন্য দায়ী"  </li> <li>ছবি: মুথের এক পাশে টিউমার (সঠিক)</li> <li>ছবি: অন্যান্য (সঠিক নয়): দয়া করে উল্লেখ করুন</li> </ul>	
ভাষাক মাড়ির রোগের জন্য দায়ী তামাক মৃত্যুর কারণ	-text: "tobacco causes mouth disease" -picture: diseased/gross teeth (correct) -picture: other (incorrect): please specify	<ul> <li>টেকস্ট: "ভামাক মাড়ির রোগের জন্য দার্য়ী"  </li> <li>ছবি: মাড়ির রোগাক্রান্ত দাত (সঠিক)</li> <li>ছবি: অন্যান্য (সঠিক নর্য): দর্যা করে উল্লেখ করুন</li> </ul>	
তামাক হৃদরেপের জন্য পায়ী তামাক মৃত্যুর কারণ	-text: "tobacco causes heart disease" -picture: open chest (correct) -picture: surgery (correct) -picture: other (incorrect): please specify	<ul> <li>টেকস্ট: "ভামাক হৃদরোগের জন্য দায়ী"  </li> <li>ছবি: অপারেশনের জন্য উন্মুক্ত বস্থ (সঠিক)</li> <li>ছবি: অপারেশন</li> <li>ছবি: অন্যান্য (সঠিক নয়): দয়া করে উল্লেখ করুন</li> </ul>	
তামাক প্রচড রক্ম দেশা সৃটিকারী তামাক মৃত্যুর কারণ	-text: "tobacco is highly addictive" -picture: hole in throat (correct) -picture: tumour on throat (correct) -picture: other (incorrect): please specify	<ul> <li>টেকস্ট: "ভামাক প্রচন্ড রকম (নশা সৃষ্টিকারী"  </li> <li>ছবি: মুখের গহবরে ড্রিদ্র (সঠিক)</li> <li>ছবি: গলায় টিউমার (সঠিক)</li> <li>ছবি: অন্যান্য (সঠিক নয়): দয়া করে উল্লেখ করুন</li> </ul>	
তামাক গড়ে হাজিদন ১৫৬ জন বাংলাদেশীর মৃত্যুর কারণ তামাক মৃত্যুর কারণ	-text: "tobacco kills 156 Bangladeshis every day" -picture: dead body under white sheet (correct) -picture: other (incorrect): please specify	<ul> <li>টেকস্ট: "তামাক প্রতিদিন বাংলাদেশে ১৫৬ জন মানুষের মৃত্যুের জন্য দায়ী"  </li> <li>ছবি: সাদা কাফলের ঢাকা মৃতদেহ (সঠিক)</li> <li>ছবি: অন্যান্য (সঠিক নয়): দয়া করে উল্লেখ করুন</li> </ul>	
Experimental C	Condition 4: PERSONALIZED GRAPHIC	AND TESTIMONIAL	
মান বন্ধ মান বন্ধ দা মান ক মান ক মান ক মান ক মান ক মান ক মান ক মান বন্ধ মান ক মান বন্ধ মান বন্ধ মান বন্ধ মান বন্ধ মান বন্ধ মান মান মান মান মান মান মান মান মান মান	-text: "tobacco causes oral cancer" -picture: man with oral cancer (correct) -picture: missing jaw (correct) -picture: other (incorrect): please specify -testimonial: "I lost my jaw to oral cancer". Abdur, age 38, died two weeks after this photo was taken.	<ul> <li>টেকস্ট: "ভামাক মুথের ক্যান্সারের জন্য দায়ী"  </li> <li>ছবি: মুথের ক্যান্সারে আক্রান্ত একজন পুরুষ (সঠিক)</li> <li>ছবি: অবনুপ্ত চোয়াল (সঠিক)</li> <li>ছবি: অন্যান্য (সঠিক নয়): দয়া করে উল্লেখ করুন</li> <li>সাক্ষ্য: "আমি মুথের ক্যান্সারে আক্রান্ত হয়ে চোয়াল হারিয়েছি  " -আবদুল, বয়স ৩৮, এই ছবি ভোলার দুই সম্ত্রাহ পরে মৃত্যুবরণ করেন  </li> </ul>	
আগ হাছিব বোপে জন্ম বাসে বানহলর বারে জনার বারে বানহলর বারে বানহলর বারে বানহলর বারে বানহলর বারে বানহলর বারে বানহলর বারে বানহার বারে বানহার বার্বা বা	-text: "tobacco causes mouth disease"' -picture: man with mouth disease (correct) -picture: man with open mouth/tongue (correct) -picture: other (incorrect): please specify - testimonial: "Because of using tobacco, I have this disease in my mouth". Deepak, age 40.	<ul> <li>টেকস্ট: "ভামাক মাড়ির রোগের জন্য দায়ী"।</li> <li>ছবি: মুথের অসুথের ছবি (সঠিক)</li> <li>ছবি: থোলা মুথের/জিহবার ছবি (সঠিক)</li> <li>ছবি: এন্যান্য (সঠিক নয়): দয়া করে উল্লেখ করুন</li> <li>সাক্ষ্য: "ভামাক ব<b>্যাবহারের কারলে আমার মুথের এ</b> অসুখ হয়েছে। " দীসক, বয়স ৪০।</li> </ul>	
ভাগেৰ মা দেশবোৰে ৰায় 'পা পজ মাৰক সময় পুৰু হয়ে। 'তামাকি মৃত্যুৱ কাৱণ	-text: "tobacco causes heart disease" -picture: man lying down/unconscious (correct) -picture: CPR administered on man (correct) -picture: other (incorrect): please specify -testimonial: "This is my second heart attack caused by tobacco use. It could be my last." Moti , age 44.	<ul> <li>টেকস্ট: "ভামাক হৃদরোগের জন্য দায়ী"  </li> <li>ছবি: শামিত অবস্তায় অচেতন মানুষ (সঠিক)</li> <li>ছবি: মানুষের হৎপিন্ডের স্বাভাবিক সঞ্চালনের চেষ্টা (সঠিক)</li> <li>ছবি: অন্যান্য (সঠিক নয়): দয়া করে উল্লেখ করুন</li> <li>সাক্ষ্য: "এটা আমার শ্বিতীয়বার হার্ট আটক যা তামাক ব্যবহারের ফলে হয়েছে"   মতি, বয়স ৪৪  </li> </ul>	

জনাৰ বন্ধ সুন্ধৰা বিজেপিন মুক লোক মুক নাম মুক নাম মান মান মান মান মান মান মান মান মান	<ul> <li>-text: "tobacco is highly addictive"</li> <li>-picture: man with hole in throat (corre-picture: other (incorrect): please spectestimonial: "I thought I could quit tobacy any time I wanted. I was wrong." Gola age 45.</li> <li>-text: "tobacco kills 156 Bangladeshisevery day"</li> <li>-picture: woman mourning (correct)</li> <li>-picture: woman in white clothing (correct)</li> <li>-picture: body under sheet (correct)</li> <li>-picture: other (incorrect): please spectestimonial: "Tobacco use killed my husband. I feel so alone". Momtaz, age</li> </ul>	<ul> <li>(টকস্ট: "ভামাক প্রচন্দ্র রকম (লশা সৃষ্টিকারী"  </li> <li>ছবি: একজন পুরুষ মানুষের গণায় ছিদ্র (সঠিক)</li> <li>ছবি: এন্যান্য (সঠিক নয়): দয়া করে উল্লেখ করুন</li> <li>সাক্ষ্য: "আমি ভেবেছিলাম আমি চাইলে যে কোন সময় তামাক ছেড়ে দিতে পারব "   গোলাম, বয়স ৪৫  </li> <li>(টকস্ট: "তামাক বাংলাদেশে প্রতিবছর ১৫৬ টি মৃত্যুর জন্য দায়ী"  </li> <li>ছবি: কাল্লারত একজন মহিলা (সঠিক)</li> <li>ছবি: কাল্যান্য (সঠিক নয়): দয়া করে উল্লেখ করুন</li> <li>সক্ষ্য: "তামাক ব্যবহার করে আমার স্বামী মারা গেছেন  " মমতাজ - ৩৬  </li> </ul>	
HEALTH BELIE	EFS	আমি সামার, উমর জাহিকর প্রভাব ৫ রোগ রধির ভাবিকা পার	
	health effects and diseases that may or may not be caused by using smokeless tobacco. Based on what you know or believe, does smokeless tobacco use cause [INTERVIEWER NOTE: if respondent unsure of what the health outcome is, select "don't know"]	আল বা হার উণর কাউকর এডাব ও রোগ-বাবর তাদবে শরে (শানাব যা ধোঁয়াবিহীন তামাকপণ্য ব্যবহার থেকে হতে পারে আবার নাও হতে পারে।আপনি যা জানেন এবং বিশ্বাস করেন তা থেকে বলুন: ধোঁয়াবিহীন তামাকপণ্য কি নিচের রোগগুলোর জন্য দায়ী? [সাক্ষাৎকার গ্রহণকারীদের জন্য নির্দেশনা: উত্তরদাতা রোগ সম্পর্কে নিশ্চিত না হলে "জানি না" উত্তর গ্রহণ করুন।]	
HBORAL	Oral cancer? 1. Yes 2. No 3. Don't know 4. R	মূখের ক্যান্সারের?	
HBMOUTH	Mouth disease?	মাড়ির রোগ?	
HBHEART	Heart disease?	হৃদরোগ?	
HBDEATH	Death?	মৃত্যু?	
HEALTH WAR	NING RANKING TASK		

**PROGRAMMER NOTE:** For the ranking task, each respondent should be assigned to one of the 5 health effects (with balancing for number assigned to each). This is NOT the same as experimental condition. The respondent will view all 4 warnings (in all 4 executional styles) for one health effect.

