The perception of mental health amongst medical students and instructors in Libya: A qualitative study

by

Nada Jalal El-abbar

A thesis

presented to the University of Waterloo

in fulfilment of the

thesis requirement for the degree of

Master of Science

in

Public Health Sciences

Waterloo, Ontario, Canada, 2023

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: Medical students that reside in high-conflict areas are at risk for developing mental health challenges. Moreover, the stigmatization of mental disorders in Libya have reduced the collection and reporting of local research about mental health. Libya is in need of more scientific research about mental health to support awareness around this topic. Previous studies have illustrated that professors play a significant part in supporting students' mental health and can minimize the stigma around mental illnesses.

Objectives: The study had three objectives: first to explore how university students and faculty members perceive mental health at The North African University (NFU). Second, to understand what influences students and faculty in accessing supports/treatment for mental health. Third, to understand NFU and faculty supports for student mental health.

Methods: A total of 21 qualitative semi-structured interviews were conducted with medical students (n=11) and medical professors (n=10) from NFU. Research objectives and interview guide questions utilized a symbolic interactionist approach. Interview transcripts were analyzed using inductive thematic analysis. Interview transcripts were coded using NVivo software.

Results: Findings illustrated that medical students and professors had a negative perception of mental health. The study found that there were no mental health supports present at NFU. Medical students utilized informal mental health supports for their mental health challenges. Students and professors highlighted the need to implement mental health supports and raise awareness for mental health on campus.

Contribution: Minimal research in Libya has occurred to investigate how medical students and professors perceive mental health. Exploring how future and current healthcare professionals communicate their understanding of mental health in their community may raise awareness about this topic. This could allow for evidence that will help improve access to mental health supports at NFU.

Acknowledgments

This research study was an extraordinary experience, and I am very grateful for the contributions of many people. Firstly, I would like to thank all the people who participated and shared their stories in this study.

Thank you to my translators, Taleb El-Reoy and Lujain El-shakei for all the time and effort you put into this project. You are both so intelligent and kind. You made my stay in Benghazi very memorable. It was a pleasure getting to know the two of you.

To my committee, Dr. Hannah Neufeld, Dr. Elena Neiterman, and Dr. Jennifer Yessis thank you for guiding me and sharing your knowledge with me. You all taught me the skills needed to complete this thesis. I have learned so much during this process and will carry this knowledge with me.

To my supervisor, Dr. Jennifer Yessis. It has been an honour being your graduate student. Your constant support and encouragement have made me a better researcher. Thank you for always providing thoughtful and thorough feedback on my work. Moreover, thank you for all the professional development opportunities you gave me throughout my time as a graduate student. I will carry all the lessons you taught me moving forward. I am grateful for your patience and kindness throughout this project. You are someone I trust and will always look up to. I have been extremely fortunate to have you as my supervisor.

To my family, thank you for always supporting me and cheering me on. I am lucky to have you all in my life and I want nothing more than to make you all proud.

Finally, to Abduleilah, thank you for always encouraging me and providing me with unconditional support. You make me a better person. I dedicate this thesis to you.

Table of Contents

Positionality

Positionality is considered an individual's worldview regarding a research objective and its political and social context (Reich, 2021). A critical aspect of qualitative research is the researcher's role as part of the social world being investigated. It is important to note, that a researcher's positionality assists in making research comprehensible by contextualizing how a researcher's background may have influenced all aspects of the research process (Reich, 2021). Overall, the research questions and objectives in this study were determined from my own personal experiences. To be more specific, like the participants of this study, I am from Benghazi, I speak Arabic fluently, and I am Muslim. It should be noted that Benghazi is a closed-off country making it difficult for non-Libyan citizens to enter and exit the country freely. Due to this, Libyans may not have a lot of exposure to individuals who live outside of Libya. Therefore, citizens may find it hard to trust a researcher who is not like them.

Moreover, my own childhood and adolescence have illustrated how Middle-Eastern culture stigmatizes individuals who are mentally ill and hinders access to mental health services because of that. My understanding of the experiences of students has shaped my interest in this study, and my desire to give voice to the research participants' experiences. My positionality in this study allowed me to build rapport with participants so that they would feel more comfortable sharing their experiences openly.

1. Background

1.1 Context of Libya

Libya is a country located in North Africa and is also a part of the Middle-East (Wildeman, 2021). The total population of Libya is approximately 7 million (Worldometer, 2023). Libya is made up of three regions: Fezzan (southwest), Cyrenaica (east), and Tripolitania (northwest) (Bauer et al., 2017). The national religion in Libya is Islam and most citizens are Muslim. Moreover, the national language is Arabic (Salem & Bayoud, 2013).

On February 17th, 2011, the first civil war started in Benghazi in opposition to Muhammar Gaddafi's 42-year dictator rule. The war ended in October 2011 when Muhammar was seized and assassinated (Stottlemyre & Stottlemyre, 2012). The second civil war began in 2014 due to the political power rivalry between East and West Libya (Zarrugh, 2018). By October 2020, negotiators from both East and West Libya signed a cease-fire (Korotaev, Isaev, & Shishkina, 2021). The 2011 and 2014 conflict has left 217,000 Libyans internally displaced and 1.3 citizens in need of humanitarian assistance (Elhadi et al., 2020).

The death and violence that occur in war-torn countries can impact civilians psychologically. To highlight this statement, the prevalence of anxiety, depression, and Post-Traumatic Stress Disorder (PTSD) have been rising in Libya since the first civil war (Abdulshafea et al., 2021). This is more pronounced in areas that were exposed to high levels of conflict, such as Benghazi (Charlson et al., 2012). A systematic review was completed in 2019 and findings illustrated there was 22% prevalence of mental illnesses in people who resided in an area that had been subjected to conflict (Charlson et al., 2019).

Due to the civil conflict, healthcare expenditures in Libya have been negatively impacted. War-related casualties resulted in a tremendous strain on the healthcare system (Elhadi et al., 2020). Medical supplies were lacking; the infrastructure of medical facilities was damaged, and hospitals were at over capacity (Elhadi et al., 2020). The burden on the healthcare system put Libya in a financial crisis and has resulted in a lack of funds for mental health services (Rhouma

et al., 2016). Due to the violent conflict and scarcity of healthcare resources available, Libyans have a higher risk of developing mental health illnesses that have not been addressed by the healthcare system (Rhouma et al., 2016).

1.2 Mental Health and Mental Illness

Mental health is considered a fundamental component of health that plays a factor in optimal health and well-being. Mental health can be defined as the emotional, intellectual, and spiritual development of an individual. Moreover, mental health refers to an individual's ability to have a positive self-perception and intra-personal harmony (Manwell et al., 2015). Overall, an individual may be considered healthy when they are able to cope with day-to-day stressors in life and are able to complete their daily tasks (Bhugra et al., 2013). Furthermore, mental health is considered to be a balance between an individual and their social and physical environment (Bhugra et al., 2013). Having positive mental health also implies that an individual can have and maintain relationships with others. Moreover, it can also result in the capacity to demonstrate positive actions and cope with negative emotions (Bhugra et al., 2013). Overall, mental health contributes to individual self-worth and control of internal and external stressors.

When mental health is negatively impacted and hinders an individual's activities of daily living, it may result in the development of a mental illness. Notably, mental illness is affected by social, biological, environmental, and physiological factors (Bhugra et al., 2013). Internal factors that are considered risk factors for mental illness include weak emotional resilience, the feeling of helplessness, and lack of status and self-esteem (Furber et al., 2016). External risk factors for mental illness include abuse, lack of autonomy, poverty, stigma, cultural clashes, and discrimination (Furber et al., 2016). The state of an individual's mental health can affect the capability to perform tasks and make use of the opportunities given to them. Furthermore, mental health can impact how an individual fully engages with work, family, and their community (Bhugra et al., 2013).

Gender differences influence the way mental health challenges are perceived and dealt with. This may be due to the fact that restrictive gender norms can lead to discrimination and

impact an individual's health and access to care (Heise et al., 2019). This can affect the diagnosis of mental health disorders and access to mental health supports (Scheid & Wright, 2017). Women exceed men in internalizing their problems. This puts women at a higher risk for anxiety and mood disorders. Women are also considered to be more social than men which makes them more likely to seek mental health support in comparison to men (Scheid & Wright, 2017). Men are more prone to externalize their problems. Notably, this puts men at a higher risk for developing substance use disorders and antisocial personality disorder. Overall, men are also less likely to seek mental health support in fear of it lessening their masculinity (Scheid & Wright, 2017).

1.3 Stigma of Mental illnesses in The Middle-East

Stigma occurs when an individual's identity is negatively influenced by a social response. Such negative responses may hinder a person's self-worth, relationships, health, and employment (Holder et al., 2018). Individuals who experience stigma may also face discrimination and alienation. When understanding stigma in relation to mental health, public stigma occurs when a society possesses a negative attitude towards mental illness and acts upon these attitudes (Corrigan et al., 2015). This can lead to society rejecting individuals who have mental illnesses. Thus, individuals who suffer from a mental illness carry both the burden of their symptoms and the public stigma attached to their condition (Corrigan et al., 2015)

Notably, mental illnesses are highly stigmatized in the Middle-East. If an individual has a mental illness, it is thought to bring shame to themselves and their family (Gearing et al., 2014). Furthermore, having a mental disorder is viewed by the community as a weakness. Therefore, citizens of the Middle-East may be reluctant to discuss their mental health challenges with family and the community (Gearing et al., 2014). To illustrate, the stigmatization of mental health in the Middle-East stems from numerous cultural beliefs about mental disorders (Gearing et al., 2014). Mental illnesses may be considered to have originated from 'evil eye' or black magic (Dardas and Simmons, 2015). Moreover, community members believe mentally ill individuals are dangerous, psychotic, lack intelligence, and are unable to take care of themselves (Dardas and Simmons, 2015). A vast amount of Middle-Eastern community members correlate mental illnesses with supernatural factors instead of physiological factors. In the end, mental disorders

are greatly influenced by cultural perspectives within Middle-Eastern communities (Dardas and Simons, 2015).

Markedly, the attitudes and beliefs about mental health and mental health disorders are influenced by the level of education and familiarity a person has with this topic. Mental Health Literacy (MHL), is the level of understanding an individual has about mental well-being (Furnham & Swami, 2018). A higher level of understanding of mental health and mental illness can result in more informed decision-making to support mental well-being. In the end, MHL helps facilitate knowledge and use of mental health supports across communities (Furnham & Swami, 2018). Research illustrates that Middle-Eastern communities have low levels of MHL (Elyamani et al., 2021). There is limited available information in government and non-government sectors about MHL in the Middle-East (Elyamani et al., 2021). Arab university students residing in the Middle-East are reported to seek mental health information from social media and the internet (Khatib and Abo-Rass, 2022). Unfortunately, information retrieved through social media does not always enhance mental health practices due to the credibility of such information (Rennis et al., 2013). Furthermore, media literacy has been neglected in the Middle-East. This makes it difficult for citizens of the Middle-East to analyze and assess the accuracy of information retrieved from the internet (Abu-Fadil et al., 2016).

1.4 Mental Illness Amongst Students

Globally, young adults aged 18-25 years have the highest prevalence of any mental illness (AMI) (NIMH, 2023). It is reported that 9 out of 10 individuals are diagnosed with a mental illness before they turn 25 (Solmi et al., 2021). Studies have highlighted that college students are at a higher risk for developing psychological conditions. This is due to academic pressures, family commitments, and career tasks they handle simultaneously (Pedrelli et al., 2014).

Medical students globally are also experiencing higher amounts of physiological stress, anxiety, and depression due to burn-out (Masri et al., 2019). Notably, medical students reside in a high-pressure environment over the course of their degree with minimal breaks to rest. This can negatively influence their academic performance and clinical practice after graduation (Masri et al., 2019). Research also highlights that physicians' mental health is lower than that of the

general public (McFarland et al., 2019). Medical culture requires physicians to work long hours and put patients before the needs of themselves. This selflessness can result in a physician neglecting their own self-care and adding more stressors in their life, resulting in burn-out (McFarland et al., 2019).

Young adults who have been exposed to armed conflict are two times more likely to develop behavioural, emotional, and mental challenges (Carpiniello, 2023). Therefore, in addition to the pressure of post-secondary education and experiencing armed conflict, Middle Eastern medical students also face the stigmatization of mental disorders that have been embedded in their culture (Pocock, 2017). Presently, roughly 60% of individuals residing in the Middle- East are under the age of 25 (Idaho State University, 2023). Therefore, further comprehension of mental health illness prevalence and supports for mental disorders is critical for this population. Middle Eastern countries lack information about reporting and governing mental illnesses (Pocock, 2017). Moreover, there are inadequate levels of mental health resources and methods to raise awareness about mental illness across the Middle East (Pocock, 2017).

1.5 Instructors Supporting Students' Mental Health

Students who experience mental health challenges may have difficulty in achieving academic success, and/or being a successful part of a social network (Pedrelli, 2014). Instructors are the face of the academic institution for students. Professors can share college policies and resources related to student mental health (Ethan and Seidel, 2013). Instructors also have a significant role in reducing the stigma attached to mental illness. Instructors can improve how society comprehends and understands mental illnesses. This can be done by educating their students that mentally ill individuals are not dangerous and abnormal but are ill and need treatment (K et al., 2012). Notably, professionals such as professors have a high status in society and receive respect from their community members. Therefore, what they teach can be accepted more readily by the community and help alter negative attitudes toward mental illnesses (K et al., 2012).

1.6 Students and Faculty at The North-African University

Notably, to ensure the privacy of research participants in this study, the university has been given the pseudonym The North-African University (NFU). NFU is located in Benghazi. Benghazi currently has a population of 650 000 citizens and is the biggest city in the Cyrenaica region (World Population Review, 2023). NFU has 1600 students and approximately 300 staff members. NFU offers several academic programs such as human medicine, dentistry, pharmacy, business administration, and information technology. NFU's goals include improving health promotion and developing community health across Libya.

The purpose of this study is to explore how medical students and their professors at NFU perceive mental health. The study also aims to understand how students access mental health supports on campus and in their community. Notably, Benghazi has experienced two civil wars which have increased the risk of community members developing mental health problems (Charlson et al., 2012). Furthermore, the stigmatization of mental illness in Benghazi can impact the prevention, treatment, and knowledge surrounding mental disorders (Abi Hana et al., 2022). Ultimately, there is a high need for improving negative attitudes about mental disorders and accessing mental health support for psychiatric conditions in Benghazi (Abi Hana et al., 2022).

NFU teaches their medical students how to become physicians and health professionals. Therefore, the graduates of NFU will play a significant role in administrating health services throughout Benghazi. Exploring how medical students seek mental health support can improve awareness about the topic and utilization of mental health services (Khatib & Abo-Rass, 2021). Furthermore, understanding how professors support mental health and communicate the importance of the topic can reduce the stigma surrounding mental illness (Latifeh et al., 2021) Overall, students and professors at NFU are stakeholders in promoting awareness about the topic of mental health in Benghazi.

2. Study Rationale

There is a marked need to investigate the perception of mental health and its support in medical students in Libya. Notably, there is minimal research on mental health policy in Libya (Elhadi & Msherghi, 2020). In Libya, there is more focus on emergency care and physical conditions; as community members in Libya tend to keep mental health problems hidden due to the stigmatization of mental illnesses (Daw, El-Bouzedi, & Dau, 2016). In order to help re-engineer the healthcare system in Libya, health professionals must work together to promote the importance of mental health policy (Daw, 2017). Medical students are future healthcare administrators and their perceptions of mental health are significant to study due to the role they have in the future of healthcare in Libya (Daw, 2017). Research also illustrates that professors have an important position in providing knowledge about mental health to their students. Moreover, instructors can support their students in accessing sufficient mental health resources (Kratt, 2018).

