

## Health Seeking Behaviour of Migrant Fishermen for Musculoskeletal Pains along the Taylor Creek of Bayelsa State

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### Abstract

There is a dearth of literature on the health-seeking behaviour of migrant fishermen with musculoskeletal pains in the Niger Delta region even though the majority of the people in this region are fishermen. Thus, this study investigated the health-seeking behaviour of migrant fishermen for musculoskeletal pains along the Taylor Creek in Bayelsa State. This descriptive study conducted among 224 fishermen used the Health Belief Model (HBM) as its theoretical framework. The respondent-driven sampling technique was used to administer a structured questionnaire to migrant fishermen in the region. Data collected for this study were analysed using descriptive statistics. The Findings from this study indicated that the average age of the respondents was 33 years. The result from this study also indicated that majority of the respondents had their origin traced to Biseni, Kolukuma and Okordia, while a large proportion of the respondents were from the Ijaw ethnic group. The types of musculoskeletal pains experienced by the fishermen revealed that more than half of them had experienced low back pains (91.1%), muscle pains (82.1%), joint pains (82.1%), tendon and ligament pains (73.2%), bone pains (62.5%), tunnel syndromes (62.1%), chronic headaches (62.5%), myofascial pains (53.6%) and fibromyalgia (44.6%). Their health-seeking behaviour revealed that majority of them had utilised both modern and traditional health care services for medical help despite the distance of the facilities from their locations. The study concluded that more health care facilities should be provided for migrant fishermen in their respective locations.

**Keywords:** Musculoskeletal pains, health-seeking behaviour, health care facilities, migrant fishermen, Taylor Creek

### Introduction

Indeed, musculoskeletal condition remains one of the major non-communicable diseases among people carrying out strenuous activities and the elderly. This situation has therefore been a global concern to health practitioners and stakeholders. For example, Briggs *et al.* (2018) study measures that can reduce the global burden of this condition; Hay *et al.* (2017) in their research

mentioned that musculoskeletal condition is one of the 333 diseases and injuries that result into national disabilities in 195 countries.

Most often, fishermen tend to prioritise opportunities to fish and earn a sustainable livelihood, while paying little attention to the health consequences of fishing (Emery, Hartmann, Green, Gardner, & Tisdell, 2014). As such, according to MacCalman, Shafrir, Cowie and Ritchie (2011), they are less likely to seek medical attention. No doubt strenuous activities such as paddling, lifting heavy nets, mending nets etc. could result in musculoskeletal health-related problems among fishermen thereby reducing their professional efficiency and quality of life. Again, musculoskeletal pains among fishermen especially in the Niger Delta region of Nigeria can be attributed to the fact that they generally use crude fishing tools. This is compounded by the migratory nature of most fishermen along the creeks and rivers of the Niger Delta Region. It is on this note that Woodhead, Abernethy, Szaboova and Turner (2018), stated that fishing occupation is dangerous, and fishermen are likely to be exposed to numerous health-related challenges both at on-shore and offshore.

Nonetheless, extant literature has suggested that fishermen, apart from the strenuous activities engaged in by fishermen, their engagement in risky behaviour such as; tobacco and alcohol use, poor sleeping habits and stress could impact their health conditions (King, Kilpatrick, Willis, & Speldewinde, 2015). Additionally, new studies are also suggesting that apart from physical health-related problems, fishermen are also likely to experience mental health conditions such as anxiety and depression (King, Kilpatrick, Willis, & Speldewinde, 2015). Others have added that the health condition of fishermen is exacerbated by their self-employed nature, particularly those who are often compensated on a catch share basis (Matheson *et al.*, 2001; Symes, & Phillipson, 2009).

Furthermore, studies have also noted specific health problems and injuries among fishermen as a result of accidents emanating from working in an unstable weather condition, and tiredness relating to long working hours (Allen, Wellens, & Smith, 2010; Rezaee, Pelot, & Finnis, 2016). Importantly, given the nature of the fishing occupation, they are often isolated and disconnected from modern health facilities, this has compelled them to a large extent to rely on traditional

health practices when they are sick (Prosenewicz, & Lippi, 2012). It is also significant to note that the poor health condition of fishermen has enormous implications for their social integrity, economic viability, and environmental sustainability of fisheries (Woodhead, Abernethy, Szaboova & Turner, 2018).

