Musculoskeletal Pain and Quality of Life among Rohingya Refugees at Different Camps in Ukhiya

Faculty of Medicine

University of Dhaka

By

Md. Abdul Alim

Roll: 1279

Reg. No: 10277

Session: 2017-2018

Student of Bachelor of Science in physiotherapy

Saic College of Medical Science & Technology

Department of Physiotherapy

Saic Tower, M/16, Mirpur-14, Dhaka, Bangladesh

We the undersigned certify that we have carefully read and recommended to the faculty of Medicine, University of Dhaka for acceptance of thesis dissertation entitled.

Musculoskeletal Pain and Quality of Life among Rohingya Refugees at Different Camps in Ukhiya

Submitted by Md. Abdul Alim for the partial fulfillment of the requirements for the degree of Bachelor Science in Physiotherapy (B.Sc. PT).

………………………….

Zakia Rahman

Lecturer, Department of Physiotherapy, SCMST

Mirpur-14, Dhaka.

Supervisor

……………………………

Md. Shahidul Islam

Assistant Professor & Head

Outdoor patient service

Department of Physiotherapy, SCMST

Mirpur-14, Dhaka.

……………………………

Zahid Bin Sultan Nahid

Assistant Professor & Head

Department of Physiotherapy, SCMST

Mirpur-14, Dhaka.

……………………………

Abid Hasan Khan

Lecturer

Department of Physiotherapy, SCMST

Mirpur-14, Dhaka.

………………………………………………

Dr.Abdul Kasem Mohammad Enamul Haque

…………………………..

Md. Furatul Haque

Principle,

Lecturer,

Saic college of medical science and technology

Department of Physiotherapy, SCMST

SCMST, Mirpur-14, Dhaka

DECLARATION

This work has not previously been accepted in substance for any degree and isn't concurrently submitted in candidature for any degree. This dissertation is being submitted in partial fulfillment of the requirements for the degree of B.Sc. in Physiotherapy. I confirm that if anything identified in my work that I have done plagiarism or any form of cheating that will directly awarded me fail and I am subject to disciplinary actions of authority. I confirm that the electronic copy is identical to the bound copy of the Thesis.

In case of dissemination the finding of this project for future publication, research supervisor will highly concern, it will be duly acknowledged as graduate thesis and consent will be taken from the physiotherapy department of Saic College of Medical Science and Technology (SCMST).

……………………………   ……………………..

Signature   Date

Md. Abdul Alim

Student of 4th professional B.Sc. in physiotherapy

Reg No: 10277

Roll: 1279

Session: 2017-2018

CONTENT

ACKNOWLEDGEMENT

ACRONYMS

aIRR: adjusted incidence rate ratio's

BDHS: Bangladesh Demographic Health Surveys (BDHS)

CIC: Camp in charge.

MHPSS: Mental Health and Psychosocial Support.

MSK-HQ: Musculoskeletal Health Questionnaire.

PCGA: Per Capita Greening Area.

PTE: Person English test

PTSD: Post- traumatic stress disorder

RRRC: Refugee Relief and Repatriation Commissioner.

SF-12: Short form Survey 12

UN: United Nations.

UNHCR: United Nations High Commissioner Refugees

WHOQOL-BREF: World health organization quality of life-brief Version.

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Abstract

Background: Rohingya had fled violence in Myanmar Rakhine state and sought refugees across the border in Bangladesh. Physical and psychological problems which are associated with poor health outcomes are likely to affected refugees. *Objective:* To identify musculoskeletal complaints and quality of life among rohingya refugees of different camps at Ukhiya Upazila. *Method:* The cross sectional study was conduct from January to June 2023. Nordic Questionnaire used for musculoskeletal complaints and the modified SF-12 Questionnaire used for quality of life. SPSS 25 was uses for statistical analysis. *Results:* A total of 120 rohingya refugees completed the survey questionnaires. Rohingya refugees have more musculoskeletal complaints than quality of life. *Conclusion:* From this study, it can be seen that most of the rohingya refugees have musculoskeletal complaints and small number of rohingya refugees have quality of life.

Key words: *Musculoskeletal pain, Quality of life, Rohingya refugees.*

CHAPTER-I	INTRODUCTION

1.1 Background:

According to researchers, a person was considered a refugees if they live outside their country of nationality or habitual residence, can demonstrate a well-founded fear of persecution on specific grounds and do not receive protection from their home country. One of the most oppressed communities in the world is the Rohingya in Myanmar. The bulk of them are stateless and are not regarded as citizens by the government of Myanmar. Rohingyas have been suffering for more than 200 years. The history of the rohingya was divided into three periods; pre-colonial, colonial and post-colonial. In pre- colonial times, the autonomous Arakan State (now known as Rakhaine State). Rohingyas and Arakanese coexisted peacefully in the pre-colonial era (Milton et al.,2017).

Researcher said that, refugees are the authorized offices of National Resettlement Agencies also known as voluntary agencies) designated by the federal government to resettle refugees around the United States (Henry et al., 2019).

Author state that, there seem to be already 11.5 million refugees worldwide and that number continues to leave every day. In today's world, the refugee problem is a global one of which the rohingya refugees in Bangladesh are the most disadvantage. As of late February 2018, more than 700,000 Rohingya had fled violence in Myanmar, Rakhine state and sought refuge across the border in Bangladesh. Physical and psychological problems which are associated with poor health outcomes are likely to affected refugees. Due to previous physical injuries, musculoskeletal discomfort often manifested as low back and neck pain. Very common in the refugees community and in dire need of treatment. The most serious medical conditions that require attention are musculoskeletal disorders. Otherwise, it will be difficult for the host society to meet the health needs of the refugees (Ahmed et al., 2021).

According to author, referred to the state of psychological well-being or the absence of mental disorders. It referred to a person's mental, behavioral a cognitive health. It also affected our daily activities, interpersonal connections and physical well-being (Naher, Dey and Parvin.).

Author noticed that, Face with environmental crises, both natural and man-made, such as war, state-sponsored violence, political persecution, natural disasters, as well as loss of family members, forced migration and resettlement, are major contributors to the psychological tendencies of refugees. Illness and disorder. Because of these experiences, this population is 10 times more likely to experience disorders like post-traumatic stress disorder than the general population. They also had more mental health problems. Among refugees, depressive disorders, anxiety disorders, transient reactive psychosis and adjustment reactions are the most prevalent illnesses (Chang, 2015).

Along with physical and mental health problems rohingya refugees suffer from a variety of acute and chronic health disorder, according to author (Rahman et al., 2020).

Researchers said that, the prevalence of mental health problems among refugees was identified as a significant public health concern. Refugees are people who have been forced to flee their homeland or natural habitat and are unable to do so in a safe manner. These people lacked the power to defined themselves and feared persecution because of their race, religion or nationality. While many rohingya refugees suffered from physical illness due to wounds or malnutrition a greater number were experiencing psychological trauma. As a result, there is growing concern about the impact of these on vulnerable groups mental health. Major depressive disorder, anxiety disorder, post-traumatic stress disorder are the most common mental health problems affected refugees worldwide according to previous studies (Kaur et al., 2020).

Researchers noticed that, Rohingya refugees were denied medical care for physical or sexual abuse in Myanmar. Emotional and verbal abuse were also significant factors in these violent incidents. These narratives were repeated and verified by rohingya group leaders in various sources. These incidents of physical, sexual and emotional abuse had lasting effects on survivor's mental health and were said to be associated with a possible diagnosis of mental health problems including post traumatic disorder.

Patients with post traumatic disorder showed significant cognitive, emotional and behavioral responses to stimuli, leading to hallucinations, intense anxiety and escape or hostile behavior. In extremes these symptoms resulted in social isolation as well as emotional numbness and reduced participation in daily activities (Hossain et al., 2021).

Researchers noticed that, over the past ten years, the number of refugees worldwide has steadily increased and these concerns about mental health have intensified. Traumatic events, difficulty adjusting to a new culture, prejudice from peers, parental separation and cultural attitudes of mental illness in their country of birth all contributed to mental health problems. As a result of these experiences, adolescent refugees are at higher risk for mental disorder including post traumatic disorder, depression and anxiety which make it more difficult for them to settle in the United States. Current approaches to addressing mental illness in adolescent refugees center on school intervention, approaches to commitment therapeutic mental health professionals and cultural sensitivity training (Lloyd, 2019).

1.2 Justification of this study:

The majority of the ethnic group known as the Rohingyas are Muslims. They have been residents of Myanmar for millennia. Almost every one of them in Rakhine. They speak Rohingya dialect. Myanmar does not consider them the country's own ethnic groups and so the Rohingya have been denied citizenship since 1982.Thus the Rohingyas have become stateless and refugees. Since 1970s, nearly one million Rohingya have fled from Myanmar to Bangladesh being subject to physical and mental persecutions. Currently, more than 1000 people have been killed brutally in Myanmar in recent violence. Their houses have been burnt. Many women have been raped. The number of refugees in the world is about 11.5 million and still increasing day by day. Refugees are a global issue in today's world and Rohingya refugees in Bangladesh are one of the most vulnerable group among them. By the end of February 2018, about 700,000 Rohingya had crossed the border of Myanmar to seek shelter in Bangladesh during the violence occurring in Myanmar's Rakhine state. The Rohingya have been subjected to various forms of physical and sexual abuse during the Rakhine state's violence, which has left them with a variety of physical and mental problems. The Rohingya refugees are homogenous population with complex health needs, they experienced trauma before and during their deleterious journey. The major health problems among the refugees includes communicable (Cholera, diarrhea, hepatitis, typhoid etc.) and non-communicable (arthritis, heart disease, respiratory disease, musculoskeletal problem) diseases, malnutrition and mental illness. A lot of research has been done worldwide research on rohingya refugees and we have done it in Bangladesh as well. So I try to identify the musculoskeletal pain and quality of life among rohingya refugees at different camps in Ukhiya. It will be beneficial to know about them from my work for research. So I am doing these studies. I think that if someone wants to research this topic in the future. My research will inspire them more and they will be able to take a lot of information from that research. So I will focus on rohingya refugees with their problems. In this case, our physiotherapy profession will be expanded.

1.3 Research Question:

What are the musculoskeletal pain and quality of life among rohingya refugees at different camps in Ukhiya?

1.4 Objectives of study:

General objective:

To identify musculoskeletal pain and quality of life among rohingya refugees of different camps at Ukhiya Upazila.

Specific objectives:

I. To find out musculoskeletal pain among rohingya refugees living at Ukhiya Upazila under Cox's Bazar district.
II. To explore quality of life among the rohingya refugees living in ukhiya.
III. To evaluate health status of the participants.
IV. To explore the socio-demographic characteristics of the rohingya refugees.

1.5 Conceptual framework:

Independent variable

Dependent variable

Musculoskeletal pain

1**.** Pain in joints and muscles.