The current research about mental health in Libya is minimal and centers around the prevalence of mental illnesses of community members (Rhouma et al., 2016). There is a lack of research regarding how professors support student mental health in Libya. This study addresses these gaps and focuses on how both medical students and their instructors perceive mental health. Moreover, this study examines how medical students' mental health is supported on campus by their professors and the university.

2.1 Research Questions

This study is framed by the following research questions:

1. How do students and faculty at The North African University perceive mental health?
2. What do medical students at The North African University experience when seeking mental health supports/treatments?
3. How The North African University and how do individual faculty members support student mental health?

2.2 Research Objectives

Specifically, I explored:

1. How university students and faculty members perceive mental health at The North African University.
2. What influences students and faculty at The North African University in accessing supports/treatment for mental health.
3. The North African University and faculty supports for student mental health.

The overarching aim of this study is to contribute to the literature on mental health among medical students and professors in Benghazi. Moreover, the research will examine the perceptions about mental health and access to mental health supports on a university campus. These experiences may inform strategies to improve mental health awareness and access to mental health supports for students at NFU.

3. Student and Professor Advisory Committee at NFU

For this study, I have created an advisory committee made up of 2 medical students and 1 medical professor from The North African University (NFU). Due to the stigmatization of mental health in the Middle East, the questions I ask my participants needed to consider how sensitive the discussion around mental health is within this community. The advisory team reviewed my interview guide, recruitment posts, and findings to ensure the medical students and professors at NFU would receive the information well *(See Appendix A for the interview guide and Appendix B for the recruitment post)*. The advisory team helped me understand the social norms present at NFU. Furthermore, the advisory team would like to present the findings at NFU through the North African University's Medical Students and Young Doctors Association (NFUYA) to raise awareness of the topic of mental health on campus. NFUYA is a student-led organization at NFU that hosts events on campus to educate students about topics pertaining to health. Notably, the 2 medical students who are part of the advisory committee are also members of NFUYA. The advisory committee also anticipates presenting the findings of the study to the Dean of The Faculty of Medicine at NFU with the goal of further dissemination of the findings of the study.

4. Methodology

4.1 Study Design

To address the gap in literature and research questions previously mentioned, this study will utilize qualitative methods Using a symbolic interactionism lens, I have conducted 21 individual semi-structured interviews. The first set of interviews was with 11 medical students from The North African University (NFU). The second set of interviews was with 10 medical professors from NFU *(Refer to Appendix A for interview guide)*.

4.2 Theoretical Orientation

Symbolic interactionism is a theoretical framework that was used in this study to help investigate the perception of mental health in medical students and medical professors at NFU. This was achieved by exploring how the perception of mental health is impacted by the social interactions of participants. Moreover, the framework involved understanding what symbols and language participants correlated to mental health. Notably, this framework helped create the research questions and interview guide in this study.

4.3 Symbolic Interactionism

Symbolic interactionism is a micro-level theoretical framework that illustrates how society is constructed through repeated social interactions. Symbolic interactionism investigates how individuals give meaning to their actions (Carter and Fuller, 2015). The theory was introduced and influenced in the mid-twentieth century by George Herbert Mead's theories of self and society. Notably, symbolic interactionism was a response to dominant sociology in the mid-twentieth century (structural functionalism). This theoretical framework asserts that people use symbols and language to communicate with others (Carter and Fuller, 2015). The theory investigates the interpretation of subjective beliefs and how individuals understand their world through their own views. Symbolic interactionism can be summarized as (1) individuals act based on the meanings that objects hold to them (2) interactions occur within social and cultural contexts, where individuals and situations have a definition or are appointed individual meaning (3) meanings occur from interactions with others (4) meanings are not set in stone and are always changing through interpreting interactions with others (Carter and Fuller, 2015).

4.4 Application of Symbolic Interactionism

Symbolic interactionism helped highlight the meanings of mental health for the participants in this study through their previous social interactions with mental health in Benghazi. Symbolic interactionism provided a lens to study how medical students at The North African University (NFU) may form a perception of mental health through their social environment. Moreover, symbolic interactionism considered how professors support medical students' mental health through their social environment. The framework also highlights how students with mental health challenges may have trouble accessing mental health supports due to their social environment. Symbolic interaction helps explore the meanings constructed in these interactions.

5. Methods

5.1 Participants

For this study, I interviewed 21 participants from The North African University (NFU). NFU is located in Benghazi which is a coastal city (Bauer et al., 2017). Notably, 19 participants were of Arab heritage and 2 participants were Sudanese. All participants' first spoken language was Arabic. Notably, NFU's academic curriculum is taught in English. Therefore, all participants spoke English. All participants stated they were Muslim. Moreover, in order to attend NFU students must pay tuition. Furthermore, a professor position in Benghazi is considered a high-earning career. Therefore, participants involved in this study are considered to be from the middle to upper-class.

There were two groups interviewed in this study. The first group included 11 medical students from NFU. Medical students from the second, third, fourth, fifth, and internship years were interviewed. Students' ages ranged from 19-25 years old. The student cohort included 6 males and 5 females.

The second group included 10 professors from the faculty of medicine at NFU. The age and work experience of professors had no estimation and was flexible. Overall, 5 male professors and 5 female professors were interviewed.

5.1.1 Selection Criteria

To be a participant in the study, individuals had to meet the following criteria:

1) Students were enrolled in the faculty of medicine at The North African University (NFU).
2) Medical students were at least in their second year of study (first-year students do not start their academic term until November and study began in October).
3) Instructors were teachers in the Department of Medicine at NFU.

5.1.2 Table 1: Participant Demographics

Students:

Pseudonym	Age	Ethnicity	Gender	Year of Study
Noah	22	Libyan	Male	2nd Year Medical Student
Linda	19	Libyan	Female	2nd Year Medical Student
Ahmed	22	Libyan	Male	3rd Year Medical Student
Layla	19	Libyan	Female	3rd Year Medical Student
Omar	23	Libyan	Male	4th Year Medical Student
Lana	22	Libyan	Female	4th Year Medical Student
David	23	Libyan	Male	5th Year Medical Student
Sarah	25	Libyan	Female	5th Year Medical Student
Gabriel	24	Libyan	Male	Intern Medical Student
Farah	25	Sudanese	Female	Intern Medical Student
Xavier	24	Libyan	Male	Intern Medical Student

Professors:

Pseudonym	Age	Ethnicity	Gender	Occupation
Zayn	35	Sudanese	Male	Professor
Mia	38	Libyan	Female	Professor
Harris	38	Libyan	Male	Professor
Nancy	42	Libyan	Female	Professor
Daniel	50	Libyan	Male	Professor
Ruby	40	Libyan	Female	Professor
Isaiah	50	Libyan	Male	Professor
Jasmine	53	Libyan	Female	Professor
Adam	58	Libyan	Male	Professor
Nadia	42	Libyan	Female	Professor

5.2 Recruitment

After receiving ethics approval from The University of Waterloo Research Ethics Board in October 2022, participant recruitment began at The North African University (NFU) in Benghazi, Libya. A letter of invitation from the NFU Faculty of Medicine Dean was also given to me. The letter included an invitation to the NFU campus and approval for the study to be conducted with medical students and professors at NFU. Originally the letter of invitation was issued for October 2022. However, in-person travel to NFU did not occur until January 2023. Nonetheless, the letter of invitation from NFU was extended until March 2023. *(See Appendix G for the letter of invitation)*. The participants were recruited through a recruitment post (*See Appendix B for the recruitment post*) and letter of information form (*See Appendix D for the letter of information*) for this study via Facebook, through word of mouth, and e-mail. A post was made on The North African University's Medical Students and Young Doctors Association Facebook page. The post contained a summary of the study, a request for participants, the contact information of the researcher, and instructions to assure confidentiality is possible. Individuals interested in participating were instructed to message the researcher privately on Facebook or via e-mail. Respondents to the Facebook post were given a letter of information and consent form to sign via e-mail. Verbal consent was also obtained prior to the start of the interviews. At the participant's availability, I conducted the interviews online via Google Meet or in-person on the NFU campus. Participants were given the choice to be video recorded.

Two student members from The Student and Professor Advisory Committee shared the letter of information form to students and professors at the NFU. The letter of information described the goals of the study, the request for participants, and the researcher's contact information. Participants interested in being a part of the study were given a letter of information. Participants were then scheduled to meet with the researcher online or in-person to discuss the information letter and consent form. Both verbal and informed consent was obtained before the interviews.

5.3 Data collection:

The interview guide (*See Appendix A for the interview guide*) was a semi-structured script that asked questions to gather information addressing the study objectives. The guide was designed to develop comfort as the interview progressed starting with information about the participant and moving into the concept of mental health later in the interview. Interviews lasted between 30-90 minutes in length. Interviews were conducted online via Google Meet or in-person on The North African University (NFU) campus, based on the participant's preference. Notably, 7 interviews were conducted on Google Meet and 14 interviews were conducted in-person. Before beginning the interview, participants signed a consent form and gave verbal consent to participate. These documents were stored in a safe at my family home in Benghazi. Participants were given a pseudonym for their privacy.

Participants were told skip any questions they did not feel comfortable answering and to end the interview at any time if they did not wish to continue participating in the study. Demographic questions were asked to all participants. I asked about the participant's age, ethnicity, education, occupation, and gender. The interview questions focused on the participants' perception of mental health and how medical students' mental health was supported at NFU. With the permission of the participant, the interviews were audio and video recorded. All participants consented to have their interview audio recorded and 6 participants consented to have their interview video recorded. The interview questions were asked in English and participants often answered the questions with a mix of both English and Arabic. A translator was present for each interview. I am a Native Arabic speaker; however, I have never lived in Libya and needed assistance understanding slang terms spoken between local community members in Benghazi. Therefore, a translator translated if necessary and explained the participant's experiences more in-depth during the interview. The translator was asked to sign a confidentiality agreement before the research study began as well *(See Appendix E for the confidentiality agreement)*. I informed the participants that their transcripts would be anonymized with a pseudonym and be kept on a password protected laptop. A letter of appreciation (*See Appendix F for the letter of appreciation*) was e-mailed, sent via Facebook messaged, or a WhatsApp text to participants after the study. The letter highlighted how they

would receive follow-up information and a statement of gratitude for the participant's involvement in the study.

5.4 Data Analysis

Participants spoke in both English and Arabic while answering questions during the interview. To illustrate, Arabic and English have different grammar styles. This resulted in some quotes not flowing seamlessly in the findings when participants spoke in Arabic and English interchangeably. Interviews were transcribed by the investigator and the translators reviewed the transcriptions for accuracy. NVIVO 14 software was used for organizing and coding the data. I analyzed the data using an inductive thematic analysis approach. This approach involved a six-phase method that helps identify, analyze, and organize themes within data sets (Byrne, 2021). Symbolic interactionism influenced the foundation of this study and was applied to the interpretation of the data analysis.

The following six steps are suggested by Braun & Clark (2006) and helped guide my data analysis:

1. **Familiarize myself with the data:**
   At this step, I extended my engagement with the data. I listened and watched each interview multiple times to recall the mannerisms and tone of voice of the participants (Byrne, 2021). I also took notes of participants' gestures and body language as well. Once the transcription of each interview was complete, I re-read each interview several times as well (Byrne, 2021).
2. **Generate initial codes:**
   All transcripts were line-by-line coded using NVivo software. Each code was labelled with a description in NVivo that helped develop ideas about what was occurring within and across the transcripts. This allowed for comprehensive notetaking of the data and allowed for visualizing the similarities and differences between the transcripts (Byrne, 2021). A total of 174 codes were created in NVivo.

3. Search for themes:

In this step, I organized the codes in themes that illustrated shared meaning across the transcripts. This involved merging similar codes together (Byrne, 2021). A total of 4 main themes were formed from the data.

4. Review themes:

I reviewed the themes in my data and ensured the quality of the themes found. Overall, that the themes were useful to my research questions, that there was enough meaningful data present to support these themes, and that the themes were coherent (Byrne, 2021).

5. Define and name themes:

In this step, I chose names for the themes that tell the story of the data. Overall, the names of the themes came together to create a narrative of all the data (Byrne, 2021).

6. Produce a report:

In the final step, I completed writing the findings from the analysis. I ensured that the way the report was written was concise and followed a logical order that would be easy for readers to follow. My report highlights findings that were relevant to answer my original research questions and objectives (Byrne, 2021).

6. Ethical Considerations

Given the sensitivity about the topic of mental health in the Middle-East ethical considerations were established through the study. I ensured that anonymity was practiced. Every participant received a pseudonym as well as the university. This was done to ensure that all information within this study was private and could not be traced back to the participants. The topic of mental health can be triggering. Therefore, the consent form and letter of information *(See Appendix D for the letter of information)* provided international mental health support that could be accessed in Libya for participants. I reminded participants that the study was voluntary and that they could end the interview at any time. All participants were told they could review their transcripts to ensure they were comfortable sharing their responses. However, no participant asked to review their transcript. Furthermore, I completed The North African University Ethics form before beginning the study. The ethics office at NFU cleared the implementation of the study. (*See Appendix C for NFU ethics form*).

7. Results

7.1 Theme 1: Stigmatization of Mental Health

When discussing the topic of mental health, most participants spoke about how mental health in their community was highly stigmatized. Notably, participants expressed how this stigma was based on the cultural beliefs present in Benghazi. Participants also emphasized that there was a lack of awareness of the topic of mental health among community members. Moreover, participants expressed that there was a lack of patient confidentiality for individuals who would seek mental health supports. Furthermore, there were gender differences present related to how mental health was stigmatized. Notably, participants explained that males experienced more stigma for their mental health challenges than females in Benghazi. Overall, these factors resulted in negative connotations related to the concept of mental health.by participants in the study.

7.1.1 Cultural Beliefs

Participants explained how cultural beliefs impacted the way mental health was stigmatized in Benghazi. Cultural beliefs described in this study were that individuals who had a mental illness were considered crazy and dangerous. A student named Farah describes the way the community views individuals with mental health problems by saying:

"Because the majority here understand that if you have a mental health problem that means you are crazy, and this is something that the public is afraid of. This is wrong, mental illnesses are normal. But they don't think so, even when they talk about a psychiatrist, they call them a doctor who treats crazy people. Not all of course but the majority."

Farah explains how her community interprets mental health problems as a concept to fear. As a result, individuals who are experiencing challenges are seen as being dangerous in their community. Participants also discussed that mental illnesses were considered shameful. A student named Omar illustrates how mental disorders can be degrading by stating:

"Firstly, there are traditions in Libya of course. How families are with each other. (...) Its- it's shameful for a parent to say their son has a mental health- mental illness. He's mentally incapacitated or anything like that. This is something in Libya as soon as you start growing up, you start to hear (...) that a mentally ill person (..) this should not exist."

Omar highlights how traditions in Libya have influenced community members of Benghazi to believe mental health disorders bring shame since childhood. Omar states how these traditions start from a young age and can impact how the concept of how mental health is understood by community members. A Professor named Ruby emphasized this by saying:

"But here this is something that we still- I think you can all agree with me here that there is a feeling of shame. Even if you told me to go see a psychologist, that might upset me. The majority of us feel this way- that I can fix my own problems. Most Libyans are like this (laughs)."