	I am now going to show you four health warnings about [INSERT HEALTH EFFECT]. I am going to ask you to compare the warnings to each other.	আমি এখন আগনাকে চারটি [INSERT HEALTH EFFECT] সম্পর্কিত সত্তকীকরণগুলো দেখার এবং আগনাকে সত্তকীকরণ গুলো একটি আরেকটির সাখে তুলনা করতে বলব
	[Health effects to insert:] (oral cancer) (mouth disease) (heart disease) (addiction) (death)	[Health effects to insert:] মুখের কেৎসারের (oral cancer) মাড়ির রোগ (mouth disease) ফদরোগ (heart disease) (লশ্য (addiction) মৃত্যু (death)
L1a	Overall, which warning do you think is the <u>most effective</u> for discouraging the use of smokeless tobacco?	সর্বপরি, কোন সভর্কীকরণ টিকে আপনি ধোঁয়াবিহীন তামাক তাগ করতে উৎসাহিত করার ব্যাপারে সবচেয়ে কাযকারী মনে করেন?
L1b-e	Overall, which warning is the next most effective? [Interviewer note: Repeat until all warnings in the set have been selected]	সর্বোপরি কোন সতকীকরনকে ধুমপায়ীর ধুমপান ত্যাগ করতে উৎসাহিত করার ব্যাপারে পরবর্তী সবচেয়ে কার্যকরী বলে মনে করেন? [ <b>সাক্ষাৎকার গ্রহণকারীদের জন্য নোট</b> : (সটটির সব সতকীকরণ নির্বাচিত না হওয়া পর্যন্ত পুনরাবৃত্তি করুন]
REIMBURSEME	NT AND END	
That's all the questions I have for you today. Thank you very much for your participation. Here is a T- shirt in appreciation of your time. To confirm that you've received your reimbursement, I'll need you to sign this form.		আমার প্রশ্ন শেষ।আপনার অংশগ্রহনের জন্য অনেক ধন্যবাদ।আপনার সমযের উপহারম্বরুপ এই গেঞ্জীটি আপনি গ্রহণ করুন।আপনি যে এই উপহারটি গ্রহণ করেছেন তার প্রমানম্বরুপ এই ফর্মটিতে স্বাক্ষর দিন।
[Interviewer note: Have participant sign/initial Remuneration Form]		[ <b>সাঙ্ফাৎকার গ্রহণকারীদের জন্য নোট</b> : উওরদাতার স্বাক্ষর নিন।]
I'll now go over a feedback letter with you.		আমি একটি ফিডব্যাক লেটার পড়ে শোনাব
[INTERVIEWER NOTE: Hand out Feedback Letter, go over main points:]		[ <b>সাক্ষাৎকার গ্রহণকারীদের জন্য নোট</b> : ফিডব্যাক লেটারটি উত্তরদাতার হাতে দিন এবং মূল পযেন্টগুলো পড়ে শোনান।]
Thank you for parti appreciate your he	cipating in our study – we lp.	আমাদের গবেষনায় অংশ নেয়ার জন্য ধন্যবাদ।
<ul> <li>As we mentioned earlier, we are interested in people's opinions about health warnings on tobacco packaging.</li> </ul>		- আগেই উল্লেখ করেছি যে আমরা সিগারেটের প্যাকিং সম্পর্কে জনগনের মতামত সম্পর্কে আগ্রহী।
<ul> <li>We were inte types of healt people's perc relevance, an eliciting nega</li> </ul>	rested in the impact of different h warnings and how they affect eptions of believability, personal d overall effectiveness as well as tive emotional arousal.	<ul> <li>- আশরা ।বাওল্ল ধরণের শ্বাস্থ্য সঙকাকরণ বাণা, গোকউলের চিন্তাভাবনার উপরে এদের প্রভাব, এবং সর্বোগরি এদের কর্যকারিভা ও নেভিবাচক চিন্তার উদ্রেকে কিভাবে সহয়তা করছে সে সম্পর্কে জানতে আগ্রহী।</li> <li>- আমরা আরও জানতে সে এই স্বাস্থ্য সভর্কীকরণ বাণীগুলো স্বাস্থ্য</li> </ul>
- We were also different heal	o interested in the impact of th warnings on the credibility of	সভকীকরণের বিশ্বাসযোগ্যতাকে এবং ধোঁয়াবিহীন ভামাক ব্যবহারের কারণে স্বাস্থ্য সমস্যা সম্পর্কে মানুষের ধারণাকে কিভাবে প্রভাবিত

health warning messages, and beliefs about the health effects of using smokeless tobacco	করে।
<ul> <li>Participants were shown different types of health warnings: text-only, pictorial warnings with graphic health effects, pictorial warnings with personal testimonials and/or effects on "lived experience", and other types of pictorial warnings (symbols, etc.), in order to compare responses to each type of warning.</li> </ul>	- অংশগ্রহণকারীদেরকে এক ধরণের স্বাস্থ্য সমস্যা সংক্রান্ত সভর্কীকরণ দেখানো হযেছে। শুধুমাত্র লিখুন, সচিত্র সভর্কীকরণ, ব্যক্তিগত অভিজ্ঞার বিবরণ এবং অন্যান্য ধরণের সভর্কীকরণ (যেমন, প্রভীক, ইত্যাদি)। এর মাধ্যমে প্রত্যেক ধরণের সভর্কীকরণের ভুলনা করা হয়েছে।
- As a reminder, no personal information (name, address, contact information, etc.) will be collected, other than a signature or initial to confirm that the t-shirt was received. For your protection, we will assign you a number that will be used to label all information and no personal identifiers will be linked to your data.	- আপনার নাম বা ঠিকর সম্পর্কে কোন ভখ্য দেখা হবে না আপনি যে ফোন কার্ড গ্রহণ করেছেন তার প্রমাণস্বরুপ কেবলমাত্র আগনার স্বাক্ষর গ্রহণ করা হবে আপনার জন্য একটি নম্বর দেওয়া হবে যার মাধ্যমে আপনার ভখ্য চিহ্নিত হবে
- This study has been reviewed by and received ethics clearance through the University of Waterloo and the Bangladesh Medical Research Council. If you have any comments or concerns resulting from your involvement please contact Dr. Nigar Nargis at the University of Dhaka whose contact information is listed in your letter [point out contact information in their letter].	- ওয়াটারলু ইউনিভার্সিটি এবং বাংলাদেশ মেডিকেল রিসার্চ কাউন্দিল এই গবেষণাটি পরিচালনার জন্য নৈতিকভার ছাড়পত্র প্রদান করেছে   এতে অংশ নেয়ার ব্যাপারে বা অন্য কোন প্রশ্ন বা উদ্বেগের ব্যাপার খাকলে ঢাকা বিশ্ববিদ্যলাযের শিক্ষিকা ড নিগার নার্গিসের সাথে কথা বলতে পারেন।তার যোগাযোগের তথ্য তথ্যপত্রের নিচে দেওয়া আছে।
That's everything for today. Thank you very much for your participation.	আজ এ পর্যন্তই।আগনার অংশগ্রহনের জন্য অনেক ধন্যবাদ।

## APPENDIX D continued. Codebook for Bangladesh

<b>Bangladesh Study 3 Codeb</b>	ook	1
DESDNILIM	Pespondent Number on Machine	1
KESFNUM	starting at 1	1-
Status	System variable for status	4 Complete 3 Not Complete
Interviewtime	System variable for interview length	Number
StudyID	5-digit number based on RESPNUM	#####
Intersite	Site of Interview (entered by interviewer)	2,4,5,6,7,11
InterID	Interviewer ID (entered by interviewer)	Number (1-9)
iPadnum	Number of iPad used (entered by interviewer)	Text
RevisedSite	Site of Interview (determined by date of survey completed)	2,4,5,6,7,11
Date_of_Interview	Date of Interview	MMDDYYYY
Intstart	Start Time of interview	HHMMSS
Agegroup	Variable to store age group based on D_Age	1 YOUTH (16 - 18 YEARS) 2 ADULT (19+ YEARS)
User1	Variable to store smoking status based on Sstatus	1 User (if sstatus=1,2 or 3) 2 Non-User (if sstatus=4)
Date_end_Interview	Date Interview Ended (local date for laptops, UW server time for OnlineY) – Only present if made it to final screen	MDDYYYY
Intfinish	Time interview Ended (local time for laptops, UW server time for OnlineY) – Only present if made it to final screen	HHMMSS
sLanguage		2 Bengali
Country	Code for Country	BAN
AGP	Age Group Selected by Interviewer at beginning of survey	1 Youth (16 - 18 YEARS) 2 Adult (19+ YEARS)
Consen	Does Respondent Consent to doing the survey:	1 Yes, continue to survey 2 No, Thank you for your time
DGender	Gender	1 Female 2 Male
D_Age	To begin, may I ask how old you are?	Number (1-99)
SLTSTATUS1	In the last 30 days, how often did you use any smokeless tobacco products? (If ANS=1,2 or 3 skip to SLTStatus2, If ANS=4 (Youth ONLY) skip to EVERUSE)	<ol> <li>Every day</li> <li>At least once a week</li> <li>At least once in the last month</li> <li>Not at all</li> </ol>
	I am now going to ask you questions about your smokeless	

	tobacco use. Have you EVER USED any smokeless tobacco products? These are products that	
	are not burned or smoked, but	
	instead are usually put in the	
	examples are	
	chumples are	
	(Check all that apply)	
EVERUSE_1	Zarda	$\overrightarrow{\square} = 1$ $\overrightarrow{\square} = 0$
EVERUSE_2	paan with tobacco leaf	$\overrightarrow{\mathbf{v}} = 1$ $\square = 0$
EVERUSE_3	gul	$\overrightarrow{\mathbf{v}} = 1$ $\overrightarrow{\mathbf{u}} = 0$
EVERUSE_4	sadapata	$\overrightarrow{\mathbf{V}} = 1$ $\overrightarrow{\mathbf{D}} = 0$
EVERUSE_5	pan masala	$\overrightarrow{\mathbf{v}} = 1$ $\square = 0$
EVERUSE_6	nasshi	
EVERUSE_7	Other smokeless product	$ \overrightarrow{\nabla} = 1 $ $ \overrightarrow{\Box} = 0 $
EVERUSEOTH	Other smokeless product - specify	Text
EVERUSE_8	None of the above	$ \overrightarrow{\nabla} = 1 $ $ \overrightarrow{\Box} = 0 $
EVERUSE_9	R	$ \overrightarrow{\nabla} = 1 $ $ \overrightarrow{\Box} = 0 $
EVERUSE_10	DK	$ \overrightarrow{\nabla} = 1 $ $ \overrightarrow{\Box} = 0 $
	If any products chosen skip to	
	AgeInit	
	If no products chosen skip to Sproducts	
SLTSTATUS2	You mentioned that you	1 Enter Number
	currently use smokeless tobacco	2 DK/R
	On average, how many times per	
	tobacco?	
	(Daily, Day if Sstatus=1)	
	(Weekly, Week if Sstatus=2)	
	(Monthly, Month if Sstatus=3)	
	(If ANS=1 skip to SLTStatus3,	
	If ANS=2 skip to AgeInit)	
SL1S1A1US3	currently use smokeless tobacco	Number (0-999)
	On average, how many times per	
	do you use smokeless	
	(Daily, Day if Sstatus=1)	
	(Weekly, Week if Sstatus=2)	