2. Decrease range of motion

Socio demographic factor:
Age, Gender, Education level, monthly income, Marital status, Religion, Types of family

Quality of life

1. Movement
2. Anxiety, depression
3. Sleep disturbance
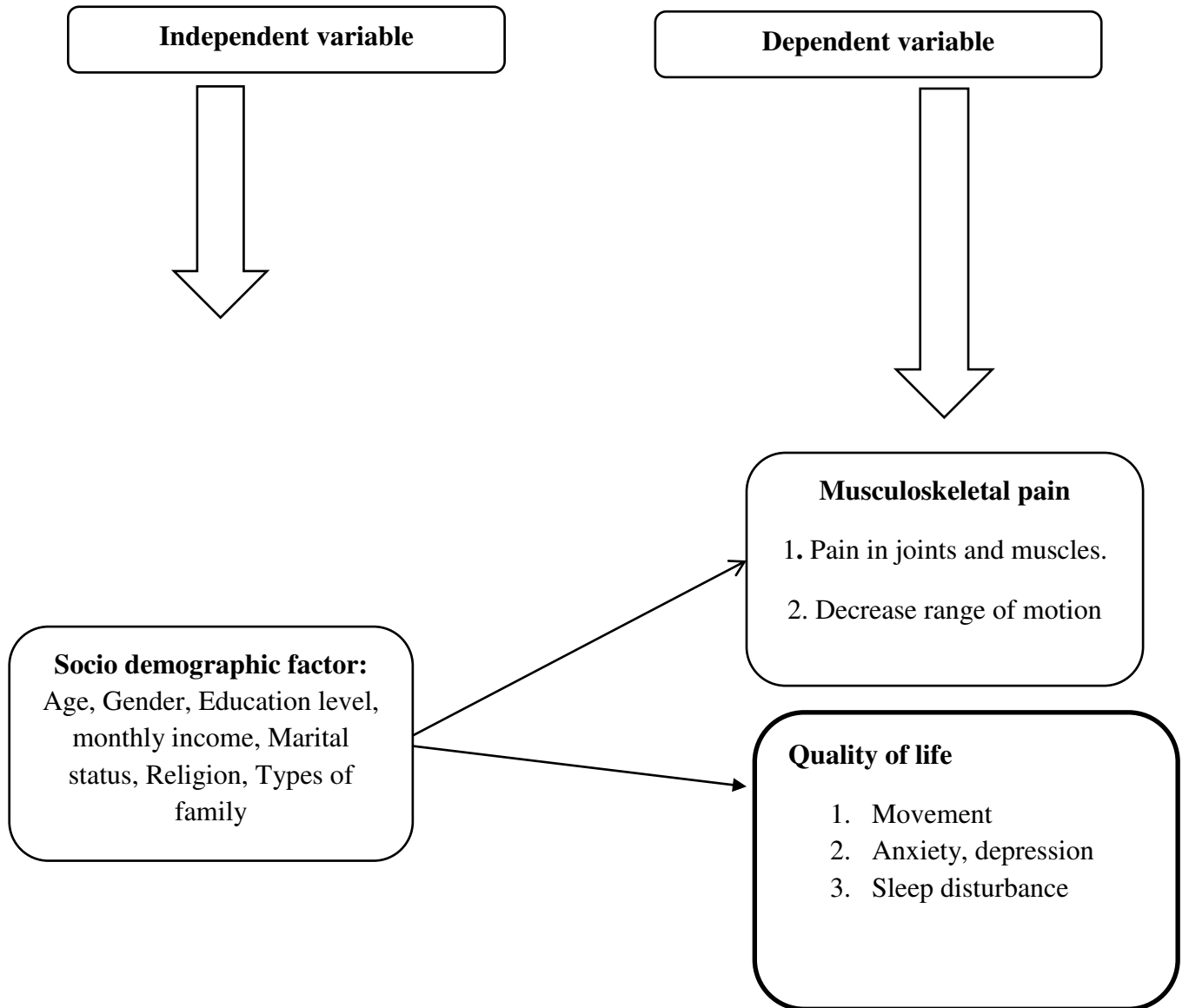
1:6 Operational definition of the variables:

Musculoskeletal pain: Musculoskeletal Pain is defined as acute or chronic pain that affects bones, joints, ligaments, tendons or muscles, and nerves. Pain can occur anywhere in the body from head to foot, including the spine and upper and lower extremities. An injury such as a fracture may cause sudden, severe pain with the most common symptoms being pain, fatigue, and sleep disturbance. The pain can also have it throughout the body if the pain is a widespread condition like fibromyalgia. The most common musculoskeletal pain is low back pain. Low back pain is the main contributor to the overall burden of musculoskeletal conditions (570 million prevalent cases worldwide, responsible for 7.4% of global YLDs).

Quality of life: WHO defines Quality of Life as an individual's perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns.

Rohingya refuges: The Rohingya people are one of the most persecuted minority groups in the world. Today, they are forced to live life on the margins of society or in confined camps. They often experience sexual violence, repeated infectious diseases, child or bonded labor, arbitrary arrest, detention, or even forced deportation. Following a concerted campaign of extreme violence and killings by the Myanmar authorities against Rohingya people in Myanmar's Rakhine state in August 2017, around 770,000 Rohingya fled to cox's bazar, Bangladesh. One million Rohingya now live in camps in Cox's Bazar, in dire conditions.

Using a straightforward random sample procedure, participants were enlisted in a cross-sectional survey. The information was gathered using a questionnaire that included demographic information, answers to the SF-12 health survey and the Nordic musculoskeletal questionnaire. Calculating the prevalence rate required descriptive statistics. Out of 120 participants, 79.2% were men and 20.8% were women. Participants reported experiencing discomfort in various body parts in 69.3% of cases. The majority of individuals (34.2%) reported lower back discomfort, followed by joint pain in many places (21.7%). Mild pain made up 38.5% of the total amount of discomfort, moderate pain made up 35.2%, and severe pain made up 2.4% (sohel et al., 2022).

In Cox's Bazar, Bangladesh, between November and December 2017, a questionnaire was created in order to conduct in-person interviews with Rohingya refugees. From four sizable refugee camps, families were chosen using convenience sampling. Primary respondents were interviewed and given information on themselves and 6268 additional family members, of whom 4163 (66.4%) were children under the age of 18, representing 1634 families, aged 10-90 (median 32) and 56% male. Of all primary responders, only 736 (45%) were knowledgeable about how to manage diarrhea; 882 (54%) relied on unqualified village "doctors" for care; and 547 (33.5%) indicated that a member of their family had been injured during the preceding six months, with 8% (42/547) of injuries being fatal. In addition to reporting family deaths in the previous 12 months, 172 primary respondents (11.8%) also said they had experienced one 70% of all deaths (134/192) involved men, and 44% (85/192) of all deaths were allegedly homicidal (Rahman et al., 2020).

A cross-sectional investigation was carried out. For the purpose of this study, 149 samples overall were easily chosen from the refugee camps. Data was gathered utilizing a variety of questionnaire types. Data analysis, which was presented in tables, pie charts, and bar charts, utilized descriptive statistics. The study's findings revealed that 45.6% of participants had various issues, followed by 16.8% of individuals who had additional particular issues such musculoskeletal pain, vision issues, and gastric ulcers.

The most prevalent personal health issue, affecting 11.4% of the study group, was urinary tract infection. 10.7% of patients had hypertension, 6% had a respiratory infection, 3.4% had nutritional deficiencies, 4.75% had diabetes mellitus, and 1.3% had sanitation and hygiene issues. 68.4% of participants were between the ages of 15 and 59. Only 16.1% of participants in the research expressed satisfaction with the quality of the services they received, while 37.6% felt that they needed better services, such as more laboratory tests, radiological imaging, medicine, and doctors (Masud et al., 2017).

The purpose of this research was to identify needs and gaps for young refugees affected by violence who were residing in long-term settlement camps in Thailand. It also addressed concerns connected to reproductive health and quality of life. Only one-third of young people, male and female combined, said they got any information from health workers despite the fact that over 60% of them said they would like to. While friends were the most common source of knowledge for young men (29/143, 20.3%), mothers provided reproductive health information to thirty-two percent of young women (43/136). The majority of interviewees (279/395, or 70.6%) requested more classes on relationships, puberty, and sex education (Benner et al., 2010).

A total of 187 patients received an initial refugee examination, and 122 (mean age = 26, 46% female) had established care at 8 months or later. Refugees were mostly Asian (72%), mostly from Malaysia (25%) and Myanmar (43%) respectively. Burmese, Rohingya, and Karen were the most often used languages. The most common health-related findings included positive screening for mental health conditions at the initial visit (12%), latent TB (14% initially and 22% of those who established care), anemia (12%, 17% respectively), dyslipidemia (14%), smoking (24%), betel nut use (11%), elevated lead (27%), dental problems (50%) and Vitamin D deficiency (8%). A lot of people had weight problems, including obesity (11%, 13% respectively), underweight Musculoskeletal (23.7%) and gastrointestinal (17.2%) health systems were prevalent. For those who started receiving care, the screening rates for cervical cancer, colon cancer, and breast cancer were 57.8%, 58.3%, and 75%, respectively (kotovicz, Dinh and Sorenson, 2018).

postal survey questionnaire with a cross-sectional design. Minimum age of 18, Syrian refugee, and arrival in Norway between 2015 and 2017.Number size=902 participants (participation rate 10%) were chosen at random for the study sample from full population registries. Last year, CP was assessed using 10 items related to pain that persisted for at least three consecutive months. The HSCL and HTQ measures were used, respectively, to measure the symptoms of anxiety, depression, and PTSD. The analyses employed ordered and binomial logistic regressions. With the Wald test for interaction, gender was examined as an effect modifier. 43.1% of people had severe CP. There was substantial evidence linking greater levels of CP to conditions like PTSD, depression, and anxiety. In fully adjusted regression models that included both CP and mental health variables, CP was highly related with poor perceived general health, whereas mental health exhibited much lesser relationships. The correlation between mental health (depression and anxiety) and functional impairment was extremely gender-specific, with considerable relationships in males but not in women. With no difference across genders, CP was significantly linked to functional disability (Nissen et al., 2022).

From the Bangladesh Demographic Health Surveys (BDHS) conducted in 2014 and 2017/18, respectively, this study comprised 6,610 and 7,357 under-5-year-olds. The Chi-square test of independence was used to determine the relationships between the coexistence of stunting, wasting, and underweight and independent variables. Negative binomial regression was used to explore the impact of related independent variables. From 5.2% in 2014 to 2.7% in 2017/18, the prevalence of stunting, wasting, and underweight have gradually decreased. The most significant risk factors were low birth weight infants (adjusted incidence rate ratios, aIRR; 2.31; 95% confidence interval, 1.64; 3.24); infants between the ages of 36 and 47 months (aIRR; 2.26; 95% confidence interval, 1.67; 3.08); infants from socioeconomically disadvantaged families (aIRR; 2.02; 1.36; 2.98); infants whose mothers had no formal education; 1.98; 95% confidence interval, 1. In addition, a reduced incidence of stunting, wasting, and underweight in children was seen in the 2017–18 survey (aIRR 0.59, 95% CI 0.49, 0.70) when compared to children in the 2014 survey (Chowdhury et al., 2022).