Ruby highlights how even she may be offended at the thought of others assuming she has any mental health challenges. Moreover, she also believes others within her community would react the same way if they were under the same assumption. Participants also accentuated how the community members believed mental disorders were a weakness. This was illustrated when a professor named Mia stated:

"Like I believe that when- when a mental health patient communicates with other people, others will say that this is nonsense; don't listen to him. Uh, he's not reasonable. He's not-he's not aware of it, of what he's saying, he's a crazy one you know. I believe this -because of uh we are tough people. Libyans are tough people. This is a weakness point against them."

Here Mia highlights how presenting symptoms of illnesses can be considered a form of weakness to the citizens of Benghazi. Mia illustrates that Libyans have envisioned experiencing negative emotions that are difficult to control as a flaw in their character. Due to this, participants have expressed how community members in Benghazi that do suffer from mental health challenges

deny their problems. A student named Gabriel describes how patients do not accept their symptoms by saying:

"Like, people don't look at it nicely. People don't want to think that they have mental health problems, even patients by themselves, for example, they'd rather not. They'd rather ignore it; they'd rather overlook it."

Gabriel highlights how due to the cultural beliefs surrounding mental illness, the community struggles to acknowledge mental health challenges. He emphasizes how difficult it might be for individuals who experience problems to understand their own symptoms when he says:

"Changes in attitudes etc. Except not everyone can see it. Maybe close family members and they'll just blame stress or something else for it, so it's not as visible."

Here Gabriel explains how problems individuals face are dismissed as being a physical condition rather than a mental health concern. The ideologies in Benghazi about psychiatric disorders have been present for a long period of time. Therefore, many community members share the same beliefs. A student named Xavier highlights that the cultural beliefs in Libya were so dominant that he believed the beliefs were fact.

"When someone sees someone going to the mental health hospital, they call him crazy. We grew up and got used to it and when we see someone going to the hospital, we call them crazy. Why? Because I heard my friends saying it or heard it from so and so. So, all of us are uh going like monkey see monkey do."

Here Xavier emphasizes how common it was within the community to believe individuals are insane if they are struggling mentally. Overall, this belief was part of the culture and normalized throughout the community of Benghazi.

7.1.2 Lack of Awareness About Mental Health

Participants of The North African University (NFU) highlighted that the stigmatization of mental illness creates a negative association of mental health in their community. Due to this, participants avoid sharing information regarding the topic of mental health. This has impacted the level of awareness around the topic. Lack of awareness described by participants is failure of the community members to give importance to and acknowledge mental health conditions. A student named Lana illustrates this when she says:

"People in Libya they can't discuss mental health, they can't see mental health as an actual thing. They aren't convinced with things like depression, or anxiety, or if you're stressed."

Another participant, Omar, further illustrated this by stating:

"They are not convinced that there are mental illnesses, especially the community in Libya- especially the people who live outside the city, the more rural areas. The Marj, the Bayda, they don't have any knowledge about mental health or mental illnesses. What are they? Why do they happen? If you can manage them or not."

Participants have highlighted how their community members lack a true understanding of what mental health entails. Apprehension about the topic may relate to how difficult mental health can be to assess and treat. A student named Ahmed describes this when he says:

"Mental health which maybe a bit more difficult to perhaps diagnose like medicate but it's yeah, it's just as important as physical health. I just think- I think it's over- the- the terms overused. I do think it's- it's especially on the milder ends. I think- it is very difficult to diagnose in terms of there's- there's no uh metric that you can definitely objectively say that someone has something or doesn't. So, maybe people who already feel that they already have something, they go to the doctor and they don't get treatment or medicine. Then like it's solved, there's like a placebo effect, don't you think?"

Gabriel also explained:

"Uhm physical conditions are more clear. Like you can see the symptoms in front of you. If someone has a fever, everyone can feel the fever. If someone has a dislocated shoulder, everyone can see that there's something wrong there. People can see it. A lot of mental health diseases they present slowly, changes in attitudes etc. Except not everyone can see it."

The participants express how the lack of mental health symptoms being observed can result in the disbelief of a problem being present for their community members. The way mental health is assessed is not fully explored in their community creating barriers for how these conditions are understood. The gap in comprehension creates confusion for individuals who do seek mental health treatment in the community. This is explained by a professor named Jasmine when she says:

"They wouldn't understand you. I would tell someone that could help me but the mentality here- like welcome third world (laughs). It's impossible to say- they'll say you're crazy and she even takes medicine and went to go see a doctor."

Here Jasmine explains the preconceived notion that taking prescribed medication means you are unstable. Moreover, Jasmine shared that community members will not understand the need for taking pharmaceuticals for mental health conditions. This pervasive view may result in individuals not seeking the care they need.

7.1.3 Lack of Confidentiality

Participants highlighted that the facilities that do provide mental health support have problems with maintaining patient confidentiality. This has resulted in individuals that do seek mental health support to be negatively labelled in society. Participants expressed that physicians do respect patient confidentiality. However, other staff members who work in the facility may disclose information: Xavier states:

"*Even if I want to seek mental treatment- the problem with Libya is there- it's not confidentiality between doctor and patient relationship- that isn't the problem. The problem is the nurses that are a part of the staff in the hospital. For example, if they see a person go to a doctor, they might go tell people. A doctor will never say so- and so came and saw me. So how do people know you came to seek treatment? It's from the people that work there, not the doctors. The nurses below them and the hospital staff. They say so and so came to the mental hospital or I see him coming to this doctor often and I saw them go to the pharmacy to take medicine, so they tell the public."*

Participants described Benghazi as being a small city where the community all know each other. It was common for individuals to know a few nurses and staff members when they visited hospitals and clinics. Moreover, the location of hospitals and clinics were in populated areas of the city. The general public could also easily identify individuals who were entering and exiting the facilities. Taking into consideration the interconnectedness of the community alongside the cultural beliefs about mental illnesses described by participants, information about mentally ill patients was difficult to keep private. A professor named Joseph explains this problem and says:

"*I used to visit the mental hospital a lot. Uh, the stories you hear are shocking. The stories about patients. There's no privacy for it- there's no respect, it's all just gossip."*

Here Joseph highlights how mental health challenges were not fully accepted in Benghazi. Mental illnesses were feared and thought to be dangerous. The gossip culture around the topic was normalized as a form of community members protecting each other from this believed danger. Participants illustrated that once the public was aware of an individual's mental health problems, it would label them. Noah explains this and states:

"That's the problem in Libya you can't go back. Once people think that you are not a stable person, they will never believe you will be stable again. So, this is something that may cause hesitation to go seek help, so you have to pick specific people to go to."

Participants indicated that the act of seeking support can negatively impact an individual's social

reputation in Benghazi. This becomes a barrier for individuals who would like to seek formal support. Participants considered seeking support in Benghazi as more damaging than helpful for patients. Lana illustrates the common occurrences for people who were discovered to be visiting mental health facilities in Benghazi:

"In Libya here the most common example is that person won't get married. Uhm, they won't find good work and even the way people treat them. The way relatives treat them, the family- it won't be the same."

Overall, participants indicated that community reactions to mental illnesses deter individuals from seeking mental health services. Notably, there are minimal services available to the public. Moreover, participants also highlight how their community does not prioritize mental health conditions which limit an expansion or effort to enhance mental health services and support in Benghazi.

7.1.4 Gender Differences

When participants spoke about how mental health was stigmatized in Benghazi, each gender experienced such stigma in different ways. Ahmed described how males who face any challenges can be seen as cowards:

"So especially men, I think the women maybe, maybe a bit different, but speaking from a man's perspective. If- if things get stressful and you're the first to bow out- and say I can't handle this. I don't think that's seen as a positive thing. I don't think it's- you're seen as brave-like. For example, it's a Western opinion to be like you're brave, for a man coming out and saying- saying you were sad or you were anxious. I don't think that'll be dealt with in the same way here. I- it would fall under cowardice I think."

Ahmed illustrates that men who vocalize their problems in Benghazi can damage their reputation and role within the family unit, which can make them seem unreliable to those outside the family

and within the family. He continues to explain that men in Benghazi care for others within the family and must remain strong to do so:

"I think if it was- if- if times were very tough yes, especially if you're responsible for other people. If you're the oldest, a father or something you-you should be the last person to bow out. If everyone else within the same environment couldn't handle it, you should be the last person in the family to be able to. I don't-that doesn't say you don't- you won't have any mental health problems. It's just you can overlook it for the benefit of other people."

Ahmed indicates that men openly discussing their challenges not only makes a man appear weaker but can jeopardize their perceived role as the head of the household. He explains that in Benghazi men take on an infallible persona in order to combat being seen as too fragile. A professor named Adam highlights that for a man to be able to survive in Benghazi, he has to be tough by saying:

"But the African community is like a jungle, like snakes between each other for example. The men have to be tough, he has to be tough in order to be healthy or he can be submissive and walk alone. Because you have the guys that are aggressive this is what is considered a man here. When I was a kid, I used to hide my books, so they don't see me reading. Because studying was a problem it was considered a little feminine."

Adam emphasizes that being submissive may hinder a man's place in society, Therefore, in order for a man to have respect in society he should refrain from being overly vulnerable. Adam experiences highlight how this can impact the way he would show internal challenges to others in his surrounding environment. Female participants also expressed observing how men do get treated differently when they discuss their mental health. Lana states:

"Because it has to do with their masculinity, being a man, it's not right- it's not right for a man to be like this. If you're a man and have a mental health problem uh keep it to yourself, don't say it (...) it's something that affects their masculinity."

Lana emphasizes that if men do vocalize their problems, it can reduce their masculinity. Participants have expressed how important it is for men to have the appearance of being strong in Benghazi. Therefore, men will avoid any action that will reduce this goal. Participants expressed how women speaking about their mental health challenges are more accepted in society. Lana says:

"Yes, I feel that if a girl has a mental health problem, they would be more sympathetic towards her but for a guy, no."

Notably, participants highlighted that women are believed to be weaker than men in Benghazi. Participants illustrated how mental illnesses were seen as a limitation/failure in their community, as a result, it is more acceptable for a woman to discuss her mental health challenges with others. Adam highlights this power dynamic by stating:

"The girl usually- usually she is considered weak in our community. So, they can accept her weakness. Although the female community is not weak. But- anyway the weakness is accepted."

Here Adam refers to mental health challenges being considered a weakness. Therefore, community members accept a woman's weakness because she is already perceived as weak in society. However, participants explained that women in Benghazi who express their challenges still are not fully supported. This is explained by Ahmed when he says:

"Yeah, probably she would get more emotional support and things like that obviously more than a male. But even she won't be given the level of support she needs with this topic."

Gender differences do exist in the community as the participants have highlighted. However, female and male participants have both expressed that the stigma still impacts everyone.

7.1.5 Negative Association

Participants from The North African University (NFU) have highlighted that mental illnesses are stigmatized in Benghazi. This has led participants across both the student and professor cohorts to have a negative association with the topic of mental health. During their interviews participants were asked the question, "What does mental health mean to you? Can you describe the concept of mental health?" Participants frequently described mental health as the absence of negative emotions. This is illustrated when Farah stated:

"Not thinking too much, not stressed, this to me is mental health. You don't have any problems; you don't have anxiousness. So (..) you're good."

Here Farah speaks about mental health problems when asked about mental health. She highlights how, "she is good" so long as she does not experience challenges such as being stressed and anxious. Overall, Farah describes being well as the lack of negative feelings. Furthermore, a professor named Adam also explains that mental health is the lack of having mental health disorders:

"Uh, like I'm not depressed, I'm not uh I don't have schizophrenia. Uh (…) that's it, I-I'm not a vulnerable person, that I have an issue from simple things."

Here Adam has correlated very complex and extreme cases of mental illness when trying to define mental health. As Adam shares his thoughts the way he has conceptualized mental illness is impacted by stigma. The way participants have expressed how society has envisioned mental health disorders has influenced participants' own understanding of mental health. Resulting in participants subconsciously associating mental health with severe forms of psychotic disorders. This negative association was also described to happen to the general community members in Benghazi. A student participant named Layla explains how community members in Benghazi react when they hear the term mental health:

"Whenever it's talked about it, it's talked about in the manner of (.. looks around). You

hear mental health, and you would immediately associate it with suicide. Which is the severe form of mental health if you have problems, so they don't know that there's like levels."

Here Layla illustrates how mental health is interchangeable with mental illness in Benghazi. This results in participants considering the negative aspects of mental health rather than focusing on the positive features.

7.2 Theme 2: Conflict Impact

The 2011 and 2014 civil conflicts that took place in Libya have continued to impact the civilians of Benghazi until today. Community members have been exposed to a significant number of traumatic events that can affect their mental well-being. Participants describe their experiences of having to relocate from their homes and isolate from society for several months to remain safe. Moreover, they explained the threats that were present in the country and the alarming increase in deaths from the conflict. Furthermore, participants highlighted the rise of mental health problems within the community.

7.2.1 Mental Health Impact

Participants illustrated how the armed conflict that occurred in Libya increased the rate of mental strain among citizens residing in Benghazi. Individuals were not in control of their lives and had to take extreme measures to ensure their safety, Most participants explained that they had to relocate from their homes that were too close to the area of conflict. Farah describes what happened to her family at the start of the conflict:

"Yes, I was affected- me and my family because we live in Omar Ibnas which is where the conflict first started. So uh, we left our homes, you couldn't stay- packed all of our things and we started from zero."

Several participants had similar experiences to Farah. Participants' families left the comfort of their homes in order to survive the conflict. To maintain their safety participants also illustrated

that they had to remain isolated from society. Participants explained that it was common for militia groups to attack and raid houses near the conflict zone. A student named Noah discusses how his house was invaded:

"We were scared, they came one time uh and we were at home but upstairs not downstairs. So, we thought that it is better for us to leave the house at that moment, because you know (..) they could have done anything then and there".

Noah continues to say that other families were not so lucky when getting raided in comparison to his own family:

"We lived in fear, that what happened to them would happen to us. They would come and- and do (..) what they did, attack or kill."

Participants emphasized how relocating to a different area of the city was essential for the safety of citizens and their families. Another safety measure was remaining inside the house to avoid danger and violence. A professor named Isiah describes the state of Benghazi during the conflict by saying:

"The country's situation was horrible, horrible, horrible. First of all, there was a war going on. You would be walking on the street and a missile might land on you. Most roads were closed, there's no electricity, no gas, no petrol."

Noah continues to describe the state of Benghazi during the conflict by saying:

"Every day we would check underneath our cars because of the stories we would hear about the explosives."

Due to the threats civilians faced, it was crucial that participants and their loved ones stayed home for long periods of time. Participants described the social isolation they went through during the war. Omar explains how he remained at home for several months:

"We stayed six months in an apartment (..) I may have left (...) twice or three times in these five-six months. I was staying in the apartment 24/7 and I did not move from there. Of course, we were also young, so they would tell us don't go outside. So, we would stay in the house and not leave until the situation got better. That took about five-six month minimum."

Overall, participants' families took all the necessary precautions to avoid tragedy, however, participants told stories about the lives that were lost during the conflict. It was common among participants that they all had known someone that was killed during the conflict. A professor named Nadia states:

"My nephew passed away during the conflict in downtown Benghazi. Almost everyone knows someone that passed away downtown. They also know the exact street the corpse was found."