	(Monthly, Month if Sstatus=3)	
AgeInit	At what age did you start using	1 Enter Age
	smokeless tobacco?	2 DK/R
	(If ANS=1 skip to	
	AgeInitiation,	
	If ANS=2 and User=1 skip to	
	CurrentUse,	
	If ANS=2 and User=2 skip to	
	Sproducts)	
AgeInitiation	At what age did you start using	Number (0-99)
	smokeless tobacco?	
	(If User=1 skip to CurrentUse,	
	If User=2 skip to Sproducts)	
	Do you currently use any of the	
	Tonowing smokeless tobacco	
	products at least once a month?	
	(Chast all that apply)	
CUDDENTUSE 1	(Check all that apply)	$\overline{\nabla l} = 1$
CURRENTUSE_I	Zarda	$\mathbf{V} = \mathbf{I}$
CURRENTUSE 2	near with tabages last	$\Box = 0$
CURRENTUSE_2	paan with tobacco leaf	
CURRENTUSE 3	gul	$\nabla = 1$
conditione_5	gui	$\Box = 0$
CURRENTUSE 4	sadanata	$\overrightarrow{v} = 1$
	Suduputu	$\Box = 0$
CURRENTUSE 5	pan masala	$\overrightarrow{V} = 1$
	Pun moure	$\Box = 0$
CURRENTUSE 6	nasshi	$\nabla = 1$
		$\Box = 0$
CURRENTUSE 7	Other smokeless product	$\nabla = 1$
_	1	$\Box = 0$
CURRENTUSEOTH	Other smokeless product -	Text
	specify	
CURRENTUSE_8	None of the above	$\overline{\checkmark} = 1$
_		$\Box = 0$
CURRENTUSE_9	R	$\nabla = 1$
		$\Box = 0$
CURRENTUSE_10	DK	$\mathbf{v} = 1$
		$\Box = 0$
	If one product is chosen skip to	
	ReasonsForUse1,	
	If multiple products chosen	
	skip to UsualProduct,	
	If no products chosen skip to	
	Susuall	
UsualProduct	Which of these products do you	Number (1-5)
	use most frequently?	(See CUSEDLIST and T_CUSEDLIST
		variables)

CUSEDLIST_1 CUSEDLIST_2	Code used in Constructed list for selected first in CURRENTUSE used in UsualProduct	<ul> <li>93 Zarda</li> <li>94 paan with tobacco leaf</li> <li>95 gul</li> <li>96 sadapata</li> <li>97 pan masala</li> <li>98 nasshi</li> <li>99 Other smokeless product</li> <li>93 Zarda</li> </ul>
	selected second in CURRENTUSE used in UsualProduct	<ul> <li>94 paan with tobacco leaf</li> <li>95 gul</li> <li>96 sadapata</li> <li>97 pan masala</li> <li>98 nasshi</li> <li>99 Other smokeless product</li> </ul>
CUSEDLIST_3	Code used in Constructed list for selected third in CURRENTUSE used in UsualProduct	<ul> <li>93 Zarda</li> <li>94 paan with tobacco leaf</li> <li>95 gul</li> <li>96 sadapata</li> <li>97 pan masala</li> <li>98 nasshi</li> <li>99 Other smokeless product</li> </ul>
CUSEDLIST_4	Code used in Constructed list for selected fourth in CURRENTUSE used in UsualProduct	<ul> <li>93 Zarda</li> <li>94 paan with tobacco leaf</li> <li>95 gul</li> <li>96 sadapata</li> <li>97 pan masala</li> <li>98 nasshi</li> <li>99 Other smokeless product</li> </ul>
CUSEDLIST_5	Code used in Constructed list for selected fifth in CURRENTUSE used in UsualProduct	<ul> <li>93 Zarda</li> <li>94 paan with tobacco leaf</li> <li>95 gul</li> <li>96 sadapata</li> <li>97 pan masala</li> <li>98 nasshi</li> <li>99 Other smokeless product</li> </ul>
CUSEDLIST_6	Code used in Constructed list for selected sixth in CURRENTUSE used in UsualProduct	<ul> <li>93 Zarda</li> <li>94 paan with tobacco leaf</li> <li>95 gul</li> <li>96 sadapata</li> <li>97 pan masala</li> <li>98 nasshi</li> <li>99 Other smokeless product</li> </ul>
T_CUSEDLIST_1	Derived Variable with text version of CUSEDLIST_1	Text
T_CUSEDLIST_2	Derived Variable with text version of CUSEDLIST_2	Text
T_CUSEDLIST_3	Derived Variable with text version of CUSEDLIST_3	Text
T_CUSEDLIST_4	Derived Variable with text version of CUSEDLIST_4	Text
T_CUSEDLIST_5	Derived Variable with text version of CUSEDLIST_5 Text	Text
T_CUSEDLIST_6	Derived Variable with text version of CUSEDLIST_6	Text

the text for what the respondent selected in usual product question OR if they only selected one product in CURRENTUSE	
selected in usual product question OR if they only selected one product in CURRENTUSE	
question OR if they only selected one product in CURRENTUSE	
one product in CURRENTUSE	
one product in CURRENTUSE	
displays that product	
Reasonsforuse1In choosing this type of1 Yes	
smokeless tobacco, was part of 2 No	
your decision based on any of the 3 R	
following? 4 DK	
The price.	
Reasonsforuse2 In choosing this type of 1 Yes	
smokeless tobacco was part of 2 No	
vour design besad en env of the 2 D	
your decision based on any of the $3 \text{ K}$	
following? 4 DK	
This type is of High Ouelity	
I fills type is of filgh Quality.	
reasonstoruses in choosing this type of i Yes	
smokeless tobacco, was part of 2 No	
your decision based on any of the 3 R	
following? 4 DK	
This type is less harmful to my	
health.	
Susual Do you have a particular brand of 1 Yes	
smokeless tobacco that you 2 No	
usually usa?	
usually use? 5 K	
$(\mathbf{I}\mathbf{f} \mathbf{A}\mathbf{N}\mathbf{S}-1_{1}\mathbf{b}\mathbf{b}\mathbf{x} \mathbf{f}\mathbf{a}$	
(II AINS=1 SKIP to	
SusualSless I ob,	
If ANS=2,3 or 4 skip to	
Susual3)	
SusualSlessTob What is the full name of your Text	
usual smokeless brand?	
If answered skip to Sproducts	
Susual3 Do you have a TYPE of 1 Yes	
smokeless tobacco that you 2 No	
usually use? 3 R	
4 DK	
(If ANS=1 skin to	
SusualSlessTyne	
If ANS=2.3 or 4 skin to	
Sproducte)	
SucualSlessType Do you have a TVDE of Taxt	
ample logg to be seen that your	
smokeless tobacco that you	
smokeless tobacco that you usually use?	
smokeless tobacco that you usually use?       In the past month, have you used	
smokeless tobacco that you         usually use?         In the past month, have you used         any of the following smoked	
smokeless tobacco that you         usually use?         In the past month, have you used         any of the following smoked         tobacco products	
smokeless tobacco that you         usually use?         In the past month, have you used         any of the following smoked         tobacco products	
smokeless tobacco that you usually use? In the past month, have you used any of the following smoked tobacco products (Check all that apply)	
smokeless tobacco that you         usually use?         In the past month, have you used         any of the following smoked         tobacco products         (Check all that apply)         SPRODUCTS 1	

SPRODUCTS_2	Bidis	$ \overrightarrow{\square} = 1 $ $ \overrightarrow{\square} = 0 $
SPRODUCTS_3	Hookah/ shisha/ narghile/ water	
SPRODUCTS_4	Other (Specify)	
SprodOTH	Other Specify	Text
SPRODUCTS_5	None of the above	$ \overrightarrow{\square} = 1 $ $ \overrightarrow{\square} = 0 $
SPRODUCTS_6	R	$ \overrightarrow{\square} = 1 $ $ \overrightarrow{\square} = 0 $
SPRODUCTS_7	DK	$\overrightarrow{\square} = 1$ $\square = 0$
	If User1=2 skip to Ysusfuture, If User1=1 AND any product is chosen skip to multiuse, If User1=1 AND no product is chosen skip to EverQuit.	
MultiUse	You mentioned you use both smokeless and smoked tobacco. Which do you use more often: (Skip to EverQuit)	<ol> <li>Smoked tobacco</li> <li>Smokeless tobacco</li> <li>do you use smoked and smokeless tobacco about the same</li> <li>R</li> <li>DV</li> </ol>
Ysusfuture	Do you think in the future you might try using smokeless tobacco?	<ul> <li>5 DK</li> <li>1 Definitely not</li> <li>2 Probably not</li> <li>3 Probably yes</li> <li>4 Definitely yes</li> <li>5 R</li> <li>6 DK</li> </ul>
Ysusfriend	If one of your best friends were to offer you smokeless tobacco, would you use it?	<ol> <li>Definitely not</li> <li>Probably not</li> <li>Probably yes</li> <li>Definitely yes</li> <li>R</li> <li>DK</li> </ol>
Ysusyear	At any time during the NEXT YEAR, do you think you will use smokeless tobacco? (Skip to YDEduc)	<ol> <li>Definitely not</li> <li>Probably not</li> <li>Probably yes</li> <li>Definitely yes</li> <li>R</li> <li>DK</li> </ol>
Everquit	Have you ever made a serious attempt to stop using all smokeless tobacco products?	1 Yes 2 No 3 R 4 DK
Plantoquit	Are you planning to quit using smokeless tobacco	<ol> <li>Within the next month</li> <li>Within the next 6 months</li> <li>Sometime in the future, beyond 6 months,</li> <li>or are you Not planning to quit?</li> <li>R</li> <li>DK</li> <li>Not at all</li> </ol>
Quimeann	smokeless tobacco permanently	2 A little