The prevalence of stunting, wasting, and underweight has gradually declined from 5.2% in 2014 to 2.7% in 2017–18. Low birth weight infants (adjusted incidence rate ratios, aIRR; 2.31; 95% confidence interval, 1.64; 3.24); infants between 36 and 47 months (aIRR; 2.26; 95% confidence interval, 1.67; 3.08); infants from low-income families (aIRR; 2.02; 1.36; 2.98); and infants whose mothers did not receive a formal education (aIRR; 1.98; 95% confidence interval, 1.98; 1.98 Additionally, as compared to children in the 2014 survey, there was a lower incidence of stunting, wasting, and underweight in children in the 2017–18 survey (aIRR 0.59, 95% CI 0.49, 0.70). A wide range of mental health issues, such as posttraumatic stress disorder, anxiety, depression, and suicidal ideation, are likely to be more prevalent among refugees as a result of their long history of exposure to conflict and persecution, which is exacerbated by their protracted conditions of deprivation and displacement. The MHPSS staff's insufficient knowledge of the language, culture, and help-seeking behavior of Rohingya refugees presents another difficulty in Bangladesh and elsewhere. This hinders the delivery of to these refugees of MHPSS services that are contextually and culturally appropriate (Tay et al., 2019).

Convenience sampling was used to gather participants from the local community for a cross-sectional study between November 20 and November 24, 2017 that included people with serious health issues (n = 156, 53% male) and caregivers (n = 155, 69% female) residing in Rohingya refugee camps in Bangladesh. Significant physical disability (n = 100; 64.1%), treatment-resistant tuberculosis (TB) (n = 32; 20.5%), cancer (n = 15, 9.6%), and HIV infection (n = 3) were the diagnoses that were made the most frequently. The prevalence of considerable pain was high (62%, n = 96) and the effectiveness of pain medications was low (70%, n = 58) among patients with major health issues. The average age of people with major health issues was 44.8 years (range: 2-100 years), whereas the average age of caretakers was 34.9 years (range: 8-75 years). A daily average of 13.8 hours of care were reported by caregivers. The most often reported issues associated with the caregiving role were sleep issues (87.1%, n = 108), loss of appetite (58.1%, n = 72), and lack of enjoyment in life (53.2%, n = 66). The usage of was one of this study's primary flaws because the use of convenience sample and closed-ended interview questions were the main weaknesses of this study (Doherty et al., 2020).

201 (94.81%) of the 212 participants in the study, who live in the refugee camp, gave their consent. The WHO's criteria for oral health assessment survey basic techniques, 2013, and oral health impact assessments were used to determine the oral health status and oral health-related quality of life.Profile-14. Spearman's rank correlation coefficient test and descriptive statistics like mean, standard deviation, and percentage were used to statistically examine the data. 5% was chosen as the degree of significance. In adults aged 15 and older, the prevalence of dental caries was determined to be 83.92%. In the overall study population, there was periodontal disease accompanied by gingival hemorrhage. Children under the age of 15 had a caries frequency of 85.23%. It was discovered that a rotten tooth, a missing tooth, or a decayed but filled tooth was substantially connected with functional restriction, physical pain, and emotional distress (Niraj et al., 2017).

This prospective, cross-sectional study used a structured, language-validated questionnaire and took place in two refugee camps in southern Bangladesh. According to the study, depression affected 70% of respondents (n=150), with 8.7% indicating "severe depression" on the PHQ-9. An inverse relationship between WHOQOL-BREF scores and depression symptoms was found, with a strong and significant correlation (r= 0.652; p0.01) in terms of overall and physical health, psychological (r= 0.757, p0.01), social relationship (r= 0.479, p0.01), environment (r= 0.443, p0.01), increasing age (r= 0.272, p0.01), and depression severity (r= 0.489, Additionally, there was a statistically significant correlation between the same variables and overall quality of life (r =0.600, 0.309, 0.482, 0.170, 0.103, 0.272, 0.339; p=0.01), as well as a correlation between married people and the severity of depression in the PHQ (r=0.346), physical state (r=0.353), psychological state (r=0.358), and social relationship (r=0.435), all of which had statistical significance (p=0.0 (Hossain et al., 2020).

160 Syrian teenagers who had just just relocated to Norway participated in this study's cross-sectional design between May and December of last year by answering questionnaires at their schools. A serial multiple mediator model was evaluated along with correlations between various post-migration stressor types and HRQoL parameters. Using age and gender adjustments, models were PTSD and general mental distress are two different types of mental distress.

Higher PTE concentrations decreased experienced HRQoL, although this direct effect was moderated by post-migration stressors both alone and in conjunction with mental anguish. High levels of mental distress had no independent effect on HRQoL; rather, they only had an impact when combined with more post-migration stressors. Post-migration stresses of various kinds, such as prejudice and economic worries, impacted multiple aspects of HRQoL (Dangmann, Solberg and Andersen, 2021).

A broad search approach was used to methodically scan several databases. A manual search for grey literature was also done. Studies had to meet the following requirements to be included: a refugee population, b residents of the destination country, and c the WHOQOL Brief instrument used to measure HRQOL. 15 studies were found and split into two subgroups: (a) the general population of refugees; and (b) the clinical population of refugees, which was chosen expressly for its selection based on its members' mental health or because it had members who had suffered from pertinent prior traumas. Heterogeneous HRQOL values are seen across the studies considered, despite the fact that we can identify common patterns between the two groups in terms of the areas scoring the highest and lowest (Gagliardi, Brettschneider and Konig, 2021).

More than half of the 175,000 refugees or asylum seekers registered with the UN High Commissioner for Refugees in Malaysia are Rohingya in ethnicity. Refugees who live in asylum nations like Malaysia can face economic, social, and health difficulties as well as limited legal rights and unclear futures. 115 Rohingya refugees who were staying in Malaysia's cities were assessed for signs of emotional distress. For the purpose of evaluating psychosocial wellness, we used both quantitative and qualitative methodologies. We looked at socio-demographic and environmental factors that were related to distress scores after evaluating emotional distress using the Refugee Health Screener-15. The results showed that this group of people experienced widespread emotional suffering. While gender, length of stay in Malaysia, employment, and other characteristics that could be examined were not related to distress, age was connected with higher rates of distress. The findings highlight the need for policy issues that would enable stability and security for Rohingya refugees, as well as programs that address economic requirements and reduce misery (Shaw et al., 2019).

The vegetation in and around the Rohingya refugee camps in Ukhiya-Teknaf is extremely fragile as a result of the area's significant environmental degradation brought on by the influx of millions of migrants. In order to determine the causes of the decline in vegetative cover, we used a supervised image classification technique to quantify the changes in vegetative cover in Ukhiya-Teknaf and 34 refugee camps over three time-steps: one before the refugee crisis (January 2017), and two after (March 2018 and February 2019). Using the Per Capita Greening Area (PCGA) datasets and K-means classification algorithms, the vegetative cover vulnerability of the thirty-four refugee camps was evaluated. The satellite-based monitoring data confirms a significant loss of vegetation covering 1502.56 hectares (79.57%) and 5482.2 hectares (14%), respectively, in Ukhiya-Teknaf. between 2017 and 2019 among the 34 refugee camps. According to the K-means categorization, 82% of the refugee camps' vegetative cover is extremely fragile. In the conclusion, several criteria are discussed and a suggestion is made for designating the examined area as an ecological park. As a result, further discussions between politicians and scholars may be encouraged, and forests may be protected and reserved from local deforestation (Karim and Zhang, 2021).

The World Health Organization's assessment of their health-related quality of life places the Rohingya refugees in Bangladesh in the lowest possible category. With none of the respondents indicating a normal HRQoL, the majority of Rohingyas reported leading poor lives, ranging from "very poor" to "neither good nor poor." Studies on the human-quality of life (HRQoL) of Rohingya residing in Bangladesh were nonexistent, and scant information was known regarding their situation in Rakhaine. Rakhaine has the greatest rates of open defecation, the lowest rates of basic education, and the highest rates of parental care, according to UNHCR and the World Bank [10, 14]. According to the survey data, the majority of Rohingyas were not happy with their current state of health (Hossain et al., 2020).

3.1 Study design:

It was a descriptive type of cross sectional study carried out with the objective of determining the musculoskeletal pain and quality of life of the rohingya refugees in Ukhiya.

3.2 Study area:

Data was collected from the rohingya refugees camp (8E, 8W and camp-17) in Ukhiya Upazila under Cox's bazar district.

3.3 Study period: The duration of study work was six months from July 22 to June 23.

3.4 Study population:

Rohingya refugees living at Ukhiya camp, Cox's bazar constituted the study population for the present study.

3.5 Sample size:

We know that;

$$n = \frac{z^2 pq}{d^2}$$

Here,

n = Required sample size.

z = 1.96 at 95% level of significant.

P = P is the expected rate of prevalence, here we have taken the prevalence rate of 83.3% from the previous published literature by Ahmed et al., 2021.

d = margin of error at 5% (Standard value of 0.05).

$$n = \frac{z^2 p(1-p)}{d^2}$$

$$= \frac{(1.96)^2 \times 0.83(1-0.83)}{(0.05)^2}$$

$$= 216$$

So, sample size: 216

3.6 Sampling technique:

Convenience sampling technique was used to select the participants for the present study.

3.7 Eligibility criteria

Inclusion criteria:

- Rohingya refugees
- Age of the refugees 18 years and above.

Exclusion criteria:

- Recent operation.
- who were not interested.

3.8 Method of data collection: Face to face formal interview technique was adopted to collect information.

3.9 Instrument of data collection: A pre tested structured questionnaire was prepared for collection of relevant data.

3.10 Tools of data collection: Measuring tape, weighing machine.

3.11 Procedure of data collection: To researcher obtained permission from the Refugee Relief and Repatriation Commissioner (RRRC) for collection of data from the rohingya. Introduced himself to the camp in charge (CIC). Aim and objectives of the study was explained to CIC. The CIC helped me to select a rohingya interpreter. The interpreter took me to different blocks of the camp. Each block consisted to 15-20 houses. Respondents for the study from my study was selected by convenience sampling technique. After selection of one respondent. I introduced myself and told him/her the aim and objectives the study. Obtaining verbal informed consent I started interview. The relevant data from the rohingya respondents were collected by using the pretested questionnaire. The interview was completed with thanks to the rohingya respondents.