Here Nadia emphasizes the danger that occurred in downtown Benghazi. Downtown was described as the heart of the conflict by participants. It was once a large tourist area but is now described as a "graveyard" by participants. Adam illustrated that it was not only a graveyard for people but for memories as well:

"My memories are there in the streets, in the mornings I used to walk and visit places- I have been in Benghazi since the eighties. Still, I do not consider it to be true. Is it true that I lost this street? I mean it's very precious- to lose a street. That is no longer present except in your mind. At least if you leave someplace, you have that desire that maybe you'll go back to that place. For example, I wish I saw that street in downtown Amman, that's normal. I have the hope that I can see it again. But this place I lost it physically, that's it, lost. Like someone died."

Nadia and Adam provide emphasis on the emotional distress that the conflict produced. Participants endured the loss of property, people, and peace. A professor named Harris who also practices as a psychiatrist explains the rise of mental health disorders due to the conflict. He says:

"There is something called PTSD, a lot of people got it, a lot of people still have it. For example, a- bomb fell on their house. Or they are walking and there was an explosion or an accident. So, this place becomes a- they're scared of it, they get flashbacks, nightmares, they get depressed. Sometimes they get depressed to the point where they won't leave their house, they have agoraphobia they no longer go out. They are homebound, they quit their job because of all of the symptoms that were caused from the terror."

Harris describes how the lived experiences of community members during the conflict still shape their lives over a decade later. Harris also illustrated extreme cases of mental health challenges during the war that led individuals to take their own life:

"He was married, and he died in the war, and everyone was sad. His wife went and took his gun and committed suicide. Then their kids are alone, the kids get abused, and they start doing drugs. And from 2011 until now if you think everything is okay here, then you've misunderstood."

Harris highlights how families were broken during the conflict. That both adults and children were victims of the violent environment that occurred in Benghazi.

7.2.2 Social Impact on Community

Participants were exposed to a high level of violence during the conflict. In order to protect themselves, they had to remain in their homes for several months at a time. The constant violence and social isolation individuals experienced hindered the way community members interacted with each other. Participants reported that before the conflict, society was very unified and friendly. Layla says:

"My mom used to tell me stories about how she was friends with her neighbours uh in her- in her compound. Where she lived back in the day and now, I don't even know the names of my neighbours."

Participants illustrated how the citizens of Benghazi experienced a tremendous amount of anguish. What was once a safe city became a battlefield. Citizens had to adapt to the environment to survive. After the conflict subsided it was difficult for people to trust their community members. Layla states:

"They -they've grown more apart maybe uhm like less trusting. So, people kept to themselves, which made for this huge division between-between people. So, uhm I'm not sure why, but it is how it is. That's the world I know right now."

Participants highlighted how community members are sometimes considered cold or aggressive. However, this behaviour is described to be misunderstood. Participants expressed that the community is still healing from the conflict and are still in survival mode. Adam says:

"You now see a 25-year-old and you think he is a thug and he is a troublemaker. But it's sad, it's not from him…. This same 25-year-old was 15 years old during the war. All he knows is war, he grew up in it…. They don't have a good education, no work experience, so it's tough. They always want to take what they can get because they aren't- they aren't used to things being available….There was nothing available during the war, shortages of everything….So after the war, they still always feel like there are living in poverty."

The situation in the country is still not ideal or entirely stable. As well, young people who experienced isolation and conflict may not remember life before that time and may be forever changed with respect to their motivation and perspectives about what they feel they need going forward. Participants expressed how the city is now safer but there are still shortages everywhere. Therefore, community members are still adapting to their surroundings and are in a constant flight or fight mode. There is no unified society as there once was before the conflict. Ahmed explains:

"There's no sign of a functional country you- you just have to do stuff on your own. It's just a group of people living on a piece of land. Literally, there's no country. So, it's so uhm- so it's you can't- there's no stability."

Here Ahmed emphasizes the lack of stability that is present in the country. As a result, this can limit the social relationships between community members in Benghazi. Overall, participants highlighted that their community still endures lingering social and psychological effects from the civil wars that took place in Libya. The persistent effects of war continue to influence the challenges faced by citizens of Benghazi including mental health challenges according to participants.

7.3 Theme 3: Lack of Resources

The stigmatization of mental illnesses has hindered participants' access to mental health resources. Furthermore, participants have expressed how the civil conflicts that occurred in Libya have continued to negatively impact all resources across Benghazi. Participants discussed the lack of mental health resources present on campus for both students and professors experiencing any challenges. Overall, the lack of mental health resources present at The North African University (NFU) has resulted in participants seeking alternative informal support for their mental state.

7.3.1 Healthcare System

Participants illustrated how health problems that arose during the conflict were commonly left untreated. The resources throughout Benghazi were depleted and the devastation of healthcare services left individuals with both physical and mental health problems unable to access treatment. Ruby explained how hospitals were impacted during the conflict:

'You can say in 2014 there was no hospital that was running. Only clinics that see people and that's it. But to be able to see a patient and perform a surgery and help them, no. There wasn't anything like that in 2014 and 2015. Can you imagine that? I worked in the surgery department and for two years there were no surgeries."

Ruby describes the shortage of medical treatments that occurred during the armed conflict. The major public hospital, "The 1200" had stopped providing tertiary care. Several urgent care

clinics were opening to combat this problem. Ruby highlights that clinics were usually running because clinics often fell into the private sector of the healthcare system. Ruby voiced how the private facilities were more likely to be operating during the conflict compared to general publicly funded hospitals:

"The patient was helpless, they had to go to private clinics. Private was working but the public was stopped in terms of surgery, there was none. I would come to the hospital, see a patient, give them a check-up and that was it, that was all I could do. So, it was- it wasn't nice for hospitals."

Notably, participants highlighted how the public sector of the healthcare system was funded by the government. Before the conflict, these facilities provided an optimal level of care with qualified physicians. However, when the conflict began many physicians fled the country. Xavier states that before the conflict:

"There were 1200 beds which is now the common name for the hospital (e.g., "1200"). There were doctors that weren't Libyan. There were training programs, there were exam centers, so it was a certified center where you could take any exam, even worldwide. But after 2011 the doctors didn't trust the situation here, so they travelled. No one monitored the facilities or sent out reports for verification, so it stopped being verified. So, we started declining."

Participants voiced how facilities were also physically damaged or destroyed during the conflict. The government did not provide enough support for these facilities to remain fully functional at the time. Participants highlight how this lack of support from the government is still seen today. The infrastructure of public facilities is still damaged from the conflict. Xavier states this by saying:

"A lot of faculties were damaged. So, when all these facilities were ruined, and the government didn't have an interest in the things that got ruined. So, it made it difficult for doctors when they came back after the war to come work again. So, this made the focus shift to

private hospitals, especially in the last three-four years. You now hear every week or month that a new clinic opens.

Participants indicated that the lack of support from the government devastated the public sector of the healthcare system in Benghazi. The public facilities no longer provide adequate services which forces individuals to turn to the private sector. The private facilities supply a higher quality of care. However, most citizens cannot afford to access this care. Nancy explains this problem by stating:

"The private clinics are what works. And the private is not affordable by maybe, if not 80%, maybe 85% of people. Most of them don't go to the clinics. They go when they have no other option. Like my kid his eye has conjunctivitis. A consultation is $55, and a check-up is $85. I can pay for this but there are a lot of people who can't pay this, and this is something considered very minor. So, people will say just put some warm water on it and it will go away if it's nothing serious. People only go for severe cases to the hospital. It's unfortunate because we don't have a proper healthcare system. Because if there is something that is not affordable by people then it can be considered that it's not even available."

The armed conflict has impacted the financial state of individuals and their families. However, the cost of living has only increased in Benghazi even until the present. Omar highlights this by saying:

"The prices of everything were multiplied by eight (..) everything skyrocketed. Despite salaries in Libya staying the same."

Participants express how this has left many Libyans unable to attain proper medical care which has jeopardized their quality of life. Notably, Ahmed explains how seeking treatment for physical conditions in Benghazi is prioritized over mental health conditions:

"So, I think that most of the people can't even afford to get medicine like cough medicine,

let alone go pay for a therapist or something. So, I think a lot of things need to be fixed before mental health."

The shortage of care for physical problems is considered a larger problem than the scarcity of mental health services in Benghazi, as expressed by participants. Nonetheless, there are still minimal facilities that provide mental health support. Participants explained how there is only one public facility. Omar describes this facility and says:

"Yeah, the mental health hospital (..) uh, it does not have any preparations for the people they admit. There are no facilities (..) there is no equipment. They do not have all these things. It also does not have- the building- the space to treat mentally ill patients. There are no uniforms, no facilities, and there is not enough medicine even (..) to give to patients. Sometimes there is a drug shortage over there. There is no good nursing staff (….) uh there are no screening tools, there is nothing you can manage your patients with. All in all, the place is not clean either."

Omar highlights how the only public facility that distributes mental health services is neglected by the government. Participants do vocalize that the doctors who treat the patients are qualified and care for these individuals. However, their ability to provide optimal care is limited due to the lack of resources. Omar expresses this and states:

"Of course, the doctors that are there, they do as much as they can. They give 100%. But (shakes head) it is not enough with the conditions there."

Overall, the mental health hospital needs more support to be able to provide adequate treatment for patients. Participants expressed that the mental health hospital was also considered a facility for individuals who had severe mental health challenges. Participants indicated that a public mental health facility was lacking the necessary capacity, but there was a private clinic that offered mental health supports. Ruby discusses a private clinic by saying:

"The only place I know is The Amal Clinic. There are specialists for mental health and psychiatrists as well. You know, people can go and see a doctor and talk to them and see exactly

what the problem is and they try and help them. Uhm there is the mental health hospital but there isn't– I don't think that can help. But The Amal Clinic I know a few people there that are good- there are specialists and there is a psychiatrist. Sometimes you don't need a psychiatrist, but you need a specialist to sit with you, talk to you."

Here Ruby highlights how this specific private clinic does provide better mental health support for individuals. However, the majority of people will not be able to afford these services. Moreover, participants only listed "The Amal Clinic" when asked about facilities that provided mental health support in Benghazi. Other supports available included contacting a psychiatrist who works at the mental health hospital that may be able to provide one-on-one sessions. A student named Sarah states:

I have heard but I am not sure of my info because I've just heard from a couple of people that the doctors that work there actually does one-to-one sessions privately in other places"

Participants struggled to list the mental health services available within their community. Notably, participants highlighted how clinics that treat physical conditions are frequently opening in Benghazi. However, the same enthusiasm is not applied to facilities that treat mental health challenges.

7.3.2 Lack of Mental Health Supports in NFU

Participants explained how mental health was not a topic that was often discussed at The North African University (NFU). Notably, all participants were asked about what mental health supports were available on campus. Overall, every student participant stated t**hat** there were no mental health supports available or they were unaware of any supports provided at the university. When Farah was asked to describe the mental health supports on campus she said:

"Support in NFU (…) are there supports in NFU (laughs)? Really? Are there any supports? In all honesty, the support here would be like being given a compliment. They support us by maybe bringing in good doctors to teach us- things like that. Other supports (..) there

aren't any. Just compliments from doctors. After you finish an exam, you'll run into a doctor outside who will ask you how things went. They give you the feeling that someone cares, that someone is asking about you."

Farah explains how there are no mental health supports provided on campus. She indicated that her professors do care about academic performance and compliment her academic achievements, Moreover, they will follow up with her immediately after completing an exam. She considers this to be a mild form of support. Participants have highlighted how the university focuses more on academic progression which may cause pressure and mental health challenges. Gabriel says:

"There is no uhm-I don't feel that they put policies based on whether or not they're going to affect the mental health of students. It's more about how good this policy is for the general running of the university. For the general passing of the academic year more than it is for the actual mental health of the student."

Here Gabriel highlights that the policies in place at the university prioritize moving on to the next academic term rather than considering the mental state of students. However, at times pressure exerted by NFU can cause mental health challenges and affect academic performance. Xavier describes how his academics were impacted when he was having mental health problems and no one at the university checked up on him:

"During my time at NFU, I experienced mental health problems- my father's passing- they didn't do anything, and it was something they knew, not something they didn't know. But no one reached out to me and told me are you stressed? Has this impacted you? Are your grades changing? I failed one of my courses and I took it again. Even when I failed none of them gave me advice or contacted me asking me why this happened and maybe something has happened to me. I've never failed with them; my grades have always been good. So, when someone has a sudden drop, they should at least ask about them. See if they're okay. If something happened but they never did. So honestly, they-they don't support me."

Xavier emphasizes how he did not receive any support from the university when his father

passed away. Moreover, his grades dramatically decreased but the faculty at the university did not notice this change. Overall, Xavier's mental health was not given enough importance during an unfortunate time in his life. When professors were asked about what mental health supports were in place at the university, the majority were unaware if there were any. However, a few stated that academic advisors/counselling programs were a form of mental health support at the university. Notably, there was a contradiction between what Xavier said and what faculty members said. Ruby states:

"Uh now, uh we have like here in NFU we have a program called -academic counselling. So, when the students are declining-are failing or uh they want to uh quit suddenly. Or uh quit the program or uh students have problems- recurrent problems with their colleagues or their seniors. They would be transferred to uh academic counselling or an academic advisor. So, he talks with him or her- to find their problems. To detect their problems. If it's only a social problem they would solve it between each other. If not- it's further-it's going to mental health. No, I think we have to transfer them to uh for counselling like psychiatric counselling. And the psychiatrist will be-move on with him."

Ruby indicated that if a student is facing a problem, they would be sent to an academic advisor to address their challenges. Social problems that occur between students and faculty members are handled on campus. However, mental health challenges are passed on to a psychiatrist outside of campus. A professor named Nancy also contradicts what Ruby has said and explains how the academic counselling program is not fully practiced on campus:

"Listen there should be academic supervision but it's not working properly actually It's not working because it starts at the end of the year and it should start on the first day in NFU. There should be uh- uh (..) an academic supervisor for each student to solve his or her problems and that's not happening actually.

Here Nancy highlights how students can discuss their problems with an academic advisor but this program is only implemented at the end of the academic year. Participants believed the lack of implementation was due to poor policy planning. Therefore, students who have challenges

before the end of the school year are unable to speak to an academic advisor. Moreover, Jasmine highlights how problems raised to an academic advisor are not always solved:

"There are academic supervisors but it's not done properly. You tell them your problem and it may or may not get fixed, you're not involved. But there isn't- personally, I have never seen mental health support here."

Overall, participants highlighted how the academic counselling program is not thoroughly executed at the university. Moreover, students are unaware of this program when they are experiencing challenges during the academic year. Professors were also asked how they personally support their student's mental health. It was apparent across all professors that they were very willing to help students with their challenges and provide support. Isaiah describes how he tries to support his students:

"The first thing I would do is give them my phone number and tell them if they need anything they can call me, they don't have to even ask their family for help. Since they came up to me to talk about their mental health that means they're comfortable with me and they trust me. So, I will help them and make them not regret coming to me for help."

Here Isaiah highlights how his students could turn to him during their mental health challenges the same way they would seek support from a family member. He wants his students to trust him enough with their problems and help them find a solution. Isaiah highlights that students do not usually come to him for mental health support. He explains how it is more often that students have come up to him for physical health concerns:

"It's more so with physical health than mental health. For example, a family member is sick and they ask for help. At least I can guide them and tell them where they can find help,"

Isaiah explains how he is more familiar with supporting students' physical health concerns. Isiah utilizes his connections as a doctor in Benghazi to help students and their families seek treatment for physical health problems. Similar responses were reported by several other professors in the

study. Professors highlighted that they could help students more with physical health problems because they were trained to do so. The majority explained that mental health was not their specialty. Therefore, they could not help as much as a mental health professional would be able to. Joseph says:

"It's like I told you, it's personally- it's not my specialty so I wouldn't get too involved."