	in the next 6 months, how much	3 A lot
	do you think it would improve	4 R
	your health?	5 DK
	your meanin?	5 DK
	(If Youth skip to YDEduc,	
	If Adult skip to DEduc)	
Dadua	What is your highest level of	1 Illitorata
Deduc	what is your nighest level of	
	education?	2 Literate, no formal education
		3 Primary (1-5 years)
		4 Secondary (6-8 years)
		5 SSC (9-10 years)
		5 55C ()-10 years)
		6 HSC (11-12 years)
		7 Bachelor's degree (14-16 years)
		8 Master's degree (15-17 years)
		9 Above Master's degree (i.e. PhD)
		10 K
		11 DK
Income	In the last year, on average, how	1 less than 5,000 Taka
	much was the total monthly	2 5.000-9.999 Taka
	income of your household?	2 3,000 3,000 Take
	income of your nousenoid?	5 10,000–14,999 Taka
		4 15,000–19,999 Taka
	(Skip to Religion)	5 20,000+ Taka
		6 R
		7 DK
Vdadua	What was the last year of asheel	1 Illitarata
raeduc	what was the last year of school	
	that you completed?	2 Literate, no formal education
		3 Primary (1-5 years)
		4 Secondary (6-8 years)
		5  SSC - Vear 9
		CSC Veen 10
		0 SSC- Year 10
		7 HSC – Year II
		8 HSC – Year 12
		9 More than HSC
		10 R
		10 K 11 DV
D 1' '		
Religion	What is your Religion?	1 Muslim
		2 Hindu
	(If Youth skip to	3 Christian
	PREOverallOpinion	4 Buddhist
	If A dult skin to DE 622260)	5 Others
	II Adult skip to DE022500)	5 Others
		6 R
		7 DK
ReligionOTH	What is your Religion – Other	Text
8	Specify	
Occupation	What is your primary	1 Owner former
Occupation	what is your primary	
	occupation?	2 Tenant farmer
		3 Self-employed in non-farm
		agricultural activities (e.g., cattle,
		noultry raising fisheries plantation)
		4 Colf amployed in non-contraction
		4 Sen-employed in non-agricultural
		activities (e.g., rickshaw pulling,
		tailoring, hair cutting, restaurant,
		grocery shop tea stall)
		5 Farm wage laborer
		6 Non-tarm agricultural wage laborer

		7 Non-agricultural wage laborer (e.g.,
		industrial, construction, transport)
		8 Professional (e.g., physician,
		engineer, lawyer, teacher, researcher)
		9 Managerial, administrative or
		clerking service
		10 Student
		11 Unamployed
		12 Housewife/Housekeeper/Household
		12 Housewhe/Housekeepel/Household
		12 Other (manife)
		13 Other (specify)
		14 K 15 DV
DE(222) OTH		
DE62236001H	what is your primary occupation	lext
	– Other specify	
Preoverallopinion	For the next few questions, I'd	1 Good
	like to ask for your opinion about	2 Neither good nor bad
	smokeless tobacco products.	3 Bad
	There is no right or wrong	4 R
	answer —we are most interested	5 DK
	in your thoughts.	
	What is your overall opinion	
	about using smokeless tobacco?	
relativeriskA	I would like to know what you	1 Answer Rank
	think about the following	2 R
	smokeless tobacco products. In	3 DK
	your opinion please rank the	5 DK
	following smokeless tobacco	
	nonowing sinokeless tobacco	
	hameful	
	narmur.	
	(If ANS-1 alvin to DeletiveDisk	
	(II ANS-1 skip to Relative Kisk, If ANS-2 skip to proCA1)	
	II ANS-2 skip to preGAT	
	I would like to know what you	
	think about the following	
	smokeless tobacco products. In	
	your opinion, please rank the	
	following smokeless tobacco	
	products from most to least	
	harmful:	
relativeRisk_1_1	Most harmful	1 Zarda
		2 Paan with tobacco leaf
		3 Gul
		4 Sadapata
		5 Pan masala
		6 Nasshi
relativeRisk 1 2	Second most harmful	1 Zarda
		2 Paan with tobacco leaf
		3 Gul
		4 Sadapata
		5 Pan masala
		6 Nasshi
relativeRick 1 3	Third most harmful	1 Zarda
	i mu mosi nannu	$\begin{array}{c} 1  \text{Latua} \\ 2  \text{Derv}  \text{it to be a set less } \end{array}$

		3 Gul
		4 Sadapata
		5 Pan masala
		6 Nasshi
relativeRisk 1 4	Fourth most harmful	1 Zarda
	i ourtii most narmitu	2 Paan with tobacco leaf
		2 T dan with tobacco ical
		5 Gui 4 Sedemete
		4 Sadapata
		5 Pan masala
nalative Disla 1 5	Eich weget hermefel	1 Zanda
relativeRisk_1_5	Filth most narmful	1 Zalua 2 Deen with takened loof
		2 Paan with tobacco leaf
		4 Sadapata
		5 Pan masala
		6 Nasshi
relativeRisk_1_6	Sixth most harmful	1 Zarda
		2 Paan with tobacco leaf
		3 Gul
		4 Sadapata
		5 Pan masala
		6 Nasshi
Relrisequal	all are equally harmful	= 1
		$\Box = 0$
	In your opinion, please tell me	
	whether you agree, disagree, or	
	neither agree nor disagree with	
	each of the following statements.	
	In general	
preGA1	Bangladeshi society disapproves	1 Agree
	of smokeless tobacco use.	2 Disagree
		3 Neither agree nor disagree
		4 R
		5 DK
preGA2	Smokeless tobacco is highly	1 Agree
•	addictive.	2 Disagree
		3 Neither agree nor disagree
		4 R
		5 DK
preGA3	It is acceptable for females to use	1 Agree
	smokeless tobacco.	2 Disagree
		3 Neither agree nor disagree
		4 R
		5 DK
preGA4	Using smokeless tobacco sets a	1 Agree
*	bad example for children.	2 Disagree
	1	3 Neither agree nor disagree
		4 R
		5 DK
preGA5	Smokeless tobacco use is	1 Agree
presite	harmful to health	2 Disagree
	nummur to nearth.	3 Neither agree nor disagree
		JDK

currentHW	Thinking now about the packages for smokeless tobacco products (paste, sachets, packs, tins, bottles) As far as you know, do smokeless tobacco products in Bangladesh have health warnings on the packages?	1 Yes (including `some products`) 2 No 3 R 4 DK		
	(If USER1=1 skip to HWLastPack, If USER1=2 skip to HWOpinion1)			
HWlastpack	On your last package of smokeless tobacco, was there a health warning?	1 Yes 2 No 3 Can't remember 4 R 5 DK		
HWopinion1	Do you think that smokeless tobacco packages should have health warnings?	1 Yes 2 No 3 Maybe 4 R 5 DK		
HWopinion2	Do you think that the health warnings should include pictures?	1 Yes 2 No 3 Maybe 4 R 5 DK		
HWMtestkit	Please tell me whether this kitten <b>IS CUTE</b> One means that you do not find the kitten at all cute, and ten means that you find the kitten extremely cute.	1 Not at all 2 3 4 5 In The Middle 6 7 8 9 10 Extremely 11 Don't know/Refused		
Randgroup1	Randomly assigned group	<ol> <li>Text Only</li> <li>Symbolic Imagery</li> <li>Graphic Imagery</li> <li>Personalized Graphic and Testimonial</li> </ol>		
HW11_aattention	Please tell me whether this warning message:	1 Not at all 2 3		
	GRABS YOUR ATTENTION	4 5 In The Middle 6 7 8 9		

		10 Extremely
		11 DK/R
HW11 bbelieve	Please tell me whether this	1 Not at all
	warning message.	2
	warning message.	3
	IS DELIEVADI E	1
	IS DELIE VADLE	5
		J In The Middle
		0
		7
		8
		9
		10 Extremely
		11 DK/R
HW11_crelevant	Please tell me whether this	1 Not at all
	warning message:	2
		3
	IS IMPORTANT TO YOU	4
		5
		In The Middle
		6
		7
		8
		9
		10 Extremely
		11 DK/R
HW11 dsurprise	Please tell me whether this	1 Not at all
	warning message:	2
		3
	IS SURPRISING	4
		5
		In The Middle
		6
		7
		8
		9
		10 Extremely
		11 DK/R
HW11_efright	Please tell me whether this	1 Not at all
	warning message.	2
	warning message.	$\frac{2}{3}$
	IS FRIGHTENING	4
	15 FRIGHTENING	5
		J In The Middle
		7
		/ o
		0
		9 10 Extremely
		10 Extremely
HWI1_tdisgust	Please tell me whether this	1 Not at all
	warning message:	2
		3
	IS DISGUSTING	4
		5
		In The Middle