3.12 Data management: At the end of each day the collected questionnaires were checked for any error or inconsistency. Necessary corrections were made. The recorded data were coded accordingly for entry into the SPSS-25 version program.

3.13 Data analysis: Descriptive analysis was done by SPSS-25 version program according to the objectives of the study. It includes percentage, mean, median, standard deviation, frequency. Association between age and pain and violence and down hearted and blue, examined by chi-square test.

3.14 Presentation: Result of study has been presented with table, figure. Adequate description also included in the result.

3.15 Ethical consideration:

The research protocol was submitted to the ethical review board of Saic College of Medical Science and Technology (SCMST). The proposed research protocol continued aims and objectives of the study, details planning and methodology of the research. The ethical review board went thoroughly the protocol. The researcher also presented the protocol in front of the teachers of the department of physiotherapy and the members of ethical review board permitted the researcher to carry out the research. The researchers obtain legal permission from the camp in charge (CIC) to collect data from the rohingya refugees.

Relevant data of the present study were collected by a pretested structure questionnaire from the rohingya refugees living at different camps at Upazila under Cox's bazar district. No invasive technique was applied to collect data for the present study. So participants were free from physically harm. The name, address and personal information was kept confidential by the investigator.

3.16 Limitation:

1. The calculated sample size was 216 but data were collected from 120 participants due to shortage of time of data collection. So the small number of participants affected the result of the study were not representatives of the study population.

2. Convenience sampling technique was applied to select the study subjects for this study. As a result the representatives of the participants could not be ensured. So generalization of the finding could not be achieved by the present study.

3. Data for the present study were collected from three camps.

4. The researcher is a student of the 4th year B.Sc. in physiotherapy. This thesis is his first research work. So a number of deficiencies are in the thesis.

5. Due to linguistic Problems.

6. Fixed timing within 1 weeks of data collection from RRRC (Refugees Relief and Repatriation Commissioner).

7. In the initial stage of the data collection required number of participants was contacted. But latter on many participants did not take part in the interview despite repeated requests. As a result the number of the participants became less than estimated.

The study aimed to identify musculoskeletal pain and quality of life among the rohingya refugees at different camps in ukhiya. The data were collected by the researcher himself. A structured questionnaire was used containing both open-ended and close-ended questions in the questionnaire to collect data from the participants. The data were analyzed with the Microsoft Office Excel 2010 with SPSS 25 version software program. In this study researcher used tables, bar charts, figure, pie chart and description to present of the study.

4.1: Socio demographic information:

Table no 1: Frequency distribution of the respondents by age

Age group in years	Frequency		Mean	Standard deviation
	N	%		
18-47	83	69.2		
48-77	34	28.3	39.74	18.215
78-106	3	2.5		
Total	120	100		

Regarding frequency distribution of the respondents by age, it was found that 83 (69.2%) respondents belonged to the age group of it 18 - 47 years. It was also found 34 (28.3%) respondents were in the age group of it 48 - 77 years. The mean age of the respondents was 39.74 and SD was 18.215 (Table no 1).

Table no 2: Frequency distribution of the respondents by gender

Sex	Frequency	
	N	%
Male	86	71.7
Female	34	28.3
Total	120	100.0

The study showed that 86 (71.7%) respondents were male. It also found that 34 (28.3%) respondents were female (Table no 2).

Table no 3: Frequency distribution of the respondents by BMI

BMI	Frequency		Mean	Standard deviation
	N	%		
Below 18.5 (Underweight)	11	9.2	22.82	2.895
18.5-24.9 (Normal)	82	68.3		
25.0-29.9 (Overweight)	26	21.7		
Above 30.o	1	.8		
Total	120	100		

The study revealed that 82 (68.3%) Participants had BMI 18.5-24.9. It was also found that 26 (21.7%) respondents were overweight (25.0-29.9) and 11 (9.2%) Participants were underweight (below 18.5). The mean BMI of the respondents was 22.82 and SD was 2.895 (Table no 3).

Table no 4: Frequency distribution of the respondents by education

Education	Frequency	
	N	%
Illiterate	68	56.7
Primary education	33	27.5
Secondary	14	11.7
Graduate or above	5	4.2
Total	120	100.0

The study showed that 68 (56.7%) respondents were illiterate. It was also found that 33 (27.5%) respondents primary education; 14 (11.7%) respondents passed secondary and 5 (4.2%) graduate or above (Table had no 4).
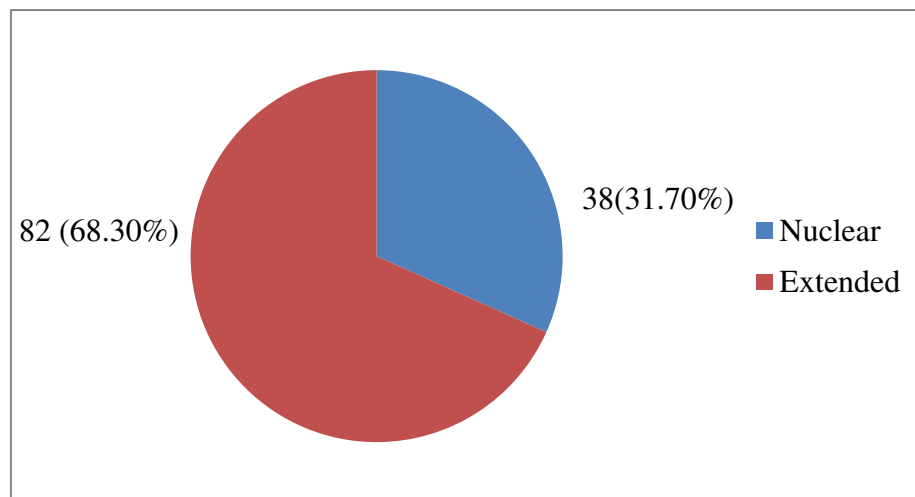
Figure no 1: Type of family of participants

About type of family 82 (68.30%) respondents belonged to the extended family and 38 (31.70%) respondents came from nuclear family (Figure no 1).

Table no 5: Frequency distribution of the respondents by marital Status

Marital Status	Frequency	
	N	%
Married	102	85.0
Unmarried	18	15.0
Divorced	0	0
Widow	0	0
Total	120	100.0

Regarding marital status, it was found that 102 (85.0%) respondents were married and 18 (15.0%) respondents were unmarried (Table no 5).

Table no 6: Frequency distribution of the respondents by monthly income

Sex	Frequency	
	N	%
0-6000	102	85.0
7000-14000	14	11.7
15000-21000	4	3.3
Total	120	100.0

Regarding frequency distribution of the participants by monthly income, it was revealed that out of 120, 102(85.0) respondents had monthly income Taka 0-6000. It was also found that 14 (11.7%) respondents had monthly income Taka 7000-14000 and 4 (3.3%) respondents had monthly income Taka 15000-21000 (Table no 6).

Table no 7: Frequency distribution of the respondents by smoking

Smoking	Frequency	
	N	%
Yes	22	18.3
No	98	81.7
Total	120	100.0

The study showed that, 98 (81.70%) participants were non-smoker. It was also found that 22 (18.30%) of the respondents were smoker (Table no 7).

Table no 8: Frequency distribution of the respondents by violence

Violence	Frequency	
	N	%
Yes	52	43.3
No	68	56.7
Total	120	100.0

Regarding violence, it was found that 68 (56.70%) participants were violence and 53 (43.30%) respondents were not violence (Table no 8).

Table no 9: Frequency distribution of the respondents by injured

Injured	Frequency	
	N	%
Yes	25	20.8
No	95	79.2
Total	120	100.0

The study revealed that, 95 (79.20%) participants were not injured. It also found that 25(20.80%) respondents were injured (Table no 9).

Table no 10: Frequency distribution of the respondents by physical abuse after Bangladesh

Physical abuse after Bangladesh	Frequency	
	N	%
Yes	10	8.3
No	110	91.7
Total	120	100.0

The study revealed that 110 (91.70%) participants were physical abuse after Bangladesh and 10 (8.30%) participants were not physical abuse after Bangladesh (Table no 10).

4.2: Musculoskeletal related condition:

Table no 11: Frequency distribution of the respondents by Musculoskeletal pain

In case of trouble in last 12 months		Prevention of normal activities during last 12 months	In case of trouble in last 7 days
Neck	Yes 13 (10.8%)	Yes 11 (9.2%)	Yes 9 (7.5%)
	No 107 (89.2%)	No 109 (90.8%)	No 111 (92.5%)
Shoulders	No 109 (90.8%)	Yes 12 (10.0%)	Yes 12 (10.0%)
	Right 6 (5.0%)		
	Left- 3 (2.5%)	No 108 (90.0%)	No 108 (90.0%)
	Both- 2 (1.7%)		
Elbows	No 114 (95.0%)	Yes 7 (5.8%)	Yes 7 (5.8%)
	Right 4 (3.3%)		
	Left 1 (0.8%)	No 113 (94.2%)	No 113 (94.2%)
	Both 1 (0.8%)		
Wrist/hands	No 114(95.0%)	Yes 7 (5.8%)	Yes 7 (5.8%)
	Right 3 (2.50%)		
	Left- 2 (1.7%)	No 113 (94.2%)	No 113 (94.2%)
	Both- 1 (0.8%)		

Upper back	Yes 51 (42.5%)	Yes 50 (41.7%)	Yes 46 (38.3%)
	No 69 (57.5%)	No 70 (58.3%)	No 74 (61.7%)
Low back	Yes 31 (25.8%)	Yes 31 (25.8%)	Yes 29 (24.2%)
	No 89 (74.2%)	No 89 (74.2%)	No 91 (75.8%)
Hips/thighs	No 111 (92.5%)	Yes 8 (6.7%)	Yes 8 (6.7%)
	Right 5 (4.2%)		
	Left 1 (0.8%)	No 112 (93.3%)	No 112 (93.3%)
	Both 3 (2.5%)		
Knees	No 89 (74.2%)	Yes 29 (24.2%)	Yes 29 (24.2%)
	Right 16 (13.3%)		
	Left 5 (4.2%)	No 91 (75.8%)	No 91 (75.8%)
	Both- 10 (8.3%)		
Ankles/feet	No 112 (93.3%)	Yes 9 (7.5%)	Yes 9 (7.5%)
	Right 6 (5.0%)		
	Left 0 (0%)	No 111 (92.5%)	No 111 (92.5%)
	Both 2 (1.7%)		

In case of trouble in last 12 months, it was found that 13 (10.80%) participants had neck problems. it was found that 6(5%) participants had right shoulder problems, 3(2.50%) participants had left shoulder problems, and 2(1.70%) participants had both shoulder problems. It was also found that 4(3.30%) participants had right elbow problems, 1 (0.80%) participants had left elbow problems and 1 (0.80%) participants were both elbow problems. The study showed that 3 (2.50%) participants were right wrist problems, 2 (1.70%) participants were left wrist problems, 1(0.80%) participants were both wrist problems. It was found that 51 (42.50%) participants had upper back problems. It was also found that 31 (25.80%) participants had lower back problems. The study showed that 5 (4.20%) participants had right hip problems, 1(0.80%) participants had left hip problems and 3 (2.50%) participants had both hip problems. It was found that 16 (13.3%) participants had right knee problems and 5 (4.2%) participants had left knee problems and 2(1.70%) participants had both knee problems. The study showed that 6 (5.0%) participants had right ankle problems and 2(1.70%) participants had both ankle problems.