A professor named Zayn also highlights how he is not trained enough to help students with mental health challenges:

"I need to be trained to tackle these issues first. Maybe have some training done for the teaching staff. I'll be pleased to do it, but I have to be trained first I think."

Overall, professors are unfamiliar with how to approach mental health problems and would rather refer students to a professional or be trained on the topic of mental health in more depth. Notably, professors at NFU want to support their student's mental health and are open to further learning about the topic. However, most professors at the university worked several jobs. Participants highlighted that it was common for professors in Benghazi to work in multiple universities to earn enough income to live. The economy of the country is still devasted by conflict. Overall, one fixed salary was not enough to maintain a high quality of life in Benghazi. Zayn said:

"One of our problems is that we have a very tight academic agenda and program. So, I have like 45 minutes to teach and then following these 45 minutes I have another job at another place. So, you have to provide 3 or 4 objectives in a very short and limited time. So, we cannot find a sufficient time for- for even getting to know your students."

Here Zayn illustrates the workload that professors face in Benghazi. He has multiple teaching responsibilities at more than one university. The heavy workload not only puts pressure on professors but also impedes the relationship students have with their professors. Jasmine explains how busy her workday is at the university by saying:

"For 6 hours I taught yesterday. I teach for 45 minutes and then take a break for 30 minutes and start again. But yesterday I only had one 30-minute break."

Jasmine explains her heavy workload and lack of breaks during the day. With the copious number of tasks professors have, even their mental state can be impacted. Jasmine was asked if there were any mental health supports available on campus for professors:

"*No (laughs). Maybe they do have something, but I have never heard or seen anything."*

Professors' demanding working conditions in Benghazi result in physical and mental exhaustion. The burnout professors experience results in a barrier to supporting students' mental health. Overall, both students and professors in this study felt as if their mental health was not fully supported at NFU.

7.3.3 Seeking Informal Supports

Due to the stigmatization of mental illnesses and the lack of formal mental health services available at The North African University (NFU) and across Benghazi expressed by participants, students described the informal mental health supports they utilized instead. Participants preferred to keep their challenges private from the community to avoid harming their reputations. Therefore, it was common among participants to seek support from immediate family or friends to cope with the mental health challenges they experience. When Noah was asked how he would seek mental health supports he said:

"I might reach out to my close friend, I would tell him what happened and what's his opinion. If he doesn't give me his opinion I would go to my brother. My brother- and tell him what's happening. Maybe he can find a solution, but I would most likely go to my friend. I don't like to tell just anyone, it can't be just anyone."

Here Noah describes how if he were to face mental health challenges, he would seek support by

asking his friend or brother for guidance. Noah's response indicates that he would only tell individuals he truly trusts about his mental health challenges. Layla also explains how she turns to her friends for mental health support:

"So, we tell each other that- hey, whatever you're facing, I'm facing it too. Now let's wipe the tears and move on. Like having someone who feels the same way as I do- uh that's like therapy. To know that I'm not alone. So, whenever I'm- whenever I'm like stressed or completely overwhelmed and feel the tears coming. I would just like text that one friend and I'll tell her, I feel this, this and that. And she's like, I've just finished feeling like that too. And I would feel tremendously better. It's common to have these conversations between us, but in the community, not so much, no."

Layla illustrates how she and her friends often experience feeling overwhelmed and stressed. Communicating these challenges has become a form of support for Layla and her colleagues. However, she highlights how expressing challenges to the community is still not a common behaviour in Benghazi. Layla continues to describe other cooping measures she and her friends utilize when feeling overwhelmed:

"Uhm okay (laughs) so I'll tell you what my friends do and what I do. I know some who cope with uh food. Umm, some who cope with sleep, a lot of sleep. Sometimes my friend would like sleep 14 hours a day when she usually sleeps 7 hours pre-exam week. It's just from a lot of depression and a lot of stress. Like you- you don't wanna deal with it, so you just like, fall into a coma. Uhm ah a temporary coma. I personally cope with a mixture of these."

Here Layla explains how she and her friends handle the mental strain of exam week. Their coping strategies allow them to shift their focus from the stress they are experiencing to consuming more food or sleeping for an immoderate duration. Ahmed also described how he handles challenges that arise in his life by saying:

"I'll just see it through. I think uh- not to belittle mental health, but I feel like I could uh

for the most -the mild parts of mental health, I think you could just get through it. Just discipline maybe."

Ahmed highlights how he often manages his problems independently. Ahmed believes that with enough discipline mental health challenges can eventually dissipate. He understands mental health problems as a behaviour that an individual can control and overcome. In the end, the coping strategies participants communicated may have exacerbated their challenges instead of treating them.

7.4 Theme 4: Future Improvements:

Both student and professor participants voiced the importance of maintaining positive mental health. Notably, participants highlighted that discussion around mental health was considered taboo in Benghazi. However, participants voiced that they hoped the conversation about mental health would become more accepted in the future. For this to occur, participants suggested raising awareness surrounding the topic of mental health and increasing mental health supports on campus.

7.4.1 Raising Awareness

Participants highlighted that raising awareness about mental health was crucial for the topic to be accepted in the community. Participants expressed that the university should promote mental health challenges as a normal experience. Omar says:

"Raise awareness for mental health, especially med students, the stress they collect (..) there is no other program that has the same stress as medical students. Normalizing this topic in order to increase awareness for it. That this is normal when it happens, let the person know that it's normal. Then they would probably seek support when they know that what they are experiencing is normal."

Here Omar explains that medical students are at risk for mental health challenges due to the

amount of stress caused by their academics. He suggests that normalizing the existence of challenges students face can result in individuals seeking support. Ruby discusses how increased education about mental health within the curriculum may help raise awareness:

"First, because I am a member of the Curriculum Development Committee, I will uh propose that there should be psychology offered. It's not psychiatry only we need to know the normal to figure out the abnormal. Here in our curriculum, we go to the abnormal directly. But there is normal behaviour, we have to know the normal, then we move to how to treat the abnormal issues."

Ruby illustrates that students are often only educated about severe mental health problems. Notably, if students were exposed to the positives of mental health and how to combat mild challenges that they may face, the fear of mental health challenges can decrease within the community. A student named Linda also suggests her professors discuss the basics of mental health in the curriculum:

"They should like uh like talk about the basics of mental health, like what is it, the definition of it, that is it something normal and like how they get through it. I feel like they should just tell the students about their experiences with mental health issues as well.

Linda explains that professors can further normalize the topic of mental health by stating they also experience challenges as well. How professors share their past challenges and how they overcame them can make students become more accepting of their own challenges. Notably, student participants highlighted that they are not educated on how to cope with stressors in their life that can lead to developing mental health challenges. Xavier suggests that students should be taught about how to develop coping strategies for stress:

"We need to raise awareness that maintaining positive mental health is important and during your academic years you will experience stress, so how to cope with stress in general."

Xavier highlights how medical students are most likely to undergo high levels of stress.

Therefore, mental health challenges will arise, and the university should educate its students and staff about how to develop healthy strategies to remedy these problems. Overall, increasing the knowledge about the topic of mental health may reduce the fear attached to mental health challenges.

7.4.2 Mental Health Supports on Campus

Participants voiced the need for adding mental health supports on campus. Students illustrated how mental health challenges may impact their academic performance. Omar highlighted how medical students at The North African University (NFU) experience mental health problems and that having a mental health professional on campus could combat these challenges:

"*There are people- not myself, they legitimately struggled with these mental health problems- I have seen it at our university. They struggled (..) and their performance goes down, down, down. These people are going through something (shakes head) but there is no support for them. Uhm, so yeah to put a therapist, a psychologist, a psychiatrist, anyone who understands this topic and can provide support about mental health."*

Here Omar explains that students do not currently have a qualified clinician to talk to about mental health on campus to discuss their challenges. Overall, Omar felt that having a mental health professional on campus could help students with the problems they are facing and their academic success. Harris states that there should be an Office of Wellness, an office where students could come speak to a mental health professional and access counselling services:

"Have an office, maybe call it "The Office of Mental Health" in NFU. What does this office do? It helps with students' mental health with the right training. People in the office, they have to be qualified, they can't just be picked and that's it. They have clinical experience and the educational background. So that there's confidentiality, privacy for the students."

Harris puts emphasis on students being able to receive mental health support from trained professionals. He also stressed that professionals will abide by the ethical standards of their clinical practice to keep information confidential during counselling sessions. Moreover, having a formal office dedicated to mental health could make the presence of mental health support on campus more apparent. Nancy highlights that an office or mental health center on campus should be accessible to both students and professors:

"The first thing is there should be a mental health center for both in all honesty (laughs) for professors and students (laughs)."

Here Nancy emphasizes that both students and faculty require more support from NFU. Participants indicated that professors also face a large amount of stress. Therefore, support for professors should be prioritized as well. Layla highlights adding mental health support that students can access through their student portal would be beneficial.

"Starting a platform is a huge accomplishment they can do. They could post a lot of articles on how to address mental health in Libya. They could like do the research and find -what you can do in Libya to help your problems because what we see online is for other countries, other developed countries. We work on a website called Moodle. So, they could add like one of the tabs, like have a mental health tab."

Here Layla describes that she is unaware of the mental health treatment and other supports that are available in Libya. Not being able to access resources about mental health can make it difficult for students and professors to understand what mental health challenges are and if they need support. Having mental health resources easily accessible through the student portal, "Moodle" may be able to help students and professors understand their mental health challenges and the actions required to treat them.

In order for mental health support to become implemented on campus there needs to be guidelines and systems in place. Participants discussed there should be a mental health policy on campus. A professor named Ali says:

"Firstly, we have to put a clear policy and then have it assessed frequently. Like having questionnaires regarding the feeling of stress. I mean no one tells me how to deal with colleagues and students. Putting a policy for having your mental health supported. I think you know everything must be clearly stated and policies are written in a manner of having something to be fulfilled. "

Having no clear model for addressing the mental health of students and professors hinders their well-being. Ali highlights how there needs to be a policy present that is constantly evaluated and can be improved. Overall, having a mental health policy creates a solid foundation that aims to improve the mental health of everyone on campus.

8. Discussion

The purpose of this study was to first: investigate the perceptions of mental health among medical students and professors at The North African University (NFU); second, assess how professors and NFU as an institution supported their student's mental health; lastly, to explore what students experience when seeking mental health supports. The methods of semi-structured interviews was utilized for data collection. Thematic analysis was conducted to sort and present the qualitative data. I used Symbolic Interactionism to explore how social interactions influence the way mental health is handled at NFU. The findings illustrated that participants had a negative perception of mental health. The majority of participants indicated they were either unaware of mental health supports present on campus or there were none. Due to the lack of support, students would seek informal mental health supports such as asking for help and advice with personal challenges from family and friends.

My study aimed to explore the perceptions about mental health for medical students and professors at NFU. Notably, medical students and professors at NFU had a negative perception of mental health. Participants understood the concept of mental health as the absence of serious mental health disorders such as schizophrenia, depression, and anxiety. Participants expressed that their community members often associated the term 'mental health' with suicide. It was emphasized by both the student and professor cohorts that mental health was a highly stigmatized topic in Benghazi. Similar, to the existing literature (Alhabash, 2021), participants in this study spoke about how mentally ill individuals were considered crazy and dangerous, in North African/Middle Eastern countries.

According to Symbolic Interactionism, actions in the social world gain meaning through social interactions (Yang et al., 2007). Moreover, social interactions are influenced by cultural beliefs (Carter and Fuller, 2015). The way participants understood mental health was influenced by how the society in Benghazi perceived mental health. Ultimately, the negative perception of mental health found within the participants is learned and reinforced through the social interactions they have with their community members. Therefore, stereotypes of mental illnesses are learned through socialization. Responses from the community (such as the stigma of mental

illness) hinder the true importance and meaning of mental health for medical students and professors at NFU (Yang et al., 2007).

My study also highlighted the differences observed between men and women and how they experience mental health stigma. Male participants were less likely to express their mental health challenges in fear of damaging their masculinity. Traditionally men are seen as strong, self-sufficient, and have control over their emotions (Berman, 2017). Masculinity is thought to be emphasized when emotions such as fear and crying are limited. Such behavioural restrictions can result in men having trouble expressing their emotions and seeking help (Chatman, 2020). Seeking help requires men to show vulnerability which contradicts masculine gender roles. Therefore, men avoid seeking mental health support due to gender-role conflicts (Berman, 2017).

Participants expressed that woman seeking mental health support was more accepted in Benghazi. This was because women were considered weaker than men in Benghazi. Women are viewed as being dependent and subordinate to men (Kambarami, 2006). Moreover, women tend to be more emotionally expressive and vulnerable in society (Berman, 2017). Participants highlighted how seeking mental health support was considered a weakness in Benghazi and so was being a woman. Therefore, participants illustrated that women experienced female subordination when seeking mental health supports while men experienced gender-role conflicts in Benghazi.

My study aimed to explore how NFU and professors support student mental health. Participants highlighted the stigmatization of mental health in Benghazi and the lack of understanding of mental illnesses. Notably, this attitude is reflected in the campus environment. Symbolic interactionism states that individuals interact through shared symbols and languages (Carter and Fuller, 2015). Similar to literature, participants highlighted how their community believed that having mental health illnesses is considered deviant and unfavourable and can lead to social isolation (Alhabash, 2021), “The Mental Health Hospital” in Benghazi is often called “The Hospital for Crazy People”. Participants indicate how the community of Benghazi recognized this institution as a symbol of insanity. Moreover, participants also highlighted how having a mental illness is considered an expression of a lack of self-discipline. These beliefs

towards mental health explained by participants may create negligence for mental health supports across in their community, as participants have highlighted that most community members do not consider it an important sector of healthcare. This pattern is shown on the NFU campus as every student participant reported there were no mental health supports provided on campus.

Professors described what they believed to be mental health supports on campus such as academic advisors. However, students were unaware of the academic advisor program and professors highlighted that the program was only implemented at the end of the school year. Therefore, this resource was not practiced efficiently and resulted in students not being able to access an academic advisor throughout the school year. Above all, what participants from NFU consider mental health supports vary from what individuals at The University of Waterloo regard as mental health supports. In comparison, The University of Waterloo provides a Campus Wellness program (University of Waterloo, 2023). Campus Wellness provides health services that can be accessed by students to support their mental well-being. Students can visit a Campus Wellness office located on campus or call to access counselling services and wellness resources (University of Waterloo, 2023). Such resources include academic support, spiritual support, and peer support/mentoring. (University of Waterloo, 2023).

Notably, the example of mental health supports professors at NFU described could be considered more of a human resource. Participants illustrated that human resource policies were also not functioning sufficiently at NFU. NFU lacks policies and guidelines for monitoring and managing its staff and students. However, human resource management can be negatively impacted in countries that have experienced conflict. Conflict can impact human capital, workforce supply and performance, education and training, and income (Roome, Raven, & Martineau, 2014). Participants expressed these shortcomings on campus and across Benghazi. Libya is still mending from the 2011 and 2014 civil conflicts and struggles to build functioning political and administrative institutions (Sadeeque el at., 2019). This is due to the lack of security present within the country and the constant threats from rebel militias occurring post-war. Due to this, several armed force groups control different areas of the country today instead of one

unified government. This can create a barrier to uniform policy across Libya (Sadeeque el at., 2019).