		6
		0
		7
		8
		9
		10 Extremely
		11 DK/R
HW11 gupploggapt	Dlagge tell me whether this	1 Not at all
H w H _gunpleasant	r lease ten me whether tins	
	warning message:	2
		3
	IS UNPLEASANT	4
		5
		In The Middle
		6
		0
		1
		8
		9
		10 Extremely
		11  DK/R
IIW/11 has norm	Diagon tall and such ath or this	1 Net et ell
Hw11_nconcern	Please tell me whether this	1 Not at all
	warning message would:	2
		3
	MAKE PEOPLE MORE	4
	CONCERNED ABOUT THE	5
	HEALTH RISK OF USING	In The Middle
	SMOVELESS TOPACCO	
	SMOKELESS TOBACCO	6
		7
		8
		9
		10 Extremely
		11  DK/R
IIW/11 immercent	Diagon tall and such ath or this	1 Net et ell
Hw11_lprevent	Please ten me whether this	
	warning message would:	2
		3
	HELP PREVENT YOUNG	4
	PEOPLE FROM STARTING	5
	TO USE SMOKELESS	In The Middle
	TOPACCO	
	IUBACCO	0
		8
		9
		10 Extremely
		11  DK/R
IIW/11 invit	Diagon tall and such ath or this	1 Net et ell
Hwiijquit	Please tell me whether this	
	warning message would:	2
		3
	MAKE SMOKELESS	4
	<b>TOBACCO USERS WANT</b>	5
	ΤΟ ΟΙΙΙΤ	In The Middle
		6
		0
		/
		8
		9
		10 Extremely
		11  DK/R
		11 $DK/K$

HW11_keffective	Overall, on a scale of 1 to 10,	1 Not at all
	how effective is this health	2
	warning?	5
		5
		In The Middle
		6
		7
		8
		9
		10 Extremely
Repeated from HW11 to HW51	HW11 refers to the Health Effect	11 DK/R
for each of the 5 health effects	1 image in the set	
using randomly assigned	HW21 refers to the Health Effect	
condition. Health affect groups	2 image in the set.	
were asked in random order.	HW31 refers to the Health Effect	
	3 image in the set.	
	HW41 refers to the Health Effect	
	4 image in the set.	
	HW51 refers to the Health Effect	
PostQuerellOminian	5 image in the set.	1 Cood
rostoveranopinion	about using smokeless tobacco?	2 Neither good nor had
	about using smokeless tobacco?	3 Bad
		4 R
		5 DK
	In your opinion, please tell me	
	whether you agree, disagree, or	
	neither agree nor disagree with	
	each of the following statements.	
De et Ce 1	In general	1. 4 mm
PostGal	of smokeless tobacco use	1 Agree
	of shlokeless tobacco use.	2 Disaglee 3 Neither agree nor disagree
		4 R
		5 DK
PostGA2	Smokeless tobacco is highly	1 Agree
	addictive.	2 Disagree
		3 Neither agree nor disagree
		4 R
D (042		5 DK
PostGA3	It is acceptable for females to use	1 Agree
	smokeless todacco.	<ul> <li>2 Disagree</li> <li>3 Neither agree nor disagree</li> </ul>
		4 R
		5 DK
PostGA4	Using smokeless tobacco sets a	1 Agree
	bad example for children.	2 Disagree
		3 Neither agree nor disagree
		4 R
		5 DK
PostGA5	Smokeless tobacco use is	1 Agree
	harmful to health.	2 Disagree
		5 Ineither agree nor disagree

	(If USER1=1 skip to worry,	4 R		
	If USER1=2 skip to RelRisk1)	5 DK		
Worry	How worried are you, if at all,	1 Not at all worried		
	that using smokeless tobacco	2 A little worried		
	WILL damage your health in the	3 very worried		
	future? Are you	4 R		
D alrials 1	Compared to amplying aigenstates	5 DK		
Keniski	do you think using smokeless	2 more harmful		
	tobacco is less harmful more	3 no difference		
	harmful or no different for	4 R		
	health?	5 DK		
Relrisk2	Compared to smoking bidis, do	1 less harmful		
	you think smokeless tobacco is	2 more harmful		
	less harmful, more harmful or no	3 no difference		
	different for health?	4 R		
		5 DK		
	Asked if Randgroup1=1			
	Health Warning Label Recall			
	Experimental condition 1: Text			
	only			
HwLrecla_1	text: tobacco causes oral cancer	[v] = 1		
HWI rools 2	other (incorrect): place gracify	$\Box = 0$		
hwheela_2	other (incorrect). please specify			
HWI rec1aOTH	Text Specify	$\Box = 0$ Text		
HWL rec1b 1	text: 'tobacco causes mouth	$\nabla = 1$		
	disease'	$\Box = 0$		
HWLrec1b 2	other (incorrect): please specify			
—		$\Box = 0$		
HWLrec1bOTH	Text Specify	Text		
HWLrec1c_1	text: 'tobacco causes heart	$\boxed{\mathbf{V}} = 1$		
	disease'	$\Box = 0$		
HWLrec1c_2	other (incorrect): please specify	$\boxed{\checkmark} = 1$		
		$\Box = 0$		
HWLrec1cOTH	Text Specify	Text		
HWLrec1d_1	text: 'tobacco is highly addictive'	$ \underline{\vee}  = 1$		
		$\Box = 0$		
HWLrec1d_2	other (incorrect): please specify			
	Tout Specify	$\Box = 0$		
HWL reg1a 1	text Specify	$\overline{12}$		
hwLiecie_i	Bangladeshis every day'			
HWI rec1e_2	other (incorrect): please specify	$\nabla = 1$		
	other (meoneet), please speeny	$\Box = 0$		
HWLrec1eOTH	Text Specify	Text		
HWLrec1f 1	tobacco kills	$\overline{\nabla} = 1$		
		$\Box = 0$		
HWLrec1f 2	Refused	$\boxed{\mathbf{V}} = 1$		
_		$\Box = 0$		
	Asked if Randgroup1=2			
	Health Warning Label Recall			
	<b>Experimental condition 2:</b>			
	Symbolic imagery			
HWLrec2a 1	text: 'tobacco causes oral cancer'	$\overrightarrow{v} = 1$		

		$\Box = 0$	
HWLrec2a 2	picture: scorpion/bug (correct)		
HWLrec2a 3	picture: other (incorrect): please		
_	specify	$\Box = 0$	
HWLrec2aOTH	Text Specify	Text	
HWLrec2b_1	text: 'tobacco causes mouth	= 1	
_	disease'	$\Box = 0$	
HWLrec2b_2	picture: snake/cobra (correct)	$\boxed{\checkmark} = 1$	
		$\Box = 0$	
HWLrec2b_3	picture: other (incorrect): please	= 1	
	specify	$\Box = 0$	
HWLrec2bOTH	Text Specify	Text	
HWLrec2c_1	text: 'tobacco causes heart	= 1	
	disease'	$\Box = 0$	
HWLrec2c_2	picture: yellow triangle (correct)		
		$\Box = 0$	
HWLrec2c_3	picture: exclamation mark	$\overline{\checkmark} = 1$	
	(correct)	$\Box = 0$	
HWLrec2c_4	picture: caution sign (correct)	$ \underline{\vee}  = 1$	
HWLrec2c_5	picture: other (incorrect): please		
	specify	$\Box = 0$	
HWLrec2cOTH	Text Specify	Text	
HWLrec2d_1	text: 'tobacco is highly addictive'		
		$\Box = 0$	
HwLrec2d_2	picture: red circle		
	nistance la classich al (a sma at)	$\Box = 0$	
HwLfec2d_3	picture: no symbol (correct)	$\mathbf{V} = \mathbf{I}$	
HWI rec2d 4	nicture: other (incorrect): please	$\nabla = 1$	
II W LIEC2d_4	specify	$\Box = 0$	
HWI rec2dOTH	Text Specify	Text	
HWLrec2e 1	text: 'tobacco kills 156	$\overrightarrow{V} = 1$	
	Bangladeshis every day'	$\Box = 0$	
HWLrec2e_2	nicture: skull and/or crossbones	$\overrightarrow{V} = 1$	
	(correct)	$\Box = 0$	
HWLrec2e 3	picture: poison (correct)	$\nabla = 1$	
_		$\Box = 0$	
HWLrec2e 4	picture: other (incorrect): please		
_	specify	$\Box = 0$	
HWLrec2eOTH	Text Specify	Text	
HWLrec2f_1	tobacco kills	$\mathbf{\nabla} = 1$	
		$\Box = 0$	
HWLrec2f_2	Refused	$\boxed{\checkmark} = 1$	
		$\Box = 0$	
	Asked if Randgroup1=3		
	Health Warning Label Recall		
	Experimental condition 3:		
	Graphic health effect		
HWLrec3a_1	text: 'tobacco causes oral cancer'	$\boxed{\checkmark} = 1$	
HWLrec3a_2	picture: tumour on side of face	$ \underline{\vee}  = 1$	
	(correct)	$\Box = 0$	

HWLrec3a_3	picture: other (incorrect): please	$\checkmark = 1$
	specify	$\Box = 0$
HWLrec3aOTH	Text Specify	Text
HWLrec3b_1	text: 'tobacco causes mouth	$\mathbf{\nabla} = 1$
	disease'	$\Box = 0$
HWLrec3b_2	picture: diseased/gross teeth	$\nabla = 1$
	(correct)	$\Box = 0$
HWLrec3b_3	picture: other (incorrect): please	$\overline{\checkmark} = 1$
	specify	$\Box = 0$
HWLrec3bOTH	Text Specify	Text
HWLrec3c_1	text: 'tobacco causes heart	$\overline{\checkmark} = 1$
	disease'	$\Box = 0$
HWLrec3c_2	picture: open chest (correct)	$\nabla = 1$
		$\Box = 0$
HWLrec3c_3	picture: surgery (correct)	$\mathbf{\nabla} = 1$
		$\Box = 0$
HWLrec3c_4	picture: other (incorrect): please	$\boxed{\checkmark} = 1$
	specify	$\Box = 0$
HWLrec3cOTH	Text Specify	Text
HWLrec3d_1	text: 'tobacco is highly addictive'	$\boxed{\checkmark} = 1$
		$\Box = 0$
HWLrec3d_2	picture: hole in throat (correct)	= 1
		$\Box = 0$
HWLrec3d_3	picture: tumour on throat	= 1
	(correct)	$\Box = 0$
HWLrec3d_4	picture: other (incorrect): please	$\mathbf{v} = 1$
	specify	$\Box = 0$
HWLrec3dOTH	Text Specify	Text
HWLrec3e_1	text: 'tobacco kills 156	$\mathbf{V} = 1$
	Bangladeshis every day'	$\Box = 0$
HWLrec3e_2	picture: dead body under white	
	sheet (correct)	
HwLrec3e_3	picture: other (incorrect): please	$\mathbf{v} = 1$
	Taut Specify	
HwLrecseOTH	teheese hills	
HwLlecs1_1		$\square = 0$
HWI rooff 2	Defined	$\Box = 0$
HwLlec31_2	Keluseu	$\square = 1$
	Askad if Dandgroun1-4	
	Health Warning Label Recall	
	Experimental condition 4.	
	Testimonial	
HWL rec4a_1	text: 'tobacco causes oral cancer'	$ \nabla  = 1$
		$\Box = 0$
HWLrec4a 2	picture: man with oral cancer	$\overrightarrow{\nabla} = 1$
	(correct)	$\Box = 0$
HWLrec4a 3	picture: missing iaw (correct)	$\overrightarrow{v} = 1$
		$\Box = 0$
HWLrec4a 4	picture: other (incorrect): please	$\overline{\mathbf{v}} = 1$
	specify	$\Box = 0$
HWLrec4a 5	testimonial: "I lost my jaw to oral	$\overrightarrow{v} = 1$
_	cancer". Abdur, age 38, died two	$\Box = 0$
	weeks after this photo was taken.	
HWLrec4aOTH	Text Specify	Text