Prevention of normal activities during last 12 months was due to neck trouble of 11 (9.20%) participants. It was found that 12 (10%) participants were shoulder problems, 7 (5.80%) participants had elbow problems, 7 (5.80%) participants were elbow problems, 7 (5.80%) participants had wrist problems, 50 (41.70%) participants were upper back, 31 (25.80%) participants were lower back problems, 8 (6.70%) participants were hip problems, 29 (24.20%) participants were knee problems and 9 (7.50%) participants were ankle problems.

In case of trouble in last 7 days, it was found that 9 (7.5%) participants had neck problems, 12 (10%) participants were shoulder problems, 7 (5.80%) participants had elbow problems, 7 (5.80%) participants were elbow problems, 7 (5.80%) participants had wrist problems, 46 (38.3%) participants were upper back problems, 29 (24.2%) participants were lower back problems, 8 (6.70%) participants were hip problems, 29 (24.20%) participants were knee problems and 9 (7.50%) participants were ankle problems (Table no 11).

4.3: Health related quality of life conditions:

Table 12: Frequency distribution of the respondents by general health

General health	Frequency	
	N	%
Excellent	1	.8
Very good	27	22.5
Good	41	34.2
Fair	39	32.5
Poor	12	10.0
Total	120	100.0

It was found that, 120 peoples were involved, among them (34.2%) was good in general health of quality of life, (32.5%) was fair in general health of quality of life, (22.5%) participants was very good in general health of quality of life, (10%) was poor in general health of quality of life and (0.8%) participants was excellent in general health of quality of life (Table no 12).

Table 13: Frequency distribution of the respondents by moving a table

Moving a table	Frequency	
	N	%
Yes, limit a lot	19	15.8
Yes, limit a little	43	35.8
No, not limit at all	58	48.3
Total	120	100.0

In this survey, 120 peoples were involved, among them , (48.30%) was yes, not limit at all of quality of life, (35.80%) participants was yes, limit a little of quality of life and (15.80%) participants was yes, limit a lot of quality of life (Table no 13).

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Table 14: Frequency distribution of the respondents by flights stairs

Flights stairs	Frequency	
	N	%
Yes, limit a lot	20	16.7
Yes, limit a little	43	35.8
No, not limit at all	57	47.5
Total	120	100.0

This study found that, 120 peoples were involved, among them (47.50%) was yes, not limit at all of quality of life, (35.80%) participants was yes, limit a little of quality of life, (16.70%) participants was yes, limit a lot of quality of life (Table no 14).

Table 15: Frequency distribution of the respondents by past 4 weeks physical accomplished

Past 4 weeks physical accomplished	Frequency	
	N	%
Yes	41	34.2
No	79	65.8
Total	120	100.0

Out of 120 peoples were involved, among them (65.80%) participants was no, Past 4 weeks physical accomplished of quality of life and (34.20%) participants was yes, Past 4 weeks physical accomplished of quality of life (Table no 15).

Table 16: Frequency distribution of the respondents by past 4 weeks physical limited

Past 4 weeks physical limited	Frequency	
	N	%
Yes	44	36.7
No	76	63.3
Total	120	100.0

This study found that, 120 peoples were involved, among them (63.30%) participants was no, Past 4 weeks physical limited of quality of life and (36.70%) participants was yes, Past 4 weeks physical limited of quality of life (Table no 16).

Table 17: Frequency distribution of the respondents by past 4 weeks physical emotional accomplished

Past 4 weeks physical emotional accomplished	Frequency	
	N	%
Yes	78	65.0
No	42	35.0
Total	120	100.0

The study showed that, 120 peoples were involved, among them (65%) participants was yes, Past 4 weeks physical emotional accomplished of quality of life and (35%) participants was no, Past 4 weeks physical emotional accomplished of quality of life (Table no 17).

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Table 18: Frequency distribution of the respondents by past 4 weeks physical emotional carefully

Past 4 weeks physical emotional carefully	Frequency	
	N	%
Yes	80	66.7
No	40	33.3
Total	120	100.0

Out of 120 peoples were involved, among them (66.70%) participants was yes, Past 4 weeks physical emotional accomplished of quality of life and (33.30%) participants was no, Past 4 weeks physical emotional accomplished of quality of life (Table no 18).

Table 19: Frequency distribution of the respondents by past 4 weeks pain interfere

Past 4 weeks pain interfere	Frequency	
	N	%
Not at all	32	26.7
A little bit	18	15.0
Moderately	31	25.8
Quite a bit	23	19.2
Extremely	16	13.3
Total	120	100.0

This study found that, 120 peoples were involved, among them (26.70%) participants was not at all of quality of life, (25.80%) was moderately of quality of life, (19.20%) participants was quite a bit of quality of life, (15%) participants was a little bit of quality of life, and (13.30%) participants was extremely of quality of life (Table no 19).

Table 20: Frequency distribution of the respondents by past 4 weeks peaceful

Past 4 weeks peaceful	Frequency	
	N	%
All of the time	7	5.8
Most of the time	60	50.0
A good bit of the time	9	7.5
Some of the time	32	26.7
A little of the time	11	9.2
None of the time	1	.8
Total	120	100.0

This study found that, 120 peoples were involved, among them (50%) participants was most of time of quality of life, (26.70%) participants was some of the time of quality of life, (9.20%) participants was a little of the time of quality of life, (7.50%) was a good bit of the time of quality of life, (5.80%) participants was all of the time of quality of life , and (0.80%) was none of the time of quality of life (Table no 20).

Table 21: Frequency distribution of the respondents by past 4 weeks lot of energy

Past 4 weeks lot of energy	Frequency	
	N	%
All of the time	6	5.0
Most of the time	76	63.3
A good bit of the time	6	5.0
Some of the time	29	24.2
A little of the time	3	2.5
None of the time	0	0
Total	120	100.0

This study showed that, 120 peoples were involved, among them (63.30%) participants was most of time of quality of life, (24.20%) participants was some of the time of quality of life (5%) participants was all of the time of quality of life, (5%) was a good bit of the time of quality of life, and (2.5%) participants was a little of the time of quality of life (Table no 21).

Table 22: Frequency distribution of the respondents by past 4 weeks frustration

Past 4 weeks down hearted	Frequency	
	N	%
All of the time	2	1.7
Most of the time	29	24.2
A good bit of the time	5	4.2
Some of the time	55	45.8
A little of the time	23	19.2
None of the time	6	5.0
Total	120	100.0

Out of 120 peoples were involved, among them (45.80%) participants was some of the time of quality of life, (24.20%) participants was most of time of quality of life, (19.20%) participants was a little of the time of quality of life, (5%) was none of the time of quality of life, (4.20%) was a good bit of the time of quality of life, (1.70%) participants was all of the time of quality of life (Table no 22).

Table 23: Frequency distribution of the respondents by past 4 weeks social activities

Past 4 weeks social activities	Frequency	
	N	%
All of the time	4	3.3
Most of the time	32	26.7
Some of the time	60	50.0
None of the time	24	20.0
Total	120	100.0

About of 120 peoples were involved, among them (3.30%) participants was all of the time of quality of life , (26.70%) participants was most of time of quality of life, (50%) participants was some of the time of quality of life , and (20%) participants was a little of the time of quality of life (Table no 23).

Table no 24: Frequency distribution of the respondents by age and pain

Age group	Pain				Total	
	Yes		No			
	N	*%*	N	*%*	N	*%*
18-47	35	42.17	48	57.83	83	69.2%
48-77	15	44.18	19	55.88	34	28.3%
78-106	1	33.33	2	66.67	3	2.5%
Total	51	42.5	69	57.5	120	100

About age of the respondents, it was found that 69.2% respondents belonged to the age group of it 18 - 47 years. It was also found 28.3% respondents were in the age group of it 48 - 77 years. It was found that 51 (42.50%) participants had upper back problems. The association between Age and pain found statistically not significant ((χ^2= 1.43 ,df = 2, p =.931 in the participant (Table no 24).

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Table no 25: Frequency distribution of the respondents by violence and frustration

Down hearted and blue	Violence				Total	
	Yes		No			
	N	%	N	%	N	%
All of the time	1	50	1	50	2	1.9%
Most of the time	15	51.72	14	48.28	29	28.8%
A good bit of the time	2	40	3	60	5	3.8%
Some of the time	26	47.27	29	52.73	55	50%
A little of the time	7	30.43	16	69.57	23	13.9%
None of the time	1	16.67	5	83.33	6	1.9%
Total	52	43.33	68	56.67	120	100

Regarding violence, it was found that 68 (56.70%) participants were violence and 53 (43.30%) respondents were not violence. It was also found that Out of 120 peoples were involved, among them (45.80%) participants was some of the time of quality of life, (24.20%) participants was most of time of quality of life, (19.20%) participants was a little of the time of quality of life, (5%) was none of the time of quality of life, (4.20%) was a good bit of the time of quality of life, (1.70%) participants was all of the time of quality of life. The association between Age and pain found statistically not significant (χ^2=4.534, df = 5, p =.475 in the participant (Table no 25).

CHAPTER V	DISCUSSION

The cross-sectional study is done in from Ukhiya Upazila in Cox's Bazar district. The study population is the rohingya refugees were from the 18-106 years of age. The objectives of the study are to identify musculoskeletal pain and quality of life among rohingya refugees of different camps at Ukhiya Upazila. Among the rohingya refugees a total of 120 respondents were interviewed with a structured questionnaire as per objectives.

About age of the respondents, it was found that 69.2% respondents belonged to the age group of it 18 - 47 years. It was also found 28.3% respondents were in the age group of it 48 - 77 years. The mean age of the respondents was 39.74 and SD was 18.215 (Table no 1). A study conducted among motorbike riders at India. The mean age of the participants was 24.63 years and SD was 7.17 (Deepan et al., 2018).

The study revealed that 71.7% respondents were male and 28.3% respondents were female (Table no 2). In another study on musculoskeletal problems conducted among the Lahore in Pakistan. It showed that out of 227 participants 49.5% were female and 51.5% were male (Fatima et al., 2022). The females participants were higher in that study.

The study revealed that 68.3% Participants had BMI normal. It was also found that 21.7% respondents were overweight and 9.2% Participants were underweight. The mean BMI of the respondents was 22.82 and SD was 2.895 (Table no 3). In other study among wrist pain at Islamabad and Rawalpindi found that Body mass index where Mean ±SD = 21.07 ± 3.31 (Amjad et al., 2020).