Due to the lack of human resources present in Benghazi from the conflict, professors at NFU take on the role of supporting their students' mental health (Sadeeque el at., 2019). Participants reported professors working outside of traditional hours when students needed support. This was in addition to how most professors interviewed reported working in at least two positions. The conflict in Libya has devastated the economy resulting in individuals having to work overtime to support their well-being (Sadeeque el at., 2019). With numerous work tasks, professors at NFU experience burnout and work stress. Research illustrates the consequences of burnout are emotional and physical exhaustion (Tijdink et al., 2004). Moreover, teachers' exhaustion is found to negatively impact students' academic performance and students' perceptions of support provided by their professors (Arens & Morin, 2016). The failure of professors being able to cope with burnout is often seen as a personal problem rather than an institutional weakness (Arens & Morin, 2016). Furthermore, professors interviewed in my study highlighted that there were no mental health supports for professors provided on campus either. Overall, professors do try to support their students' mental health to the best of their ability despite the challenges they face in doing so. However, professors lack support from the institution. Moreover, the institution of NFU also faces difficulty in policy progression due to the lack of stability present in the country.

My study also sought to explore what medical students at NFU experience when seeking mental health support. Notably, medical students at NFU were not aware of the mental health supports on campus and therefore did not seek mental health support. Furthermore, students highlighted the reluctance to seek mental health treatment due to the stigma they could face from community members. Participants also reported the lack of patient confidentiality present in hospitals and clinics in Benghazi. Patient confidentiality was reported to be broken by people external to the hospital which was similar to research findings in Western hospitals (Beltran-Aroca et al., 2016). The reason for breaches in confidentiality includes discussing patient reports in elevator rides, public areas, or in front of non-medical staff. These mistakes can poorly impact the well-being of the patient (Beltran-Aroca et al., 2016). Moreover, these breaches can be devastating to the reputation of an individual living in Benghazi.

Due to the lack of mental health services on campus, students illustrated the informal supports they turned to for their mental health challenges. Informal supports are described as mental health support that comes from sources such as friends, family, and the Internet (Lauzier-Jobin & Houle, 2021). Similar to current literature, students from NFU described seeking informal support from family and friends they trusted. Students at NFU described discussing anxiety and stress with their siblings and friends. NFU students highlighted that their families and friends help guide them to a solution for their problems.

However, students also expressed other coping mechanisms for their mental health challenges. Students stated they often experienced mental health challenges during exam season. Students coped through these challenges by sleeping sometimes 14 hours a day and overeating. The coping strategies for medical students at NFU can paradoxically be considered symptoms of mental health disorders. Current research illustrates a correlation between sleep and depression (Lopez et al., 2017). Individuals who are depressed are reported to have hypersomnia. Irregular sleeping patterns can hinder the quality of life of an individual, mood, and academic performance (Yassin et al., 2020).

Individuals who are constantly exposed to stress may develop a binge eating disorder as a response to negative emotions (Turton et al., 2017). Unhealthy eating habits such as binge episodes are considered an avoidant mechanism that is prevalent in individuals with depressive symptoms (McGarrity et al., 2019). Moreover, emotional eating behaviours also have a strong association with anxiety. Ultimately, the informal supports NFU students have discussed do not treat their mental health challenges but put them at risk for developing mental health illnesses.

A key finding from my study was that participants wanted to raise awareness about mental health at NFU. Medical students and their professors expressed the importance of the topic of mental health within their field of study, Moreover, there is a need for mental health support on campus due to the heavy cognitive load and stress associated with studying medicine. Participants also expressed that there should be more material covering mental health within the medical curriculum, as they are not familiar with the topic of mental health and only mental illnesses. Participants highlighted that medical students at NFU mainly focus on psychiatry and

how to treat severe mental illnesses such as schizophrenia, post-traumatic stress disorder, and bipolarity. In Canada, medical students take courses about mental health in addition to a psychiatry course (University of Toronto, 2023). Canadian medical students are taught how to treat patients with multisystem problems that overlap several multiple domains (physical, mental health, and psychosocial health challenges) (University of Toronto, 2023). Notably, education may help to reduce the amount of misinformation about mental illness on campus. Teaching programs have been used to convey this type of information and have been proven to diminish stigmatizing attitudes toward mental illnesses (Chen et al., 2015). Moreover, research illustrates when high authority individuals such as professors discuss certain topics, community members are more likely to accept the information being presented (K et al., 2012). Therefore, having professors at NFU incorporate mental health lectures within their courses may raise awareness about mental health among students.

Both student and professor research participants expressed the importance of raising awareness about mental health at NFU by normalizing the topic. Students feel that their professors should discuss how common mental health challenges are and share vulnerability by describing that they experience difficulties as well. Research shows that having contact with individuals who have mental health challenges can reduce the stigma attached to mental illnesses and improve positive attitudes (Chen et al., 2015). Moreover, contact with individuals who have mental health challenges and do not fit the stereotype of being ‘dangerous or crazy’ such as professors further reduces the stigma associated with mental health challenges. This creates an equal status between individuals who experience mental health challenges and individuals who do not (Chen et al., 2015).

Participants highlighted the need to implement mental health supports at NFU. Participants indicated that a mental health office should be available on campus where students and staff can access a mental health professional. In order for students and staff to work successfully, they need to be supported. Good mental health is essential for individuals to reach their full potential (Carter and Fuller, 2015). Symbolic interactionism states how meanings are always changing between individuals through their social interactions (Carter and Fuller, 2015). Raising awareness of mental health and providing mental health supports on campus can open discussion

for mental health challenges on campus and seeking support. This may change the negative perception of mental illness for students and staff because having challenges and asking for help is no longer unusual behaviour.

While there is ongoing literature about mental health supports provided for university students, few studies focus on the mental health supports at North-African/Middle Eastern universities. My research addresses this gap and also further explores how the stigmatization of mental illness can influence the perception of mental health, the help seeking behaviour of both students and instructors and also the supports/infrastructure available. North-African and Middle-Eastern students are underrepresented in current mental health research and this study provided them with a safe platform to voice their concerns about mental health. Furthermore, there is a gap in the literature on the mental health systems in Libya. Limited statistics and research evidence on the topic of mental health is available in Libya. (Abdulshafea et al., 2021). Overall, there needs to be further research and development in the field of mental health in Libya. My study is a positive step forward in conducting such research. (Abdulshafea et al., 2021). The results of this study may be used to implement de-stigmatizing mental health strategies at NFU and improve access to mental health supports on campus. Medical students at NFU are the future healthcare providers in Libya and play a strong role in how mental health can be accessed and discussed in Benghazi (Daw, 2017).

9. Conclusion

The stigmatization of mental illness in Libya may impact the perception of mental health amongst medical students and professors at The North African University (NFU). Firstly, this study aimed to explore the perception of mental health of medical students and professors at NFU. Secondly, this study sought to investigate how professors and NFU supported students' mental health. Lastly, this study explored what medical students at NFU experience when seeking mental health supports. The study used a Symbolic Interactionism lens to help capture the meaning of participants' experiences. The study found that medical students and professors at NFU had a negative perception of mental health. The study also found that there were no mental health supports on campus and NFU human resource policies need more attention. Moreover, the study found that due to the lack of mental health supports present on campus, students utilized informal supports. However, the informal supports were found to be unhealthy coping mechanisms that could put students at risk for developing mental illnesses. With the support of existing literature, this study can be utilized as a guide for implementing future mental health policies at NFU. Moreover, these findings can be used to inform future studies in Libya to understand the effects of the stigmatization of mental health on medical students.

10. Limitations

It is important to note, that I do not believe my positionality within this study was a limitation. Being a Libyan, who speaks Arabic, and Muslim helped me build rapport with my participants. I felt very welcomed within the community even though I have never lived in Benghazi (only visited). Participants treated me like a colleague and were very social during my time at the NFU campus. Furthermore, my educational background and work experience made participants confident in my ability to protect their anonymity. The limited proportion of foreigners present in the country, having a researcher who was not similar to the community may have resulted in participants being more guarded and less open in their responses. My positionality enabled interviewees to have open conversations about mental health which resulted in more meaningful results.

A limitation of the study is the lack of comparability to other community members in Libya outside of one university setting. This is because this study was based on the experiences and perceptions of a specific group of medical students and professors in Libya. Therefore, the findings may not be as relevant to other community members. All participants of the study were in post-secondary school or had already obtained a post-secondary degree. Therefore, the findings of this study may not extend to individuals who do not have a post-secondary education in Libya. Although the findings may not expand to other community members, this study is essential in collecting mental health data within a community that has minor research conducted in this area.

An additional limitation of this study was the difference between interviews done online vs in-person. It was more difficult building rapport with participants on Google Meet than the participants I met in person at NFU. Some participants preferred to keep their cameras turned off and due to the poor internet connection present in Benghazi, the interviews resulted in frequent connection errors (Almaktar & Shaaban, 2021). Despite these limitations, I practiced through observation skills. I analyzed my participant's non-verbal cues such as their tone of voice.

Another limitation of the study was the accessibility of the professor on the study's advisory committee. Notably, due to the busy schedule and burn-out this professor experienced while working in Benghazi, they only attended the first meeting to plan the start of the study at

NFU. The professor did not attend the follow-up meeting to discuss and interpret the findings of the study. Medical students on the advisory team attended meetings and supported all phases of the study. Medical students on the advisory team provided important feedback about how to communicate the results of the study to the community. Having additional feedback from a faculty member would have also been instructive. A professor would have been able to explain the formal steps required to present the findings at the university. To combat this limitation, a summary of the findings of the study was created to present to the professor by the medical students on the advisory committee. Unfortunately, no follow-up meeting was able to be scheduled with the professor. I anticipate visiting Benghazi again in the Winter of 2023. Here I will plan to visit NFU again and discuss my findings with the professor who was a part of the advisory team in person.

References

Abba, Sadeeque & Mohammed, Mohamed & Imam, Mukhtar. (2019). Libya in the Post Ghadaffi Era. *The International Journal of Social Sciences and Humanities Invention.* 2349-2031.

Abdulshafea, M., Rhouma, A. H., Gire, N., AlMadhoob, A., Arshad, U., & Husain, N. (2021). The epidemiology of common mental disorders in Libya: A systematic review. *The Egyptian Journal of Neurology, Psychiatry and Neurosurgery*, *57*(1). doi:10.1186/s41983-021-00408-y

Abdulshafea, M., Rhouma, A. H., Gire, N., AlMadhoob, A., Arshad, U., & Husain, N. (2021). The epidemiology of common mental disorders in Libya: a systematic review. *The Egyptian Journal of Neurology, Psychiatry and Neurosurgery*, *57*(1). https://doi.org/10.1186/s41983-021-00408-y

Abi Hana, R., Arnous, M., Heim, E., Aeschlimann, A., Koschorke, M., Hamadeh, R. S., El-Chammay, R. (2022). Mental health stigma at primary health care centres in Lebanon: qualitative study. *International Journal of Mental Health Systems*, 16(1). https://doi.org/10.1186/s13033-022-00533-y

Abu-Fadil, M., Torrent, J., & Grizzle, A. (2016). *Opportunities for media and information literacy in the Middle East and North Africa.* Göteborg, Sweden: The International Clearinghouse on Children, Youth and Media. Retrieved from chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.gcedclearinghouse.org/sites/default/files/resources/210109eng.pdf

Alhabash, H. (2022). Addressing Mental Health Stigma and Awareness in Middle Eastern Immigrant Families through Culturally Sensitive Practice and Intervention. *Scholar Works.*

Almaktar, M., & Shaaban, M. (2021). Prospects of renewable energy as a non-rivalry energy alternative in Libya. *Renewable and Sustainable Energy Reviews*, 143, 110852. https://doi.org/10.1016/j.rser.2021.110852

Arens, A. K., & Morin, A. J. S. (2016). Relations between teachers' emotional exhaustion and students' educational outcomes. *Journal of Educational Psychology*, *108*(6), 800–813. https://doi.org/10.1037/edu0000105

Bauer, A. & DeBoer, Jonathan & Taylor, Dylan. (2017). Atlas of Reptiles of Libya. *Proceedings of the California Academy of Sciences.* 64. 155-318.

Beltran-Aroca, C. M., Girela-Lopez, E., Collazo-Chao, E., Montero-Pérez-Barquero, M., & Muñoz-Villanueva, M. C. (2016). Confidentiality breaches in clinical practice: What happens in hospitals? *BMC Medical Ethics*, *17*(1). https://doi.org/10.1186/s12910-016-0136-y

Berman, A.L. (2017). Help-seeking among Men: Implications for Suicide Prevention. *Semantic Scholar.*

Bhugra, D., Till, A., & Sartorius, N. (2013). What is mental health? *International Journal of Social Psychiatry*, *59*(1), 3–4. doi:10.1177/0020764012463315

Byrne, D. (2021). A worked example of Braun and Clarke's approach to reflexive thematic analysis. *Quality & Quantity*, *56*(56). Springer. https://doi.org/10.1007/s11135-021-01182-y

Carpiniello, B. (2023). The Mental Health Costs of Armed Conflicts—A Review of Systematic Reviews Conducted on Refugees, Asylum-Seekers and People Living in War Zones. *International Journal of Environmental Research and Public Health*, 20(4), 2840. https://doi.org/10.3390/ijerph20042840

Carter, M., & Fuller, C. (2015). Symbolic interactionism. *Sociopedia.isa*, *1*(1). https://doi.org/10.1177/205684601561

Charlson, F. J., Steel, Z., Degenhardt, L., Chey, T., Silove, D., Marnane, C., & Whiteford, H. A. (2012). Predicting the impact of the 2011 conflict in Libya on Population Mental Health: PTSD and depression prevalence and Mental Health Service requirements. *PLoS ONE*, *7*(7). doi:10.1371/journal.pone.0040593

Charlson, F., van Ommeren, M., Flaxman, A., Cornett, J., Whiteford, H., & Saxena, S. (2019). New who prevalence estimates of mental disorders in conflict settings: A systematic review and meta-analysis. *The Lancet*, *394*(10194), 240–248. doi:10.1016/s0140-6736(19)30934-1

Chatmon, B. N. (2020). Males and mental health stigma. *American Journal of Men's Health*, *14*(4). https://doi.org/10.1177/1557988320949322

Chen, S.-P., Koller, M., Krupa, T., & Stuart, H. (2015). Contact in the classroom: Developing a program model for youth mental health contact-based anti-stigma education. *Community Mental Health Journal*, *52*(3), 281–293. doi:10.1007/s10597-015-9944-7

Corrigan, P. W., Bink, A. B., Fokuo, J. K., & Schmidt, A. (2015). The public stigma of mental illness means a difference between you and me. *Psychiatry Research*, 226(1), 186–191. https://doi.org/10.1016/j.psychres.2014.12.047

Dardas, L. A., & Simmons, L. A. (2015). The stigma of mental illness in Arab families: A concept analysis. *Journal of Psychiatric and Mental Health Nursing*, 22(9), 668–679. doi:10.1111/jpm.12237

Daw, M. A. (2017). Libyan healthcare system during the armed conflict: Challenges and restoration. *African Journal of Emergency Medicine*, *7*(2), 47–50. https://doi.org/10.1016/j.afjem.2017.04.010

Daw, M. A., El-Bouzedi, A., & Dau, A. A. (2016). The assessment of efficiency and coordination within the Libyan health care system during the armed conflict-2011. *Clinical Epidemiology and Global Health*, 4(3), 120–127. https://doi.org/10.1016/j.cegh.2015.07.004

Elhadi, M., Buzreg, A., Bouhuwaish, A., Khaled, A., Alhadi, A., Msherghi, A., … Khaled, A. (2020). Psychological impact of the Civil War and covid-19 on Libyan Medical Students: A cross-sectional study. *Frontiers in Psychology*, *11*. doi:10.3389/fpsyg.2020.570435

Elhadi, M., & Msherghi, A. (2020). COVID-19 and civil war in Libya: the current situation. *Pathogens and Global Health*, 1–2. https://doi.org/10.1080/15575330.2020.1769292

Elyamani, R., Naja, S., Al-Dahshan, A., Hamoud, H., Bougmiza, M. I., & Alkubaisi, N. (2021). Mental Health Literacy in Arab states of the Gulf Cooperation Council: A systematic review. *PLOS ONE*, 16(1). doi:10.1371/journal.pone.0245156

Ethan, Danna & Seidel, Erica J (2013). On the Front Lines of Student Crisis Urban Community College Professors' Experiences and Perceived Role in Handling Students in Distress. *College Student Affairs Journal*; Vol. 31, Iss. 1, 15-26,83-84.