HWLrec4b_1	text: 'tobacco causes mouth	$ \overrightarrow{\square} = 1 $
HWLrec4b_2	picture: woman with mouth	$\overrightarrow{\mathbf{v}} = 1$
	disease/tumour (correct)	
HWLrec4b_3	picture: woman with open mouth (correct)	$\overrightarrow{\square} = 1$ $\overrightarrow{\square} = 0$
HWL rec4b 4	nicture: other (incorrect): please	$\overrightarrow{V} = 1$
	specify	$\Box = 0$
HWLrec4b 5	testimonial: "Because of using	
_	tobacco, I have this mouth	$\Box = 0$
	tumour that cannot be removed".	
	Amena, age 53.	
HWLrec4bOTH	Text Specify	Text
HWLrec4c_1	text: 'tobacco causes heart	$\boxed{\checkmark} = 1$
	disease'	$\Box = 0$
HWLrec4c_2	picture: man lying	$\mathbf{\nabla} = 1$
	down/unconscious (correct)	$\Box = 0$
HWLrec4c_3	picture: CPR administered on	$\boxed{\mathbf{V}} = 1$
	man (correct)	
HWLrec4c_4	picture: other (incorrect): please	
	specify	
HwLfec4c_5	heart attack anusad by tabaaco	$\nabla = 1$
	use. It could be my last " Moti	
	age 44.	
HWLrec4cOTH	Text Specify	Text
HWLrec4d 1	text: 'tobacco is highly addictive'	
_		$\Box = 0$
HWLrec4d_2	picture: man with hole in throat	$\mathbf{\nabla} = 1$
	(correct)	$\Box = 0$
HWLrec4d_3	picture: other (incorrect): please	$\square = 1$ $\square = 0$
HWI rec4d 4	testimonial: "I thought I could	$\nabla = 1$
	quit tobacco any time I wanted I	$\Box = 0$
	was wrong." Golam, age 45.	
HWLrec4dOTH	Text Specify	Text
HWLrec4e 1	text: 'tobacco kills 156	
_	Bangladeshis every day'	$\Box = 0$
HWLrec4e_2	picture: woman mourning	$\mathbf{\nabla} = 1$
	(correct)	$\Box = 0$
HWLrec4e_3	picture: woman in white clothing	
	(correct)	$\Box = 0$
HWLrec4e_4	picture: body under sheet	$\mathbf{V} = 1$
	(correct)	$\Box = 0$
HWLrec4e_5	picture: other (incorrect): please	
HWI reade 6	testimonial: "Tobação usa killad	$\Box = 0$
	my husband I feel so alone'	$\Box = 1$
	Momtaz age 36	
HWLrec4eOTH	Text Specify	Text
HWLrec4f 1	tobacco kills	$\overrightarrow{\nabla} = 1$
		$\square = 0$
HWLrec4f 2	Refused	
_		$\Box = 0$

	I am going to read you a list of health effects and diseases that may or may not be caused by using smokeless tobacco. Based on what you know or believe, does smokeless tobacco use cause	
HBoral	Oral cancer?	1 Yes 2 No 3 Don't Know 4 R
HBmouth	Mouth disease?	1 Yes 2 No 3 Don't Know 4 R
HBheart	Heart disease?	1 Yes 2 No 3 Don't Know 4 R
HBdeath	Death?	1 Yes 2 No 3 Don't Know 4 R
Randgroup2	Randomly Assigned Health Affect for Ranking Question	<ol> <li>oral cancer</li> <li>mouth disease</li> <li>heart disease</li> <li>addiction</li> <li>death</li> </ol>
HWranktask1_1_1	Position on screen that was picked first	1 Top left 2 Top right 3 Bottom left 4 Bottom right
HWranktask1_1_2	Position on screen that was picked second	1 Top left 2 Top right 3 Bottom left 4 Bottom right
HWranktask1_1_3	Position on screen that was picked third	<ol> <li>Top left</li> <li>Top right</li> <li>Bottom left</li> <li>Bottom right</li> </ol>
HWranktask1_1_4	Position on screen that was picked fourth	<ol> <li>Top left</li> <li>Top right</li> <li>Bottom left</li> <li>Bottom right</li> </ol>
LR1_5DKREF	Don't know or refuse the rank question	1 R 2 DK
RankHW1	image/label number shown in position 1 (top left)	1 Image I1 2 Image I2 3 Image I3 4 Image I4
RankHW2	image/label number shown in position 2 (top right)	1 Image I1 2 Image I2 3 Image I3 4 Image I4

RankHW3	image/label number shown in	1 Image I1
	position 3 (bottom left)	2 Image 12
		3 Image 13
DembIW/4	in a se /leb sl much se sh sermi in	
KankH w 4	image/label number shown in	1 Image 11
	position 4 (bottom right)	2 Image 12
		3 Image 13
		4 Image 14
HWranktask1_actual	Actual image/label ranked first	1 Image 11
		2 Image 12
		3 Image 13
		4 Image 14
HWranktask2_actual	Actual image/label ranked	1 Image I1
	second	2 Image I2
		3 Image I3
		4 Image I4
HWranktask3_actual	Actual image/label ranked third	1 Image I1
		2 Image I2
		3 Image I3
		4 Image I4
HWranktask4_actual	Actual image/label ranked fourth	1 Image I1
		2 Image I2
		3 Image I3
		4 Image I4
HWfirst label rank	Rank of the image/label 1	Number (1-4)
HWsecond_label_rank	Rank of the image/label 2	Number (1-4)
HWthird_label_rank	Rank of the image/label 3	Number (1-4)
HWfourth_label_rank	Rank of the image/label 4	Number (1-4)
comments	Open ended comments field	text
XEVERUSE	Number of products chosen in Everuse	Number
XCURRENTUSE	Number of products chosen in Currentuse	Number
XSPRODUCTS	Number of products chosen in	Number
	Sproducts	
	G#p# - G# goes from G1-G4 for	
	each of the 4 groups, p# goes	
	from p1-p5 for each image in the	
	group	
G#p#aattention	HW Section questions organized	1 Not at all
G#p#bbelieve	by group	2
G#p#crelevant		3
G#p#dsurprise		4
G#p#efright		5
G#p#fdisgust		In The Middle
G#p#gunpleasant		6
G#p#hconcern		7
G#p#iprevent		8
G#p#jquit		9
G#p#keffective		10 Extremely
		11 Don't know/Refused

BANGLADESH	EXPERIMENTAL CONDITIONS					
Adults	OVERALL	Text	Symbolic	Graphic	Testimonial	
	n=569	n=143	n=140	n=142	n=144	Test statistic, p-value
<b>Sex</b> % ( <i>n</i> )						
Female	45.9 (261)	45.5 (65)	45.0 (63)	45.1 (64)	47.9 (69)	$X^2=0.33, p=.095$
Male	54.1 (308)	54.5 (78)	55.0 (77)	54.9 (78)	52.1 (75)	
Age Mean (SD)	38.6 (SD 12.5)	39.0 (SD 13.5)	38.7 (11.8)	38.9 (12.2)	37.6 (12.4)	F=0.37, p=0.77
<b>Religion</b> % ( <i>n</i> )						_
Muslim	98.1 (558)	99.3 (142)	97.8 (136)	100.0 (141)	96.5 (139)	$X^2 = 8.00, p = 0.24$
Hindu	1.6 (9)	0.7 (1)	2.2 (3)		3.5 (5)	
Smokeless tobacco use % (n)						
Daily user						_
Non-daily user	94.4 (537)	93.0 (133)	94.3 (132)	96.5 (137)	93.8 (135)	$X^2 = 1.80, p = 0.62$
	5.6 (32)	7.0 (10)	5.7 (8)	3.5 (5)	6.3 (9)	
Mixed use $\%(n)$	24.8 (141)	23.8 (34)	22.9 (32)	29.6 (42)	22.9 (33)	$X^2 = 2.38$ n=0.50
(Smoked & smokeless)	24.0 (141)	25.8 (54)	22.9 (32)	29.0 (42)	22.9 (33)	X 2.56, p 0.50
Age of initiation Mean (SD)	20.1 (SD 6.4)	20.8 (SD 7.1)	19.1 (SD 5.6)	19.9 (SD 7.2)	20.3 (SD 5.5)	F=1.70, <i>p</i> =0.17
Quit intentions % (n)						
Plans to quit	50.1 (284)	$50.0(71)^{a}$	59.3 (83) <sup>b</sup>	$48.9(69)^{a}$	57.6 (83) <sup>b</sup>	$X^2 - 825$ n = 0.04
No Plans to quit	49.9 (283)	50.0 (71)	40.7 (57)	51.1 (72)	42.4 (61)	A -0.23, p-0.04
<b>Income</b> % ( <i>n</i> )						
Low	72.8 (412)	70.4 (100)	72.9 (102)	69.7 (99)	78.2 (111)	
Moderate	18.0 (102)	19.0 (27)	17.9 (25)	21.8 (31)	13.4 (19)	$X^2 = 5.91, p = 0.75$
High	3.0 (17)	2.8 (4)	4.3 (6)	2.8 (4)	2.1 (3)	
Not stated	6.2 (35)	7.7 (11)	5.0 (7)	5.6 (8)	6.3 (9)	
Education % (n)						
Low	31.5 (179)	28.0 (40)	32.9 (46)	30.3 (43)	35.0 (50)	$X^2 - 2 03 n - 0.80$
Moderate	55.6 (316)	60.1 (86)	55.0 (77)	54.2 (77)	53.1 (76)	$\Lambda = 5.05, p = 0.00$
High	12.9 (73)	11.9 (17)	12.1 (17)	15.5 (22)	11.9 (17)	

<b>APPENDIX E.</b> Sample characteristics by experimental	condition
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Different letters denote significant differences between experimental conditions, where p < 0.05.