The study showed that 56.7% respondents were illiterate. It was also found that 27.5% respondents primary education; 11.7% respondents passed secondary and 4.2% graduate or above (Table had no 4). A study conducted among mental health among firefighters at China. They also 38.4% were SSC holder, 51.2% were HSC holder, 7.3% were Graduation degree holder, 3.1% were Post graduation degree holder (Chen et al., 2020).

About type of family 68.30% respondents belonged to the extended family and 331.70% respondents came from nuclear family (Figure no 1).

Regarding marital status, it was found that 85.0% respondents were married and 15.0% respondents were unmarried (Table no 5). Another Study shows that Married 41.2% Unmarried 58.8%. (Nilamsari, Prihatinijgsih and Kualaningtyas., 2019).

Regarding frequency distribution of the participants by monthly income, it was revealed that out of 120, 85.0 respondents had monthly income Taka 0-6000. It was also found that 11.7% respondents had monthly income Taka 7000 - 14000 and 3.3% respondents had monthly income Taka 15000-21000 (Table no 6).

The study showed that, 81.70% participants were non-smoker. It was also found that 18.30% of the respondents were smoker (Table no 7).

Regarding violence, it was found that 56.70% participants were violence and 43.30% respondents were not violence (Table no 8).

The study revealed that, 79.20% participants were not injured. It also found that 20.80% respondents were injured (Table no 9). In other study conducted health problems among rohingya at Cox's bazar.7.2% of primary respondents reported injuries among themselves by assault, 36.4% by sticks, sharp cutting 33.3% and bullet 30%. (Uddin. A, et al., 2022).

The study revealed that 91.70% participants were physical abuse after Bangladesh and 8.30% participants were not physical abuse after Bangladesh (Table no 10). Another researcher conducted care of public health among rohingya at Cox's bazar. It showed that 7% participants were trauma. (Rashid, R.,et al., 2121).

About musculoskeletal pain of the participants, it was found that, neck 10.80%, shoulder 5% right, elbow 3.3% right, wrist 2.5% both, upper back 42.5%, lower back 25.8%, hip 4.2% right, knee 13.3% right and ankle 5% right participants had no pain and discomfort in last 12 months. In addition, neck 9.20%, shoulder 10%, elbow 5.8%, wrist 5.8%, upper back 41.7%, lower back 25.8%, hip 6.7%, knee 7.5%, ankle 7.5% participants had been prevented from works in last 12 months. In addition, neck 7.50%, shoulder 10%, elbow 5.8%, wrist 5.8 %, upper back 38.3%, lower back 24.2%, hip 6.7%, knee 7.5%, ankle 7.5% participants had been prevented from trouble at any time during last 7days. Another study conducted on chronic pain in multi-traumatized among refugees at Norway. It was found that the most prevalent chronic pain locations were head 80%, chest 74%, arms/legs 66% and back 62%. (Teodorescu et al., 2015).

Another study showed that musculoskeletal problems among rohingya refugees at Cox's bazar. It was showed that most of the participants having pain in the lower back 34.2% followed by multiple joints 21.7%. (Ahmed et al., 2021)

The study revealed that, 34.2% was good in general health of quality of life. Regarding distribution of the participants by moving a table, 48.30% was no, not limit at all of quality of life. It was found that flights stairs of the participants (47.50%) was no, not limit at all of quality of life, 65.80% participants was no, past 4 weeks physical accomplished of quality of life, 63.30% participants was no, past 4 weeks physical limited of quality of life. 65% participants was yes, past 4 weeks physical emotional accomplished of quality of life, 66.70% participants was yes, past 4 weeks physical emotional accomplished of quality of life, 26.70% participants was not at all, past 4 weeks pain interferes of quality of life. 50% participants was most of time past 4 weeks peaceful of the participants of quality of life, 63.30% participants was most of the time past 4 weeks energy of the participants of quality of life, 45.80% participants was some of the time, Past 4 weeks down hearted of the participants of quality of life, 50% participants was some of the time, Past 4 weeks down hearted of the participants of quality of life. Another researcher revealed health related quality of life among refugees at Thailand. It was founded that 37.3% of the respondents health status is good, fair and very good (31.5% and 15.8% respectively). Physical functioning, mentioned that they had no limitation at all moving chairs or walking (78.4% and 82.2% respectively). Physical health 47.3% and alf 58.1% of the respondents reported they can accomplish their work less than they would like and no limitation at all. About 44% mentioned that due to depression or anxiety. About 44.8% of the respondents had been interfered by pain a little of the time. 5% of the respondents had physical pain most or all of the time. 36.1% of the interviewees answered they felt they have a lot of energy in most of the time to do work. 54.8% mentioned that their social activities had not been interfered by physical or emotional problems. (Ti, S. and Somrongthong, R., 2008).

About age of the respondents, it was found that 69.2% respondents belonged to the age group of it 18 - 47 years. It was also found 28.3% respondents were in the age group of it 48 - 77 years. It was found that 51 (42.50%) participants had upper back problems. The association between Age and pain found statistically not significant ($\chi^{2=}$ 1.43, df = 2, p =.931 in the participant (Table no 24).

Regarding violence, it was found that 68 (56.70%) participants were violence and 53 (43.30%) respondents were not violence. It was also found that Out of 120 peoples were involved, among them (45.80%) participants was some of the time of quality of life, (24.20%) participants was most of time of quality of life, (19.20%) participants was a little of the time of quality of life, (5%) was none of the time of quality of life, (4.20%) was a good bit of the time of quality of life, (1.70%) participants was all of the time of quality of life. The association between Age and pain found statistically not significant ($\chi^{2=}$ 4.534,df = 5, p =.475 in the participant (Table no 25).

CHAPTER VII	CONCLUSION AND RECOMMENDATION

Conclusion:

It appears that there are already 11.5 million refugees in the world, and more are arriving every day. The Rohingya refugees in Bangladesh face the greatest disadvantages in the modern global refugee crisis. More than 700,000 Rohingya sought safety in Bangladesh as of the end of February 2018, fleeing the violence in Rakhine state, Myanmar. Refugees may experience psychological and physical issues that are linked to unfavorable health consequences. Musculoskeletal pain from past injuries frequently showed up as neck and low back pain. Should you need medical attention, musculoskeletal diseases are the most dangerous conditions.

It was a cross-sectional type of descriptive study among rohingya refugees at different camps in ukhiya, Bangladesh. Data were collected from different camps in ukhiya Upazila, cox's bazar, Bangladesh. This study duration was 1 years from June 2022 to July 2023. This study sample size was 216 but I was collected data 120. Data method was face-to-face formal interview. Inclusion criteria was Rohingya refugees and age of the refugees 18 years and above. Nordic Questionnaire used for musculoskeletal pain and modified SF12 Questionnaire used for quality of life rohingya refugees. Descriptive analysis was done by SPSS-25 version program according to the objectives of the study. It includes percentage, mean, median, standard deviation, frequency. Association between age and pain complaints, violence and frustration where examine by chi-square test.

About distribution of the participants by age group in years, it was revealed 69.2% Rohingya refugees belonged to the age group of 18 - 28 years. The mean and standard deviation of age of the participants was 39.74 and 18.215 and all the participants were Muslim in this study.

Regarding distribution of the participants by BMI, it was found that BMI of 68.30% participants had normal weight 18.5-24.9. The mean and standard deviation of BMI of participants was 22.82 and 2.895. About marital status, it was revealed that 61.90% Rohingya refugees were married. The study revealed that, 81.7% Rohingya refugees did not had the habit of smoking. In addition, educational status of the Rohingya refugees, 56.7% study subjects were illiterate holder.

The study revealed that, 56.7% participants were not violence. The study revealed that, 79.2% participants were not injured and 91.7% participants were not physical abuse after Bangladesh.

The study revealed that, neck 10.80%, shoulder 5% right, elbow 3.3% right, wrist 2.5% both, upper back 42.5%, lower back 25.8%, hip 4.2% right, knee 13.3% right and ankle 5% right participants had pain and discomfort in last 12 months. In addition, neck 9.20%, shoulder 10%, elbow 5.8%, wrist 5.8%, upper back 41.7%, lower back 25.8%, hip 6.7%, knee 7.5%, ankle 7.5% participants had been prevented from works in last 12 months. In addition, neck 7.50%, shoulder 10%, elbow 5.8%, wrist 5.8 %, upper back 38.3%, lower back 24.2%, hip 6.7%, knee 7.5%, ankle 7.5% participants had been prevented from trouble at any time during last 7days.

The study revealed that, 34.2% was good in general health of quality of life. Regarding distribution of the participants by moving a table, 48.30% was no, not limit at all of quality of life. It was found that flights stairs of the participants 47.50% was no, not limit at all of quality of life, 65.80% participants was no, Past 4 weeks physical accomplished of quality of life, 63.30% participants was no, Past 4 weeks physical limited of quality of life. 65% participants was yes, Past 4 weeks physical emotional accomplished of quality of life, 66.70% participants was yes, Past 4 weeks physical emotional accomplished of quality of life, 26.70% participants was not at all, Past 4 weeks pain interferes of quality of life. 50% participants was most of time Past 4 weeks peaceful of the participants of quality of life, 63.30% participants was most of the time Past 4 weeks energy of the participants of quality of life, 45.80% participants was some of the time, Past 4 weeks down hearted of the participants of quality of life, 50% participants was some of the time, Past 4 weeks down hearted of the participants of quality of life.

From this study, it can be seen that 43.3% of rohingya refugees have violence by Myanmar security force. It was also found that 42.5% of the participants have upper back musculoskeletal pain and 50% participants of the rohingya refugees feel some of the time of frustration of quality of life.

Recommendation:

The aim of the study to identify musculoskeletal pain and quality of life among rohingya refugees attending physiotherapy services at different camps in Ukhiya, Bangladesh. The recommendations are made on the basis of the findings of the present study.

1. The people should be protected from violence and torture. It will prevented musculoskeletal pain among the rohingya refugees.

2. It was found in this study that 42.5% participants suffered of lower back pain. Positioning and physiotherapy treatment is appropriate to cure the condition.

3. It was revealed in this study that 45.80% participants had frustration. They need to consult psychiatrist timely.

4. It is recommended that, in future studies:

● Time should be kept longer.

● Different measurement tool need to be included such as MSK-HQ, WHOQOL-BREF.

5**. A** well designed research should be carried out to get real picture of the situation in Rohingya refugees.

6. A random sampling technique should be applied to select the participants for this type of research to ensure the representativeness of the population.

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Appendix-A

SAIC COLLEGE OF MEDICAL SCIENCE AND TECHNOLOGY
Approved by Ministry of Health and Family Welfare
Affiliated with Dhaka University

Ref :

Date : ....