Furber, G., Leach, M., Guy, S., & Segal, L. (2016). Developing a broad categorisation scheme to describe risk factors for mental illness, for use in prevention policy and planning. *Australian & New Zealand Journal of Psychiatry*, *51*(3), 230–240. doi:10.1177/0004867416642844

Furnham, A., & Swami, V. (2018). Mental health literacy: A review of what it is and why it matters. *International Perspectives in Psychology: Research, Practice, Consultation, Hogrefe,* 7(4), 240–257. https://doi.org/10.1037/ipp0000094

Gearing, R. E., MacKenzie, M. J., Ibrahim, R. W., Brewer, K. B., Batayneh, J. S., & Schwalbe, C. S. J. (2014). Stigma and Mental Health Treatment of Adolescents with Depression in Jordan. *Community Mental Health Journal*, 51(1), 111–117. https://doi.org/10.1007/s10597-014-9756-1

Heise, L., Greene, M. E., Opper, N., Stavropoulou, M., Harper, C., Nascimento, M., … Rao Gupta, G. (2019). Gender inequality and restrictive gender norms: Framing the challenges to health. *The Lancet*, 393(10189), 2440–2454. doi:10.1016/s0140-6736(19)30652-x

Holder, S. M., Peterson, E. R., Stephens, R., & Crandall, L. A. (2018). Stigma in Mental Health at the Macro and Micro Levels: Implications for Mental Health Consumers and Professionals. *Community Mental Health Journal*, 55(3), 369–374. https://doi.org/10.1007/s10597-018-0308-y

Idaho State University (2023). *Middle East Facts.* Retrieved from https://www.isu.edu/history/student-opportunities/projects/middle-east-facts/

K, G., N, S., L, K., Z, C., & M, B. (2012). The Beliefs of Teachers Toward Mental Illness. Procedia - *Social and Behavioral Sciences*, 47, 1146–1152. https://doi.org/10.1016/j.sbspro.2012.06.793

Kambarami, M. (2006). Femininity, sexuality and culture: Patriarchy and female subordination in Zimbabwe. South Africa: *Health Systems Trust.*

Khatib, A., & Abo-Rass, F. (2021b). Mental health literacy among Arab university students in Israel: A qualitative study. *International Journal of Social Psychiatry*, 002076402110361. https://doi.org/10.1177/00207640211036167

Korotaev, A., Isaev, L., & Shishkina, A. (2021). Second wave of the Libyan Civil War: Factors and actors. *World Economy and International Relations*, *65*(3), 111–119. doi:10.20542/0131-2227-2021-65-3-111-119

Kratt, D. (2018). Teachers' perspectives on educator mental health competencies: A qualitative case study. *American Journal of Qualitative Research*, 2(1), 22–40. https://doi.org/10.29333/ajqr/5792

Latifeh, Y., Jaredh, M. W., Nasri, L., Shriedy, D., Al-Mahdi, A., & Murtada, M. W. (2021). Knowledge, stigma, and beliefs toward mental illnesses among schoolteachers in Damascus. *International Journal of Social Psychiatry*, 002076402110157. https://doi.org/10.1177/00207640211015701

Lauzier-Jobin, F., & Houle, J. (2021). A comparison of formal and informal help in the context of mental health recovery. *International Journal of Social Psychiatry*, *68*(4), 002076402110049. https://doi.org/10.1177/00207640211004988

Lopez, R., Barateau, L., Evangelista, E., & Dauvilliers, Y. (2017). Depression and hypersomnia. *Sleep Medicine Clinics*, *12*(3), 395–405. doi:10.1016/j.jsmc.2017.03.016

Manwell, L. A., Barbic, S. P., Roberts, K., Durisko, Z., Lee, C., Ware, E., & McKenzie, K. (2015). What is mental health? evidence towards a new definition from a mixed methods multidisciplinary international survey. *BMJ Open*, *5*(6). doi:10.1136/bmjopen-2014-007079

Martyn-Nemeth, P., Penckofer, S., Gulanick, M., Velsor-Friedrich, B., & Bryant, F. B. (2009). The relationships among self-esteem, stress, coping, eating behavior, and depressive mood in adolescents. *Research in Nursing & Health*, *32*(1), 96–109. https://doi.org/10.1002/nur.20304

Masri, R., Kadhum, M., Farrell, S. M., Khamees, A., Al-Taiar, H., & Molodynski, A. (2019). Wellbeing and mental health amongst medical students in Jordan: a descriptive study. *International Review of Psychiatry,* 31(7-8), 619–625. https://doi.org/10.1080/09540261.2019.1670402

McFarland, D. C., Hlubocky, F., & Riba, M. (2019). Update on Addressing Mental Health and Burnout in Physicians: What is the Role for Psychiatry? *Current Psychiatry Reports*. 21(11). https://doi.org/10.1007/s11920-019-1100-6

McGarrity, L. A., Perry, N. S., Derbidge, C. M., Trapp, S. K., Terrill, A. L., Smith, T. W., … MacKenzie, J. J. (2019). Associations between approach and avoidance coping, psychological distress, and disordered eating among candidates for bariatric surgery. *Obesity Surgery*, *29*(11), 3596–3604. doi:10.1007/s11695-019-04038-5

National Institute of Mental Health (NIMH) (2023). Mental Illness. https://www.nimh.nih.gov/health/statistics/mental-illness

Otman, W.A., & Karlberg, E. (2007). The Libyan Economy: Economic Diversification and International Repositioning. *Springer*.

Pedrelli, P., Nyer, M., Yeung, A., Zulauf, C., & Wilens, T. (2014). College Students: Mental Health Problems and Treatment Considerations. *Academic Psychiatry,* 39(5), 503–511. https://doi.org/10.1007/s40596-014-0205-9

Pocock, L. (2017). Mental Health Issues in the Middle East : An Overview. *Middle East Journal of Psychiatry and Alzheimers,* 8(1), 10–15. https://doi.org/10.5742/mepa.2017.93004

Reich, J. A. (2021). Power, Positionality, and the Ethic of Care in Qualitative Research. *Qualitative Sociology*, *44*. https://doi.org/10.1007/s11133-021-09500-4

Rennis, Lesley & Mcnamara, Gloria & Seidel, Erica & Shneyderman, Yuliya. (2013). Google It!: Urban community college student use of the internet to obtain self-care and personal health information. *Education Resources Information Center.*

Rhouma, A. H., Husain, N., Gire, N., & Chaudhry, I. B. (2016). Mental Health Services in Libya. *BJPsych. International*, *13*(3), 70–71. doi:10.1192/s2056474000001288

Roome, E., Raven, J., & Martineau, T. (2014). Human resource management in post-conflict health systems: review of research and knowledge gaps. *Conflict and Health*, *8*(1), 18. https://doi.org/10.1186/1752-1505-8-18

Salem, N., & Bayoud, M. (2013). How the Libyan context can shape corporate social responsibility disclosure in Libya. *Journal of Accounting & amp; Marketing*, *02*(03). doi:10.4172/2168-9601.1000105

Scheid, T. L., & Wright, E. R. (2017). *A handbook for the Study of Mental Health: Social contexts, theories, and systems.* Cambridge, United Kingdom: Cambridge University Press.

Solmi, M., Radua, J., Olivola, M., Croce, E., Soardo, L., Salazar de Pablo, G., Il Shin, J., Kirkbride, J. B., Jones, P., Kim, J. H., Kim, J. Y., Carvalho, A. F., Seeman, M. V., Correll, C. U., & Fusar-Poli, P. (2021). Age at onset of mental disorders worldwide: large-scale meta-analysis of 192 epidemiological studies. *Molecular Psychiatry.* https://doi.org/10.1038/s41380-021-01161-7

Stottlemyre, S., & Stottlemyre, S. (2012). Crisis mapping intelligence information during the Libyan Civil War: An exploratory case study. *Policy & amp; Internet*, *4*(3–4), 24–39. doi:10.1002/poi3.9

Tijdink, J. K., Vergouwen, A. C., & Smulders, Y. M. (2014). Emotional exhaustion and burnout among medical professors; a nationwide survey. BMC Medical Education, 14(1). doi:10.1186/1472-6920-14-183

Turton, R., Chami, R., & Treasure, J. (2017). Emotional Eating, Binge Eating and Animal Models of Binge-Type Eating Disorders. *Current Obesity Reports*, *6*(2), 217–228. https://doi.org/10.1007/s13679-017-0265-8

University of Toronto (2023). Course Search. Retrieved from: https://md.calendar.utoronto.ca/search-courses?combine=mental+health&year=All

University of Waterloo (2023). Campus Wellness. Retrieved from University of Waterloo website: https://uwaterloo.ca/campus-wellness/

Wildeman, J. (2021). The Middle East in Canadian foreign policy and National Identity Formation. *International Journal: Canada's Journal of Global Policy Analysis*, *76*(3), 359–383. https://doi.org/10.1177/00207020211049326

Worldometer. (2023). *Libya Population.* Retrieved from https://www.worldometers.info/world-population/libya-population/

Yang, L. H., Kleinman, A., Link, B. G., Phelan, J. C., Lee, S., & Good, B. (2007). Culture and stigma: Adding moral experience to stigma theory. *Social Science & Medicine*, *64*(7), 1524–1535. https://doi.org/10.1016/j.socscimed.2006.11.013

Yassin, A., Al-Mistarehi, A.-H., Beni Yonis, O., Aleshawi, A. J., Momany, S. M., & Khassawneh, B. Y. (2020). Prevalence of sleep disorders among medical students and their association with Poor Academic Performance: A cross-sectional study. *Annals of Medicine and Surgery*, *58*, 124–129. doi:10.1016/j.amsu.2020.08.046

Zarrugh, A. (2018). 'You exile them in their own countries': The everyday politics of reclaiming the disappeared in Libya. *Middle East Critique*, *27*(3), 247–259. doi:10.1080/19436149.2018.1475855

Appendices

Appendix A

Interview Guide(s):

Verbal Consent:

Before we begin this interview, I would like to mention some information that was discussed on the informed consent form**.** You have been invited to participate in this study to discuss the topic of mental health and how you may seek support with any mental health challenges you experience. This study aims to explore your own perception of mental health and how professors support students' mental health at The North African University. Before we start, I would like to state several reminders about the study.

- This interview will take roughly 1 hour to complete.
- Your participation in this study is voluntary. You can end and leave at any time in the interview. If you do withdraw, please let me know in the chat on the video call. You may also let me know by e-mail. Your data will be deleted once you withdraw.
- Please do not hesitate to skip any questions you do not want to answer or do not feel comfortable discussing.
- Your identity will remain confidential. All identifying information will be removed.
- There are no anticipated risks for participating in this study. You will be asked to share your thoughts about the topic of mental health. However, the topic of mental health can be triggering. Therefore, I have added some international mental health supports that can be accessed at the end of this interview.
- You are consenting to the use of anonymous quotations from your interview in published findings.
- The interview today will be recorded in order to make a transcription that will be used for data analysis. You do not have to turn on your camera if you do not wish too. However, if you turn your camera on, it can assist me to better comprehend your responses because of your facial expressions and body language. The recordings will only be accessed by

myself and will be destroyed 1 year after last use for data analysis. The video recordings will be deleted as soon as possible.

- You will have the opportunity to review and approve the transcript associated with your interview
- I will now ask you the consent questions that you completed in the LOI and consent form prior to this interview:
    - With complete understanding of the project, do you consent, of your own free will, to participate in this study?
    - Do you consent to have your interview audio recorded?
    - Do you consent to have your interview video recorded?
    - Do you consent for the utilization of anonymous quotations in evaluation findings?

Are there any questions you would like to ask before we start our interview?

If you do not wish to participate in this study after this information, you my leave and withdraw now.

The following questions I am going to ask you are all going to be in English. However, please feel free to answer in either Arabic or English. Moreover, please do not hesitate to ask me to translate any of the following questions.

I would just like to ask several demographic questions that will help me better understand your background.

a) How old are you?

b) What gender are you?

c) What is your ethnicity?

I will now begin the recording.

Interview Guide for students:

1. I want to start off by asking you to please tell me about yourself?

    a) What does your day-to-day life look like?

    b) What are some of your hobbies?

    c) What do you enjoy doing in your spare time?

2. Describe your program of study at NFU and your current course work?

    a) Can you describe how you handle all your academic tasks?

    b) What concerns or challenges do you have during your courses?

    c) How do you cope with these challenges?

3. How has living in Benghazi impacted you personally?

    a) Only if you are comfortable answering, how did the 2011 and 2014 conflict in Benghazi impact you, your family, and extended family?
    b) What about your academics?
    c) What impacted you the most during this time?
    d) How did you cope with these challenges?

4. The next questions I am going to ask relate to the concept of mental health.

    a) What does mental health mean to you? Can you describe the concept of mental health? What do you associate with mental health?

    b) How would you discuss the topic of mental health with your family?

    c)How would you discuss the topic of mental health with a stranger?

    d)What do mental health challenges mean to you? What do you think a mental health challenge or concern would like? If you thought someone you loved had a mental health challenge – how would you deal with it?

5. What would you do if you needed mental health support?

    a) Who would you call if you were experiencing mental health challenges?
    b) Where would you seek treatment for mental health challenges? What are your thoughts about the psychiatric hospital in Benghazi? What do others community members think of this hospital?
    c) What might cause you to hesitate to ask/seek mental health supports?

6. Describe how NFU and your instructors support your mental health?

    a) How would you approach your instructors for mental health support?
    b) Describe any mental health supports provided at NFU that you are aware of?

7. What would you change or add to NFU to promote positive mental health across students?

    a) What mental health supports would you recommend your instructors and NFU implement?
    b) What would you recommend your teachers discuss/educate about mental health?

8. Can you explain to me how you would try and promote positive mental health in Benghazi?

    a) What tools would you use to achieve this?

    b) What challenges would you encounter in the community trying to accomplish this?

9. How would you change the way the topic of mental health is handled in the future?

    a) How would you promote positive mental health after you graduate?
    b) How would you discuss the topic of mental health when you start to work with your medical degree?