BANGLADESH		EXPERIMENTAL CONDITIONS									
Youth	OVERALL	Text	Symbolic	Graphic	Testimonial						
	n=512	n=130	n=118	n=134	n=130	Test statistic, p-value					
<b>Sex</b> % ( <i>n</i> )											
Female	49.6 (254)	51.5 (67)	46.6 (55)	53.7 (72)	46.2 (60)	$X^2=2.15, p=0.54$					
Male	50.4 (258)	48.5 (63)	53.4 (63)	46.3 (62)	53.8 (70)						
Age Mean (SD)	17.1 (SD 0.8)	17.1 (SD 0.8)	17.2 (SD 0.8)	17.2 (SD 0.7)	17.1 (SD 0.8)	F=1.10, <i>p</i> =0.35					
<b>Religion</b> % ( <i>n</i> )											
Muslim	98.4 (504)	97.7 (127)	98.3 (116)	99.3 (133)	98.5 (128)	$X^2 = 2.81, p = 0.42$					
Hindu	1.4 (7)	2.3 (3)	1.7 (2)	0.7 (1)	1.5 (2)	-					
Smokeless tobacco use % ( <i>n</i> )											
Daily user	14.5 (74)	13.8 (18)	11.0 (13)	14.2 (19)	18.5 (24)						
Non- daily user	11.7 (60)	13.8 (18)	9.3 (11)	12.7 (17)	10.8 (14)	$X^2=9.72, p=0.37$					
Susceptible non-user	15.4 (79)	10.8 (14)	20.3 (24)	18.7 (25)	12.3 (16)						
Non-susceptible non-user	58.4 (299)	61.5 (80)	59.3 (70)	54.5 (73)	58.5 (76)						
Mixed use <sup>a</sup> % $(n)$	21 ( (20)	16.7 (6)	25.0 (6)	19.4 (7)	26.3 (10)	$x^2$ 1.00 0.72					
(Smoked & smokeless)	21.6 (29)	<i>n</i> =36	<i>n</i> =24	<i>n</i> =36	n=38	X = 1.28, p = 0.73					
Age of initiation <sup>a</sup> Mean (SD)	13.2 (SD 3.1)	13.3 (SD 2.4)	12.6 (SD 3.7)	12.9 (SD 2.9)	13.7 (SD 3.4)	E = 0.70 = -0.50					
		<i>n</i> =38	<i>n</i> =27	n=40	n=40	F=0.79, p=0.50					
<b>Ouit intentions</b> <sup>a</sup> % ( $n$ )											
Plans to quit	49.6 (66)	52.8 (19)	54.2 (13)	52.8 (19)	40.5 (15)	$x^2$ 171 0(4					
No plans to quit	50.4 (67)	47.2 (17)	45.8 (11	47.2 (17)	59.5 (22)	X = 1./1, p = 0.64					
1 1		<i>n</i> =36	<i>n</i> =24	n=36	<i>n</i> = <i>37</i>						
Susceptible <sup>bc</sup> % ( $n$ )	20.8 (79)	14.9 (14)	25.5 (24)	9.1 (25)	17.4 (16)	$X^2=5.22, p=0.16$					
F and the second s		<i>n</i> =94	<i>n</i> =94	<i>n</i> =98	<i>n</i> =92	-					
Education level % (n)											
Low	36.3 (185)	38.8 (50)	32.5 (38)	32.8 (44)	41.1 (53)	$V^2 - 6.05 = n - 0.42$					
Moderate	47.2 (240)	48.1 (62)	47.0 (55)	52.2 (70)	41.1 (53)	л =0.0 <i>3</i> , <i>p</i> =0.42					
High	16.5 (84)	13.2 (17)	20.5 (24)	14.9 (20)	17.8 (23)						

<b>APPENDIX E continued.</b> Sample characteristics by experimental condition
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<sup>a</sup>Among users (n=134); <sup>b</sup>Among non-users (n=378)

<sup>c</sup>Where susceptible = absence of firm commitment not to use smokeless tobacco (i.e., anything other than "definitely not" on all 3 susceptibility measures)

INDIA	EXPERIMENTAL CONDITIONS									
Adults	OVERALL	Text	Symbolic	Graphic	Testimonial					
	n=502	n=125	n=127	n=124	n=126	Test statistic, p-value				
Language % ( <i>n</i> )										
English	1.6 (8)	2.4 (3)	0.8 (1)	0.8 (1)	2.4 (3)					
Hindi	46.8 (235)	48.0 (60)	51.2 (65)	44.4 (55)	43.7 (55)	$X^2=3.78, p=0.71$				
Marathi	51.6 (259)	49.6 (62)	48.0 (61)	54.8 (68)	54.0 (68)					
<b>Sex</b> % ( <i>n</i> )										
Female	49.8 (250)	52.0 (65)	48.8 (62)	48.4 (60)	50.0 (63)	$X^2=0.39, p=0.94$				
Male	50.2 (252)	48.0 (60)	51.2 (65)	51.6 (64)	50.0 (63)					
Age Mean (SD)	35.98 (9.2)	35.2 (SD 9.2)	36.6 (SD 9.3)	35.8 (SD 9.4)	36.2 (SD 8.9)	F=0.55, <i>p</i> =0.65				
<b>Religion</b> % ( <i>n</i> )										
Hindu	62.7 (315)	64.8 (81)	58.3 (74)	68.5 (85)	59.5 (75)					
Muslim	17.7 (89)	17.6 (22)	21.3 (27)	14.5 (18)	17.5 (22)					
Christian	0.2 (1)		0.8 (1)			$X^2$ 15 44 0 42				
Sikh	0.2 (1)	0.8 (1)				X = 15.44, p = 0.42				
Buddhist	17.1 (86)	12.8 (16)	18.1 (23)	16.1 (20)	21.4 (27)					
Jain	2.0 (10)	4.0 (5)	1.6 (2)	0.8 (1)	1.6 (2)					
Smokeless tobacco use % (n)										
Daily user	93.6 (470)	92.0 (115)	93.7 (119)	94.4 (117)	94.4 (119)	$X^2=0.81, p=0.85$				
Non-daily user	6.4 (32)	8.0 (10)	6.3 (8)	5.6 (7)	5.6 (7)					
Mixed use $\%$ ( <i>n</i> )	1(0(05)	20.0 (25)	17.2 (22)	10.5 (12)	10.0 (25)	$X^2 = 5.27$ 0.15				
(Smoked & smokeless)	10.9 (85)	20.0 (25)	17.3 (22)	10.5 (15)	19.8 (25)	X = 5.27, p = 0.15				
Age of initiation Mean (SD)	19.4 (SD 4.6)	19.6 (SD 4.1)	19.3 (SD 5.3)	19.2 (SD 4.5)	19.4 (4.5)	F=0.15, p=0.93				
Quit Intentions % ( <i>n</i> )										
Plans to quit	69.7 (350)	68.8 (86)	70.9 (90)	69.4 (86)	69.8 (88)	$V^2 = 0.14$ m = 0.00				
No plans to quit	30.3 (152)	31.2 (39)	29.1 (37)	30.6 (38)	30.2 (38)	X =0.14, <i>p</i> =0.99				
Income level % ( <i>n</i> )										
Low	38.5 (193)	42.4 (53)	37.0 (47)	36.3 (45)	38.4 (48)					
Middle	34.9 (175)	29.6 (37)	37.8 (48)	41.1 (51)	31.2 (39)	$X^2 = 11.39, p = 0.25$				
High	10.4 (52)	12.8 (16)	6.3 (8)	7.3 (9)	15.2 (19)					
Not stated	16.2 (81)	15.2 (19)	18.9 (24)	15.3 (19)	15.2 (19)					
Education level % (n)										
Low	3.8 (19)	2.4 (3)	4.7 (6)	5.6 (7)	2.4 (3)	$V^2$ -5 20 n=0.51				
Moderate	44.4 (223)	44.8 (56)	48.8 (62)	38.7 (48)	45.2 (57)	л <i>-3.29</i> , <i>p-</i> 0.31				
High	51.8 (260)	52.8 (66)	46.5 (59)	55.6 (69)	52.4 (66)					