Ref.No: SCMST/PT/ERB-2017-18/1-2023/19

3rd January'2023

To

Md. Abdul Alim

4th Professional B.Sc. in Physiotherapy

Saic College of Medical Science and Technology (SCMST)

Mirpur-14, Dhaka-1216.

Sub: Permission to collect data

Dear Alim,

Ethical review board (ERB) of SCMST pleased to inform you that your proposal has been reviewed by ERB of SCMST and we are giving you the permission to conduct study entitled "Musculoskeletal complaints and quality of life among rohingya refuges attending physiotherapy services at different camps in Ukhiya" and for successful completion of this study you can start data collection from now.

Wishing you all the best.

Thanking You,

11.01.'23
Head of ERB
Ethical Review Board
Saic College of Medical Science and Technology

11.01.23
Principal
Saic College of Medical Science and Technology
Mirpur-14, Dhaka-1216

Address: Saic Tower, M-1/6, Mirpur-14, Dhaka-1216. Mobile:01936005804
E-mail: simt140@gmail.com, Web:www.saicmedical.edu.bd

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Appendix-B

SAIC COLLEGE OF MEDICAL SCIENCE AND TECHNOLOGY

Approved by Ministry of Health and Family Welfare
Affiliated with Dhaka University

Ref :   Date : ....

Ref.No: SCMST/PT/ERB-2017-18/1-2023/19(a)

28ᵗʰ February'2023

To

Refugee Relief and Repatriation Commissioner (RRRC)

Cox's Bazar

Sub: Permission to collect data.

Dear Sir/Mam,

Ethical review board (ERB) of SCMST pleased to inform you that Md.Abdul Alim of final year B.Sc. in Physiotherapy student from Saic College of Medical Science and Technology doing a thesis entitle of "Musculoskeletal complaints and quality of life among rohingya refugees attending physiotherapy services at different camps in Ukhiya" and His data collection area is Camp-8E, Camp-8W & Camp-17 in Ukhiya, Cox Bazar. So he wants to take data from your organization/ department.

I hope you will give kind permission to collect data for successful completion of this study and oblige thereby.

Thanking You,

28/02/23

Head of ERB

Ethical Review Board

Saic College of Medical Science and Technology

01. 03. 23

Principal

Saic College of Medical Science and Technology

Mirpur-14, Dhaka-1216

Address: Saic Tower, M-1/6, Mirpur-14, Dhaka-1206. Mobile: 01936005804
E-mail: simt140@gmail.com, Web:www.saicmedical.edu.bd

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Appendix-C

Government of the People's Republic of Bangladesh
Office of the Refugee Relief and Repatriation Commissioner
Cox's Bazar
www.rrrc.gov.bd

No: 51.04.2200.009.16.026.23. 10 51   Date: 20 March 2023

Sub: Permission for Research Work in FDMNs Camp, Cox's Bazar.

Ref: Letter from Md. Abdul Alim, Student of final year, Saic College of Medical Science and Technology;   Dated: 9 March 2023

In response to the above mentioned letter, this office is pleased to grant your proposal for the permission for Research Work in FDMNs Camp in Cox's Bazar till 30 March 2023 under the following terms and conditions.

1. You are requested to inform before commencing the activities and coordinate while working, with the concerned CiC (Camp-in-Charge);
2. Must follow Govt. Policy, Rules and Laws;
3. You are not allowed to enter the Camps during Government Holidays.
4. You must leave the Camps before 3.30 pm.
5. The content/report must be submitted to RRRC Office as well as to CiC Office, before publishing.
6. You are requested to write down Tk. 8,000 – Tk. 15,000 at the point 10 of your questionnaire part.

Please feel free to contact with office if you have any further query.

Sadhana Tripura
Senior Assistant Secretary
Phone: 01847-351662
Email: contact@rrrc.gov.bd

Md. Abdul Alim
Student of final year
Saic College of Medical Science and Technology
NID No: 4633239282
Contact: 01738 640200
Email: smaalim071@gmail.com

Copy for Information and necessary action:
01. Camp-in-Charge; Camp- 8E, 8W and 17, Cox's Bazar
02. Office Copy

Appendix D

Consent form

Respondent ID: | | | |

Dear participant,

I am **Md. Abdul Alim**, student of B.Sc. in physiotherapy program in the department of Saic College of Medical Science & Technology (SCMST) which is affiliated Dhaka University. I am conducting the study entitled **"Musculoskeletal pain and quality of life among rohingya refugees at different camps in Ukhiya"** as a part of my thesis work for the partial fulfillment of B.Sc. in physiotherapy degree. There are the lists of question you need to fill- up which is include socio- demographic, information related, disease related and treatment related questions. For spending your time to participate in this self- administered interview which will take around 15-20 minutes. There is list of questionnaires and you need to fill up each answer. The information gained from this questionnaire will be used to academic purposes and will be kept confidential. Your participation in this study is totally voluntarily and you have the right to withdraw from the interview without any clarification at any moment. You can ask any question to the researcher regarding the study to meet up your quarry. Looking forward your kind co operation.

Declaration of the participant

I have been invited to participate in this survey. The foregoing information has been read to me and that have been answered to my satisfaction. I have noticed participation in this study is totally voluntary and I have the right to withdraw from the interview at any clarification. I give my consent voluntarily to be participants in this study.

Respondent name: Witness name:

Signature and date: Signature and date:

Questionnaire

Musculoskeletal pain and quality of life among rohingya refugees at different camps in Ukhiya.

ID No*:* | | | |

Participant Name: …………………………………………………………..

Address: …………………………………………………………...

Date: ………………………………………………………….

Mobile No: ……………………………………………………

Section A: Socio-demographic information:

Q.N	Question	Answer
1	Age	
2	Gender	1.Male
		2.Female
3	Weight	
4.	Height	
5.	BMI	
6.	Educational qualification	1.Illiterate
		2.Primary
		3.Secondary
		4.Graduate or above
7.	Family type	1.Nuclear
		2.Extended
8.	Religion	1.Muslim
		2.Hindu
		3.Buddhist
		4.Christian
		5.Other
9.	Marital status	1.Married

		2.Unmarried
		3.Divorced
		4.Widow
10.	Monthly family income	
11.	Smoking habit	1.Yes
		2.No
12.	Were how you physically injured during the ethnic genocide, torture and violence in Myanmar	1.Yes
		2.No
13.	Were you injured in any way while fleeing Myanmar?	1.Yes
		2.No
14.	Did you suffer any physical abuse in the camp after coming to Bangladesh?	1.Yes
		2.No

Section 2: General health related information

	Trouble with the locomotive organs		
	Have you at any time during the last 12 months had trouble (ache, pain, discomfort in:	To be answered only by those who have had trouble	
		Have you at any time during the last 12 months been prevented from doing your normal work (at home or away from home) because of the trouble?	Have you had any trouble at any time during the last 7 days?
	Neck — Yes	Yes	Yes
	Neck — No	No	No
	Shoulders — No	Yes	Yes
	Shoulders — Right		
	Shoulders — Left	No	No
	Shoulders — Both		
	Elbows — No	Yes	Yes
	Elbows — Right		
	Elbows — Left	No	No
	Elbows — Both		
	Wrist/hands — No	Yes	Yes
	Wrist/hands — Right		
	Wrist/hands — Left	No	No
	Wrist/hands — Both		
	Upper back — Yes	Yes	Yes
	Upper back — No	No	No
	Low back — Yes	Yes	Yes
	Low back — No	No	No

Body diagram labels: Neck, Shoulder, Thoracic back, Elbow, Lumbar back, Hand/Wrist, Hip/Thigh, Knee, Foot/Ankle

	Hips/thighs	No	Yes	Yes
		Right		
		Left	No	No
		Both		
	Knees	No	Yes	Yes
		Right		
		Left	No	No
		Both		
	Ankles/feet	No	Yes	Yes
		Right		
		Left	No	No
		Both		

Section C Health related quality of life			
1	In general, would you say your health is	1.Excellent 2.Very good 3.Good 4.Fair 5.Poor	
The following questions are about activities you might do during a typical day. Does your health now limit you in these activities? If so, how much?			
2	Moderate activities such as moving a table, pushing an object, bowling, or playing.	1.Yes, limit a lot 2.Yes, limit a little 3.No, not limit at all	
3	Climbing several flights of stairs.	1.Yes, limit a lot 2.Yes, limit a little 3.No, not limit at all	
During the past 4 weeks, have you had any of the following problems with your work or other regular daily activities as a result of your physical health?			
4	Accomplished less than you would like.	1.Yes	2.No
5	Were limited in the kind of work or other activities	1.Yes	2.No
During the past 4 weeks, have you had any of the following problems with your work or other regular daily activities as a result of any emotional problems (such as feeling depressed or anxious)?			
6	Accomplished less than you would like.	1.Yes	2.No
7	Did work or activities less carefully than usual.	1.Yes	2.No
8	During the past 4 weeks, how much did pain interfere with your normal work (including work outside the home and housework)?	1.Not at all 2.A little bit 3.Moderately 4.Quite a bit 5.Extremely	
These questions are about how you have been feeling during the past 4 weeks. For each question, please give the one answer that comes closest to the way you have been feeling. **How much of the time during the past 4 weeks…**			

9	Have you felt calm & peaceful?	1.All of the time
		2.Most of the time
		3.A good bit of the time
		4.Some of the time
		5.A little of the time
		6.None of the time
10	Did you have a lot of energy?	1.All of the time
		2.Most of the time
		3.A good bit of the time
		4.Some of the time
		5.A little of the time
		6.None of the time
11	Have you felt frustration?	1.All of the time
		2.Most of the time
		3.A good bit of the time
		4.Some of the time
		5.A little of the time
		6.None of the time
12	During the past 4 weeks, how much of the time has your physical health or emotional problems interfered with your social activities (like visiting friends, relatives, etc.)?	1.All of the time
		2.Most of the time
		3.Some of the time
		4.None of the time