10. I have now finished asking all the questions. Before ending this interview, is there anything you would like to add or share with me?

    Thank you for participating in this study and sharing your experiences. If you are interested in following up with me, please contact myself at njelabba@uwaterloo.ca. If you would like the results of this study, I will share a summary of findings via e-mail after my final thesis defence.

Interview Guide for NFU instructors:

1. I want to start off by asking you to please tell me a bit about yourself?

    a) What does your day-to-day life look like?

    b) What are some of your hobbies?

    c) What do you enjoy doing in your spare time?

2. Describe your role at NFU?

    a) What courses do you teach and at what levels?

    b) Can you describe the academic workload given to your students?

    c) Can you explain to me any concerns or challenges your students have during their courses?

    d) How do you assist them to cope with these challenges?

3. How has living in Benghazi impacted you personally?

    a) Only if you are comfortable answering, how did the 2011 and 2014 conflict in Benghazi impact you, your family, and extended family?
    b) What about your occupation?
    c) What impacted you the most during this time?

d) How did you cope with these challenges?

4. The next questions I am going to ask relate to the concept of mental health.

a) What does mental health mean to you? Can you describe the concept of mental health? What do you associate with mental health?

b) How would you discuss the topic of mental health with your students?

b) How would you discuss the topic of mental health with your family?

c)How would you discuss the topic of mental health with a stranger?

d)What do mental health challenges mean to you? What do you think a mental health challenge or concern would like? If you thought someone you loved had a mental health challenge – how would you deal with it?

5. Can you tell me how you support your student's mental health in NFU?

a) Can you explain to me how you would proceed if a student approaches you with a mental health challenge?

b) Can you tell me about the mental health supports provided at NFU?

c) Can you explain to me where you would recommend your students go to receive mental health treatment? Can you tell me your own thoughts about the psychiatric hospital in Benghazi? What do other community members think of this hospital?

d) Can you tell me any reason you would hesitate to recommend students seek treatment or other supports?

6. If you don't mind sharing, can you describe if you have you ever had a time when a student approached you with a mental health concern?

a) If a student has never approached you, how would you handle the students request for mental health support?

7. What challenges do you face when trying to support your students' mental health?

a) Ex: lack of resources, how mental illness is handled in the community, etc.

8. What would you change or add to NFU to promote positive mental health for all students?

a) What mental health supports would you recommend be implemented?

b) What would you recommend be taught in the curriculum to discuss/educate students about mental health?

9. Can you explain to me how you would try to promote positive mental health in Benghazi?

a) What tools would you use to achieve this?

b) What challenges would you encounter in the community trying to accomplish this?

10. How would you discuss the way the topic of mental health is handled in the future for your students?

a) What advice would you give your students about seeking mental health support after they graduate?

b) How would you advise them to promote positive mental health after they graduate and find employment in the health/medical field?

11. I have now finished asking all the questions. Before ending this interview, is there anything you would like to add or share with me?

Thank you for participating in this study and sharing your experiences. If you are interested in following up with me, please contact myself at njelabba@uwaterloo.ca. If you would like the results of this study, I will share a summary of findings via e-mail after my final thesis defence.

Appendix B

Facebook Recruitment Post

Hello North African University (NFU),

My name is Nada E-abbar and I am a master's student working under the supervision of Jennifer Yessis in the Department of Public Health Sciences at the University of Waterloo Canada. As part of my master's degree, I am conducting a research study on the meaning of mental health amongst medical students and instructors in Libya.

The study seeks to understand students and teachers' perception of mental health. Moreover, the access to mental health supports for students. Given your experiences as medical students and instructors, I feel that you are well suited to provide insight into this topic and would like to invite you to participate in this study.

If you decide to volunteer for this study, your participation will consist of a one-on-one semi-structured interview that will take approximately 60 minutes of your time. During the interview you will be asked to share your thoughts about the topic of mental health. Moreover, to discuss how students are supported when trying to access mental health supports at NFU. With your permission, I would like to audio-record the interview to ensure accurate transcription and analysis.
This study has been reviewed and received ethics clearance through a University of Waterloo Research Ethics Board (REB#44622).

If you would like to participate, or you require additional information to assist you in reaching a decision about participation, please do not hesitate to contact me at njelabba@uwaterloo.ca or privately message me on my Facebook account (Nada Elabbar's). You may also contact my supervisor at jyessis@uwaterloo.ca. Please do not respond to this post publicly to ensure your confidentially is protected.

Sincerely,
Nada El-abbar

Appendix C

North African University Ethics Request Form

Request For using Basic Medical Science Research Lab نموذج اجراء بحث بمعمل الأبحاث

Basic **بيانات أساسية: Information:**

Name of Applicant .....Nada El-abbar ..... اسم مقدم الطلب

Principal Investigator (PI) باحث رئيس

Co-Investigator (Co-I) باحث مساعد

Student طـالب

Other اخرى

Project ..... رقم المشروع: Rank: .....M.Sc.....: الدرجة العلمية no.:

Department: ..... القسم العلمي: Faculty: .....Medicine.....: الكلية

The University of ..... :الجامعة / المؤسسة
University .....Waterloo

Email:.....njelabba@uwaterloo.ca... :البريد الالكتروني Phone No.....519-590-1007..... :رقم الهاتف

Introduction and Research Question مقدمة وأهداف البحث

There is a large need to explore the understanding and perception of mental health in students in Libya. Overall, there is a lack of research in public health and mental health policy in Libya (Elhadi & Msherghi, 2020). In Libya there is an emphasis on emergency care; mental health problems are preferred to be kept concealed due to stigmatization of psychiatric conditions (Elhadi & Msherghi, 2020). Overall, health authorities must work together to help re-engineer the healthcare system in Libya (Elhadi & Msherghi, 2020). . Medical students are the future healthcare professionals and their view of mental health is important to explore as they will play a role in how the healthcare system evolves in Libya. Studies have found that instructors play a part in educating their students about mental health and providing mental health supports to them (Ethan and Seidel, 2013).

The proposed study is framed by the following research questions:

1. How do students and faculty at The North African University (NFU) perceive mental health?
2. What do medical students at NFU experience when seeking mental health supports/treatments?
3. How does NFU and how do individual faculty members support student mental health?

المنهجية

Methodology

Symbolic interactionism is a theoretical framework that can help explore the view of mental health in NFU students and instructors. Moreover, the orientation has helped frame the research questions and objectives of the study. Furthermore, this lens has assisted with the design of the interview guides.

Notably, the interviews conducted with students and instructors will be transcribed and analysed. The interviews will produce transcripts of participants' perceptions and experiences regarding mental health. I anticipate using a thematic inductive approach for the data analysis of the proposed study. Coding of transcripts will be done through the NVivo software program. Furthermore, symbolic interactionism influenced the foundation of the study and will be applied in the interpretation of analysis

Tools and Materials Needed For The Research الوسائل والمواد والأدوات المطلوبة للبحث

- Laptop, access to internet, Google Meet, Zoom, and private room to conduct interview

Tools and Materials Required from BMS Lab الوسائل والمواد والأدوات المطلوب من الكلية توفيره.

-Access to internet, MS teams, Zoom, and private room to conduct interview

ملاحظات Notes	التخصص Specialty	اسماء فريق البحث Research Team
	Research Lead	**Nada El-abbar**
	Translator	**Taleb El-Reoy**
	Translator	**Lujain El-Shakei**

هل ترغب بترشيح مشرف / مشرف مساعد من الجامعة؟

Would You Like to Nominate Supervisor/Assistant Supervisor from NFU?

☐ No / لا ☐ Yes / نعم

المدة بالشهور Duration in months												نوع النشاط Activity Type	رقم المرحلة Phase No.
12	11	10	9	8	7	6	5	4	3	2	1	Data Collection	**1**

Time Frame

أتعهد أنا مقدم البحث .....Nada Jalal El-abbar..... أن أقوم بالأشارة للجامعة الليبية الدولية في البحث الاساسي وجميع ما ينشر عنه، كما أتعهد بالحفاظ على كافة الادوات والاجهزة المستخدمة خلال فترة العمل بها، وأتحمل أنا الباحث تكاليف اي عطل يطرأ على الأجهزة المستخدمة في البحث نتيجة الإهمال او سوء الاستخدام كما اتعهد بالمحافظة على سرية بيانات المشاركين والالتزام بأخلاقيات البحث العلمي.

Applicant's Signature

توقيع مقدم الطلب
اعتماد الجهة التابع لها البحث

Appendix D

LOI and Consent Form

University of Waterloo

Date

Dear Participant:

You are invited to participate in an online study to discuss the topic of mental health. The purpose of this study is to explore your own perception of mental health. Furthermore, how instructors support their student's mental health. Participants must be a student or teacher in the faculty of medicine at The North African University (NFU). The project is being led by M.Sc. candidate, Nada El-abbar.

INFORMATION

The interview will be approximately 1 hour and will be held on MS teams of Zoom. Your participation in this study is voluntary. You may end the interview at any time with no penalty. If you choose to withdraw from participating in this study, please tell me verbally or send an e-mail at njelabba@uwaterloo.ca. I wishs to review your thoughts and experiences about the topic of mental health amongst medical students and instructors in The Middle-East. Moreover, to discuss how instructors assist students who may need mental health support. Findings from the thoughts and perspectives collected today will be analyzed and used to write my final thesis. My thesis will be shared with my committee team and NFU. Moreover, I also plan to publish findings in a journal.

CONFIDENTIALITY

This online interview will be recorded, and transcribed. For the duration of this interview, you can decide to turn off your camera if you wish. If you keep your camera on, the video conferencing platform automatically video records in addition to audio recordings. Please know, that only the audio recordings will be kept for transcription and the video recording will be deleted as soon as possible. You will be assigned a pseudonym-so that your identity remains confidential. You will be asked to provide your age, gender, ethnicity, year of study, occupation, and work experience. Audio and video recordings will be permanently deleted 1 year after last

use for data analysis. I will also go over the completed transcript with the participant and alter any information that may breach confidentiality.

All information will be kept on the researcher team's laptop and data will be password protected. Your name and any other identifying information will not be linked with stored notes, or any direct quotations used in finding's. Only the research team can have access and view the information you share. The research team includes Nada El-abbar (team lead), and Taleb El-roey or Lujain El-shakei (translator).

BENEFITS AND RISKS

Your participation in this study will guide to helpful insights into improving awareness for the topic of mental health in the Middle-East. By sharing the learning with others, this data can change the way mental health supports are provided amongst Middle-Eastern students in the future. Moreover, to allow students to voice what mental health supports they wish to see implemented. Data from this study will be used in my final M.Sc. thesis and is hoped to be published in an academic journal. Publication of this study will also add to academic literature, improving scholarly knowledge and clinical governance of mental health in Libya. You may skip any questions that you do not desire to answer and may leave at any time during the study. If you withdraw from the study all your data will be deleted.

CONSENT FORM

By signing this form, you are providing consent to participate in this study. You are consenting to attending and participating in the interview. You are consenting to the audio/video recording of yourself for the cause of producing precise notes/transcription, and you are consenting to the use of anonymous quotations from your contributions in published findings. You can withdraw from this study at any point by letting the researcher know. You will not be given the opportunity to evaluate or approve quotations prior to their use.

This study has been assessed and granted ethics clearance through a University of Waterloo Research Ethics Committee. If you feel you have not been treated in accordance with the study

description, or your rights as a participant in research have been breached during this study, please reach out to the Office of Research Ethics, at 1-519-888-4567 ext. 36005 or ore-ceo@uwaterloo.ca.

For any further information about participating in the study please contact me by email at njelabba@uwaterloo.ca.

You will be sent a zoom meeting link or MS teams link once your interview has been scheduled. You may decide which platform is more suitable for you. Join the interview by clicking the link I will send. You can choose to join the meeting with video or join without video. You are not required to have a Zoom account to participate in this interview. You will need to have an MS teams account if you wish to have you interview done via MS teams.

Yours Sincerely,

Nada El-abbar

With complete understanding of the project, I consent, of my own free will, to participate in this study.

☐YES ☐NO

I consent to have my interview audio recorded.

☐YES ☐NO

I consent to have my interview video recorded.

☐YES ☐NO

I consent for the utilization of anonymous quotations in evaluation findings.

☐YES ☐NO

Participant Name: _____

Participant Signature: _____

Witness Name: _____

Witness Signature: _____

Date: _____

Please note the context of this study involved sensitive topics such as mental health and war/conflict and may result in the discussion of mental health challenges. Due to this, I have provided a mental health support that can be accessed in Libya to all participants below

MantraCare: Online therapy in Libya: https://mantracare.org/libya/online-therapy

-

Appendix E

Confidentiality Agreement

Confidentiality Agreement

This agreement is between:

[Nada El-abbar M.Sc candidate at The University of Waterloo]
and [***** at The North African University] for
[translating interviews for, "The Perception of Mental Health Amongst Medical Students and Instructors in Libya", research study]

Details of position:

- Attending 21 virtual interviews on MS teams or Zoom (1 hour duration for each)
- Translating Arabic interview audio into English text

I agree to:

1. To ensure that all research information shared with me will be confidential.
2. Under no circumstance will I share the research information discussed with me during this study with another individual other than the lead researcher (Nada El-abbar).
3. I ensure to secure all physical and electronic research information that is kept with me (using password protected files).
4. When I have finished all my tasks or when asked, I will return all research information to the lead researcher (Nada El-abbar).
5. All information that is not returnable to the lead researcher will be destroyed.
6. I ensure to not use any identifiable information when translating data

Transcriptionist/Research staff:

(Full Name)

(Signature)

(Date)

I agree to:

1. To give detailed instructions and communicate expectations to ensure confidentiality is not broken for this research study.

2. To support my translator and help make sure they keep confidentiality throughout the study.

Researcher:

(Full Name)

(Signature)

(Date)

Appendix F

Statement of Appreciation:

I would like to thank you for participating in this study. The purpose of the study was to explore the perceptions of mental health amongst medical students and medical instructors in The North African University (NFU).

For this study, you have been given a study number to be de-identified. The transcripts will be kept for 1 years after data collection. The video files will be deleted after they have been reviewed with the transcripts. All information is kept on my laptop and data is stored via password protection. Your name and all identifying information are not associated with stored notes, or any direct quotations presented in finding's. Only myself and the translator can access the data. You may withdraw your data up until publication' 3-months following data collection

A 1-page study report summary will be created and sent to you after August 2023. For any further questions about your participation in the study please contact myself, Nada El-abbar at njelabba@uwaterloo.ca or (519)-590-1007.

This study has been reviewed and received ethics clearance through a University of Waterloo Research Ethics Board (REB#44622) If you sense you have not been treated in alignment with the study explanation that was given prior, or your rights as a participant in research have been broken in this study, please contact the Office of Research Ethics, at 1-519-888-4567 ext. 36005 or reb@uwaterloo.ca.

Appendix G

Letter of Invitation from NFU

Letter of Invitation

Date: August 13, 2022

Dear Nada El-abbar,

We are happy to inform you that we have reviewed and approved your thesis proposal, "The meaning of mental health amongst medical students and instructors in Libya: A qualitative study".
On behalf of The Faculty of Applied Medical Science at The Libyan International Medical University, we are pleased to invite you to conduct your research study at the faculty of AMS.

In issuing this invitation, we understand that the duration of your visit will be between October 2022 to December 2022. We are looking forward to your arrival. If you have any questions, please contact Dr. Iman Fergani at (218)-300-2884 or at iman.fergani@limu.edu.ly