APPENDIX E continued. Sample characteristics by experimental condition

INDIA		EXPERIMENTAL CONDITIONS								
Youth	OVERALL	Text	Symbolic	Graphic	Testimonial					
	n=500	n=128	n=124	n=123	n=125	Test statistic, p-value				
Language % ( <i>n</i> )										
English	5.0 (25)	7.0 (9)	6.5 (8)	4.1 (5)	2.4 (3)					
Hindi	44.2 (221)	45.3 (58)	41.1 (51)	45.5 (56)	44.8 (56)	$X^2 = 4.26, p = 0.64$				
Marathi	50.8 (254)	47.7 (61)	52.4 (65)	50.4 (62)	52.8 (66)					
<b>Sex</b> % ( <i>n</i> )										
Female	50.0 (250)	55.5 (71)	45.2 (56)	45.5 (56)	53.6 (67)	$X^2 = 4.32, p = 0.23$				
Male	50.0 (250)	44.5 (57)	54.8 (68)	54.5 (67)	46.4 (58)					
Age Mean (SD)	17.49 (0.66)	17.5 (SD 0.7)	17.4 (SD 0.7)	17.5 (SD 0.6)	17.5 (SD 0.7)	F=0.62, <i>p</i> =0.60				
<b>Religion</b> % ( <i>n</i> )										
Hindu	65.0 (325)	60.1 (77)	66.1 (82)	64.2 (79)	69.6 (87)					
Muslim	14.0 (70)	16.4 (21)	14.5 (18)	10.6 (13)	14.4 (18)					
Christian	4.4 (22)	3.9 (5)	4.0 (5)	4.1 (5)	5.6 (7)					
Sikh	1.0 (5)	0.8 (1)		2.4 (3)	0.8 (1)	$X^2 = 20.79, p = 0.29$				
Buddhist	12.8 (64)	14.8 (19)	9.7 (12)	17.9 (22)	8.8 (11)					
Jain	2.6 (13)	3.9 (5)	4.8 (6)	0.8 (1)	0.8 (1)					
Parsi	0.2 (1)		0.8 (1)							
Smokeless tobacco use % (n)										
Daily user	29.0 (145)	31.1 (40)	29.0 (36)	30.9 (38)	24.8 (31)					
Non- daily user	5.8 (29)	4.7 (6)	4.0 (5)	8.9 (11)	5.6 (7)	$X^2 = 6.02, p = 0.74$				
Susceptible non-user	21.2 (106)	20.3 (26)	19.4 (24)	21.1 (26)	24.0 (30)					
Non-susceptible non-user	44.0 (220)	43.8 (56)	47.6 (59)	39.0 (48)	45.6 (57)					
Age of initiation <sup>a</sup> Mean (SD)	14.4 (2.2)	14.2 (2.0) <i>n</i> =46	14.7 (2.1) <i>n</i> =41	14.4 (2.4) <i>n=49</i>	14.1 (2.3) <i>n</i> =38	F=0.65, <i>p</i> =0.58				
Mixed use <sup>a</sup> % $(n)$	10 4 (22)	19.6 (9) <i>n</i> =46	26.8 (11) <i>n</i> =41	12.2 (6) <i>n</i> =49	15.8 (6) <i>n=38</i>	$X^{2}$ 2.40 0.22				
(Smoked & smokeless)	18.4 (32)					X = 3.40, p = 0.33				
Quit intentions <sup>a</sup> % $(n)$										
Plans to quit	81.6 (142)	78.3 (36)	82.9 (34)	83.7 (41)	81.6 (31)					
No plans to quit	18.4 (32)	21.3(10) n=46	17.1(7) n=41	16.3(8) n=49	18.4(7) n=38	$X^2=0.53, p=0.91$				
<b>Susceptible</b> <sup>bc</sup> % ( $n$ )	32.5 (106)	31.7 (26) <i>n</i> =82	28.9 (24) <i>n</i> =83	35.1 (26) <i>n</i> =74	34.5 (30) <i>n</i> =87	$X^2=0.90, p=0.826$				
Education level % ( <i>n</i> )										
Low	20.0 (100)	26.0 (33)	16.9 (21)	19.5 (24)	17.6 (22)	x <sup>2</sup> = 00 0.00				
Moderate	12.8 (64)	13.4 (17)	12.9 (16)	8.9 (11)	16.0 (20)	X = 1.02, p = 0.32				
High	67.1 (335)	60.6 (77)	70.2 (87)	71.5 (88)	66.4 (83)					

APPENDIX E continued. Sample characteristics by experimental condition

<sup>a</sup>Among users (n=174); <sup>b</sup>Among non-users (n=326); <sup>c</sup>Where susceptible = absence of firm commitment not to use smokeless tobacco (i.e., anything other than

"definitely not" on all 3 susceptibility measures)

## APPENDIX F. The statistical diagram for mediation

Model 1. Text-only vs. Pictorial health warnings Adults (n=1,053) Youth (n=988)





Model 2. Personal testimonial (ref.) vs. Graphic health effect Adults (n=524) Youth (n=504)



## APPENDIX F continued. The statistical diagram for mediation

**Model 3.** Symbolic (ref.) vs. Personal testimonial **Adults (n=529)** Youth (n=492)



**Model 4.** Symbolic (ref.) vs. Graphic health effect **Adults (n=527)** Youth (n=490)



	TEXT							SYMBOLIC								
	INDIA					BANGL	ADESH		INDIA				BANGLADESH			
	Adu	ılts	Youth		Adults		Youth		Adults		Youth		Adults		Youth	
	Before	After	Before	After	Before	After	Before	After	Before	After	Before	After	Before	After	Before	After
Harmful to health	56.8	67.2	68.5	71.9	80.4	93.0	83.6	93.1	60.6	68.5	73.4	75.0	85.7	96.4	86.3	91.5
Society disapproves	73.6	87.2	87.5	87.5	79.0	93.0	88.5	98.5	77.2	86.6	82.3	91.9	87.1	92.1	93.2	95.8
Bad example for children	58.1	64.8	67.2	71.1	76.2	83.2	71.3	79.2	62.2	68.5	75.8	66.9	77.9	87.9	74.4	83.1
<i>Not acceptable</i> <i>for females</i>	49.2	64.0	65.6	68.0	54.5	60.1	54.6	62.3	58.3	66.9	58.5	74.2	54.3	57.1	63.2	62.7
Addictive	58.4	68.0	64.8	67.2	95.8	93.7	96.9	98.5	68.5	66.9	61.8	68.5	95.0	99.3	98.3	99.2
				TESTIM	IONIAL				GRAPHIC							
Harmful to health	59.5	73.8	76.0	72.8	63.2	81.9	84.5	94.6	67.5	72.4	77.0	72.1	79.6	94.3	83.6	94.8
Society disapproves	76.2	86.5	89.6	92.0	71.5	94.4	82.9	94.6	80.6	89.4	84.6	93.5	84.5	95.7	86.6	97.0
Bad example for children	59.5	69.0	77.6	71.2	58.3	77.1	71.3	80.0	65.9	68.3	67.2	72.4	77.5	87.9	67.2	79.1
Not acceptable for females	54.8	59.5	66.9	69.6	45.8	63.2	53.5	57.7	57.7	68.3	70.7	67.2	53.5	59.6	55.2	60.4
Addictive	57.6	71.4	72.0	74.4	95.8	93.1	96.9	99.2	67.7	68.3	66.7	69.7	96.5	95.7	97.0	97.8

**APPENDIX G.** Level of agreement (%) with five attitudes and beliefs about smokeless tobacco, before and after presentation of health warnings, by experimental condition, country, and age group (n=2,083)

**APPENDIX H.** Level of agreement (%) with "overall opinion" about smokeless tobacco, before and after presentation of health warnings, by experimental condition, country, and age group (n=2,083)

	TEXT							SYMBOLIC								
		INI	DIA			BANGL	ADESH		INDIA BANGLADESH							
	Adu	ılts	You	ıth	Adults Youth			Adults Youth			Adults You		ıth			
	Before	After	Before	After	Before	After	Before	After	Before	After	Before	After	Before	After	Before	After
Good	8.0	4.8	0.8	1.6	6.3	0.0	1.6	0.8	8.7	1.6	5.6	0.8	7.1	2.9	0.9	1.7
Neither good nor bad	45.6	30.4	22.7	23.4	31.0	21.7	19.7	11.5	33.1	31.5	26.6	20.2	23.6	20.7	12.0	16.9
Bad	46.4	64.8	76.6	75.0	62.7	78.3	78.7	87.7	58.3	66.9	67.7	79.0	69.3	76.4	87.2	81.4
				TESTIN	IONIAL				GRAPHIC							
		INI	DIA			BANGL	ADESH		INDIA BANGLADESH							
	Adu	ılts	You	ıth	Adu	Adults Youth			Adults Youth			Adults Youth			ıth	
	Before	After	Before	After	Before	After	Before	After	Before	After	Before	After	Before	After	Before	After
Good	11.1	3.2	4.8	1.6	3.5	0.7	2.3	0.0	6.5	1.6	3.3	0.8	3.5	2.1	3.7	0.7
Neither good nor bad	33.3	27.0	18.4	18.4	31.9	29.2	19.2	12.3	37.9	28.2	31.7	22.8	22.5	12.7	14.2	8.2
Bad	55.6	69.8	76.8	80.0	64.6	70.1	77.7	87.7	55.6	70.2	64.2	76.4	73.9	85.2	81.3	91.0

		TI	EXT	SYMBOLIC						
	IND	IA	BANGLA	ADESH	INI	DIA	BANGL	ADESH		
	Adults	Youth	Adults	Youth	Adults Youth		Adults	Youth		
Good	-3.2	+0.8	-6.3**	-0.8	-7.1*	-4.8*	-4.2	+0.8		
Neither good nor bad	-15.2**	+0.7	-9.3*	-8.2	-1.6	-6.4	-2.9	+4.9		
Bad	+18.4**	-1.6	+15.6***	+9.0*	+8.6	+11.3*	+7.1	-5.8		
		TESTI	MONIAL			GRAP	HIC			
	IND	IA	BANGLA	ADESH	INI	DIA	BANGLADESH			
	Adults	Youth	Adults	Youth	Adults	Youth	Adults	Youth		
Good	-7.9*	-3.2	-2.8	-2.3	-4.9	-2.5	-1.4	-3.0		
Neither good nor bad	-6.3	0.0	-2.7	-6.9	-9.7	-8.9	-9.8*	-6.0		
Bad	+14.2**	+3.2	+5.5	+10.0*	+14.6**	+12.2*	+11.3*	+9.7*		

**APPENDIX I.** Percent change difference in agreement with "overall opinion" of smokeless tobacco, before and after presentation of health warnings, by experimental condition, country and age group (n=2,083)

Numbers in the table represent the difference in the percentages of respondents agreeing with "overall opinions" about smokeless tobacco before and after viewing health warnings. McNemar Chi-Square tests were conducted to assess differences between percent-changes.

\*Significant difference (at \*p<0.05, \*\*p<0.01, \*\*\*p<0.001) between percentages agreeing before vs. after viewing warnings