আইডি নম্বর		

প্রিয় অংশগ্রহণকারী,

আমি মোঃ আব্দুল আলীম, সাইক কলেজ অব মেডিকেল সাইন্স এন্ড টেকনোলজি (এসসিএমএসটি)-এর বিএসসি ইন ফিজিওথেরাপি বিভাগের ফাইনাল বর্ষের ছাত্র। আমার বিএসসি ইন ফিজিওথেরাপি ডিগ্রী সম্পন্ন করতে গবেষণার অংশ হিসেবে "উখিয়ায় বসবাসরত বিভিন্ন শিবিরে রোহিঙ্গা শরণার্থীদের মাংসপেশিজনিত ব্যথা এবং জীবনযাত্রার মান" শিরোনামের একটি গবেষণার কাজ করছি। আপনাকে পূরণ করতে হবে এমন কিছু প্রশ্নের তালিকা দেয়া আছে যার মধ্যে সামাজিক, জনসংখ্যা সংক্রান্ত তথ্য, রোগ সম্পর্কিত এবং চিকিৎসা সংক্রান্ত প্রশ্ন। আপনার নিজের দ্বারা এই সাক্ষাৎকার দিতে ১৫-২০ মিনিট সময় লাগবে। আপনাকে প্রত্যেকটি প্রশ্নের উত্তর দিতে হবে। এই গবেষণার প্রাপ্ত তথ্য শুধুমাত্র শিক্ষা ক্ষেত্রে ব্যবহার করা হবে এবং অংশগ্রহণকারীর ব্যক্তিগত তথ্য সম্পূর্ণ গোপনীয়তার মধ্যে থাকবে, অন্য কোথাও প্রকাশ করা হবে না। গবেষণা চলাকালীন সময়ে অংশগ্রহণকারী কোন রকম দ্বিধা বা ঝুকি ছাড়াই যেকোনো সময় এটাকে বাদ দিতে পারবেন। আপনার একান্ত সহযোগিতা কামনা করছি।

অংশগ্রহণকারীর ঘোষণা

আমাকে এই নিরীক্ষার জন্যে আমন্ত্রন জানানো হয়েছে। আমাকে সম্পূর্ণ পড়ে বুঝানো হয়েছে এবং আমি কোন ধরনের দ্বিধা ছাড়াই উত্তর দিয়েছি। আমি লক্ষ্য করেছি, এই গবেষণায় আমার অংশগ্রহন সম্পূর্ণ স্বেচ্ছায় এবং আমি যে কোন সময় এটাকে বাদ দিতে পারব, কোন রকম ঝুকি ছাড়াই। আমি এই গবেষণায় অংশগ্রহনে সম্পূর্ণ সম্মতি জ্ঞাপন করছি।

অংশগ্রহণকারীর নামঃ

ঠিকানাঃ

মোবাইল নাম্বারঃ

টিপসই

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প্রশ্নপত্র (বাংলা)

শিরোনামঃ উখিয়ায় বসবাসরত বিভিন্ন শিবিরে রোহিঙ্গা শরণার্থীদের মাংসপেশিজনীত ব্যথা এবং জীবনযাত্রার মান।

কোড নং: | | | |

অংশগ্রহণকারীর নামঃ ....

ঠিকানাঃ ....

তারিখঃ ....

মোবাইল নাম্বারঃ...

বিভাগ ১- সামাজিক জনসংখ্যা সংক্রান্ত তথ্য

প্রশ্ন নং	প্রশ্ন	উত্তর
১	বয়স(বছর)	
২	লিঙ্গ	১।পুরুষ
		২।মহিলা
৩	ওজন (কেজি)	
৪	উচ্চতা(ফুট)	
৫	বিএমআই	
৬	শিক্ষাগত যোগ্যতা	১।নিরক্ষর
		২।প্রাথমিক
		৩।মাধ্যমিক
		৪।স্নাতক বা তার উপরে
৭	পারিবারিক ধরন	১।একক
		২।যৌথ

৮	ধর্ম	১।মুসলিম
		২।হিন্দু
		৩।বৌদ্ধ
		৪। খ্রিষ্টান
		৫।অন্যান্য
৯	বৈবাহিক অবস্থা	১।বিবাহিত
		২।অবিবাহিত
		৩।তালাকপ্রাপ্ত
		৪।বিধবা
১০	পরিবারের মাসিক আয়	১।<৫০০০
		২।৬০০০-১০০০০
		৩।১১০০০-১৫০০০
১১	ধুমপানের অভ্যাস	১।হ্যাঁ
		২।না
১২	মায়ানমারে জাতিগত গনহত্যা, নির্যাতন ও সহিংসতার সময় আপনি কি শারীরিকভাবে আহত হয়েছিলেন?	১।হ্যাঁ
		২।না
১৩	মায়ানমার থেকে পালাতে গিয়ে আপনি কি কোনভাবে আহত হয়েছিলেন?	১।হ্যাঁ
		২।না
১৪	বাংলাদেশের শিবিরে আসার পর আপনি কি কোনভাবে শারীরিকভাবে আহত হয়েছিলেন?	১।হ্যাঁ
		২।না

বিভাগ ২- নরডিক মাংশপেশিজনিত প্রশ্ন

চলাফেরাজনিত অঙ্গগুলির সাথে সমস্যা			
আপনার গত ১২ মাসে কোন সময় সমস্যা হয়েছে (ব্যথা, অস্বস্তি, অবস অবস ভাব)		যারা সমস্যায় পড়েছেন তারাই উত্তর দিবে	
		আপনি কি গত ১২ মাসে স্বাভাবিক কাজকর্ম করতে বাধা দেওয়া হয়েছে (বাড়িতে বা বাড়ির বাহিরে) কষ্টের কারনে?	আপনি গত ৭ দিনে কোন সময়ে সমস্যায় পড়েছেন কিনা?
ঘাড়ে ব্যথা	হ্যাঁ	হ্যাঁ	না
	না	না	না
কাঁধে ব্যথা	না	হ্যাঁ	না
	ডান		
	বাম	না	না
	উভয়		
কনুই ব্যথা	না	হ্যাঁ	না
	ডান		
	বাম	না	না
	উভয়		
কব্জি/ হাতে ব্যথা	না	হ্যাঁ	না
	ডান		
	বাম	না	না
	উভয়		

পিঠের উপরে	হ্যাঁ	হ্যাঁ	না
	না	না	না
পিঠের নিচের দিকে	হ্যাঁ	হ্যাঁ	না
	না	না	না
নিতম্ব বা উরু	না	হ্যাঁ	হ্যাঁ
	ডান		
	বাম	না	না
	উভয়		
হাঁটু ব্যথা	না	হ্যাঁ	না
	ডান		
	বাম	না	না
	উভয়		
পায়ের গোড়ালি বা পা	না	হ্যাঁ	না
	ডান		
	বাম	না	না
	উভয়		

বিভাগ-৩ জীবনযাত্রায় স্বাস্থ্য সম্পর্কিত প্রশ্ন			
১	সাধারনভাবে এখন আপনার স্বাস্থ্য	১।চমৎকার ২।খুব ভালো ৩।ভালো ৪।মোটামুটি ৫।ভালো নয়	
নিচের প্রশ্নগুলি আপনার দৈনন্দিন কাজ সম্পর্কে। আপনার এই স্বাস্থ্যে কাজগুলি করতে কোন সমস্যা হয়? যদি তাই হয়, তাহলে কিভাব?			
২	কাজগুলি যেমন- টেবিল সরানো, একটি বস্তুকে ধাক্কা দেওয়া, বল করা বা খেলা।	১।হ্যাঁ, অনেক সমস্যা হয় ২।হ্যাঁ, সামান্য সমস্যা হয় ৩।না, কোন সমস্যা হয় না	
৩	সিঁড়ি বেয়ে উঠা	১।হ্যাঁ, অনেক সমস্যা হয় ২।হ্যাঁ, সামান্য সমস্যা হয় ৩।না, কোন সমস্যা হয় না	
বিগত ৪ সপ্তাহে আপনার স্বাস্থ্যের কারনে নিয়মিত দৈনন্দিন কাজে কোন সমস্যা হয়েছে কিনা ?			
৪	আপনি আপনার কাজে যতটুকু আশা করেন তার থেকে কি কাজ কম হয়?	হ্যাঁ	না
৫	আপনার কাজের ধরনে বা অন্যান্য কাজে কোন সমস্যা ছিল?	হ্যাঁ	না
বিগত ৪ সপ্তাহে আপনার কাজ বা নিয়মিত দৈনন্দিন কাজের কারনে নিম্নলিখিত মানসিক কোন সমস্যা যেমন বিষণ্ণ বা উদ্বিগ্নতা অনুভব করেছেন কি না?			
৬	আপনি আপনার কাজে যতটুকু আশা করেন তার থেকে কি কাজ কম হয়?	হ্যাঁ	না

৭	আপনি কি স্বাভাবিকের চেয়ে কম সাবধানে কাজ করেছেন?	হাঁ		না
৮	বিগত ৪ সপ্তাহে আপনার ব্যথা আপনার স্বাভাবিক কাজ (যেমন বাড়ির বাহিরের বা ভিতরের কাজ) এ কততুকু বাধাগ্রস্ত বা সমস্যা করেছে?	১।একেবারেই না		
		২।একটু		
		৩।মোটামুটি		
		৪।খুব সামান্য		
		৫।চরমভাবে		

এই প্রশ্নগুলি গত ৪ সপ্তাহে আপনি কেমন অনুভব করেছেন সে সম্পরকে।প্রতিতি প্রশ্নের জন্য দোয়া করে উত্তর দিবেন যেখানে আপনি গত ৪ সপ্তাহে আপনি কেমন অনুভব করেছেন?

০৯	আপনি কি ধীরস্থির এবং শান্তবোধ করেছেন?	১।সব সময়		
		২।অধিকাংশ সময়		
		৩।ভালো কিছু সময়		
		৪।কিছু সময়		
		৫।সামান্য একটু সময়		
		৬।কোন সময়েই না		
১০	আপনি কি অনেক শক্তিশালী ছিলেন?	১।সব সময়		
		২।অধিকাংশ সময়		
		৩।ভালো কিছু সময়		
		৪।কিছু সময়		
		৫।সামান্য একটু সময়		
		৬।কোন সময়েই না		

১১	আপনি কি হতাশায় ভুগছেন?	১।সব সময়
		২।অধিকাংশ সময়
		৩।ভালো কিছু সময়
		৪।কিছু সময়
		৫।সামান্য একটু সময়
		৬।কোন সময়েই না
১২	গত ৪ সপ্তাহে কতটা সময় আপনার আপনার শারীরিক স্বাস্থ্য বা মানসিক সমস্যাগুলি আপনার সামাজিক কার্যকলাপ (যেমন বন্ধু, আত্মীয় ইত্যাদি বাড়িতে পরিদর্শন করতে) সমস্যা বা হস্তক্ষেপ করেছে?	১।সব সময়
		২।অধিকাংশ সময়
		৩।সামান্য একটু সময়
		৪।কোন সময়েই না

Collecting time of data

Gant chart

Activities/ Month	July 22	Aug 22	Sep 22	Oct 22	Nov 22	Dec 22	Jan 23	Feb 23	Mar 23	Apr 23	May 23	Jun 23
Proposal Presentation	██											
Introduction	██	██										
Literature Review	██	██	██	██	██	██	██	██	██	██	██	██
Methodology			██									
Data Collection								██	██			
Data Analysis									██			
Result									██			
1st Progress Presentation										██		
Discussion											██	
Conclusion And Recommendation											██	
2nd Progress Presentation										██		
Communication with supervisor	██	██	██	██	██	██	██	██	██	██	██	██
Final Submission												██