While it has been acknowledged that fishing activities play an important role in the Niger Delta rural economy, there is a general dearth of research focusing on the specific health needs of fishermen in relation to musculoskeletal pains, even though this health challenge has been identified as the most common health problems experienced by fishermen (Briggs, Woolf, Dreinhöfer, Homb, Hoy, Kopansky-Giles, Akesson, & March 2018).

Few studies that have tried researching on this issue such as those of; Allen, Wellens and Smith (2010) on the fatigue of British fishermen; Rezaee, Pelot and Finnis (2016) on the effect of extratropical cyclone weather conditions on fishing vessels incidents' severity level on fishermen; Woodhead, Abernethy, Szaboova and Turner (2018) on health in fishing communities; Stubbs, Schofield and Patchay (2016) on mobility limitations and fall-related factors contribute to the reduced health-related quality of life in older adults with chronic musculoskeletal pains among others etc were mainly done outside the shores of Nigeria. Also, these studies have not sufficiently addressed the health-seeking behaviour of fishermen with musculoskeletal pains especially in the Niger Delta region where the movement of fishermen from one place to the other is a common occupational phenomenon. This study, therefore, seeks to explore the health-seeking behaviour of migrant fishermen for musculoskeletal pains along the Taylor creek of Bayelsa State.

### **Theoretical Framework: Health Belief Model**

The theoretical basis for this study is rooted in the Health Belief Model (HBM) developed in the year 1950s by social psychologists (Rosenstock, 1974). The HBM is a socio-psychological health behaviour change developed to explain and predict health-related behaviours, particularly regarding the uptake of health services. Afterwards, it was extended by other scholars to explain differing reactions to symptoms and to explain variations in adherence to treatment. It has

afterwards been used as a guide in designing interventions to improve compliance with preventive procedures.

The HBM opines that behaviours related to health are influenced by a person's desire to avoid illness or to get well, and by their confidence that the recommended action will achieve this (Janz, et al., 2002). The model breaks down health decisions into stages and offers a catalogue of variables that control health action. It does not supply a model of exactly how these operate. In the model, the likelihood that a person will follow this preventive behaviour is largely influenced by their actions.

Another major assertion of the model is that health behaviours are influenced by a person's desire to avoid illness or to get well, and by their confidence that the recommended action will achieve this (Janz, et al., 2002). This is in-line with the various health-seeking behaviours exhibited by fishermen as mitigation or coping strategies against musculoskeletal pains and disorders. Fishermen exhibit various forms of health-seeking behaviours such as mechanization of fishing system, constant medical check-up, exercise, etc. based on the perceived benefits of such health behaviour.

This behaviour is of course different and varies across different fishermen and communities. This is because the perception of Fisherman A is different from the perception of Fisherman B. Therefore, when the health-seeking behaviour of Fisherman A is the mechanization of a fishing system, for instance, the health-seeking behaviour of Fisherman B could be exercise and medical check-up. The model explains that the people's response to a health issue is determined by a range of factors he listed;

**Perceived susceptibility:** The risk of developing a health problem by subjective assessment refers to perceived susceptibility. In other words, individuals who perceive that they are vulnerable to a specific kind of health challenge will employ behaviours to reduce the risk of contracting. As the model implies, fishermen's use of health services might depend on their susceptibility of the risk of contracting a particular musculoskeletal disorder.

**Perceived severity:** The severity of a health problem and its potential consequences through perceived assessment is referred to as perceived severity. In other words, individuals who perceive a given health challenge as serious, are likely to employ behaviours that will prevent the health challenges from occurring. This is in line since fishermen who have experienced musculoskeletal disorder or have a close family member or friend who has experienced this disorder imbibe more of the health-seeking behaviours that will reduce their risk to musculoskeletal disorder while fishermen who have not experienced musculoskeletal disorder or who do not have a close family member or friend who has experienced this will not do this because they are unaware of the severity of the disorder.

**Perceived benefits:** Health-related behaviours are also influenced by the perceived benefits of taking action. What this implies is that if a fisherman believes that particular health-seeking behaviour will abbreviate susceptibility to musculoskeletal disorder or pain or decrease its seriousness, then the fisherman is likely to engage in that health-seeking behaviour regardless of objective facts regarding the effectiveness of the action.

**Perceived barriers:** Obstacles to behaviour change through an individual's assessment refer to perceived barriers. For instance, before a fisherman imbibes any health-seeking behaviour, the fisherman weighs the benefits and barriers, the perceived benefits must outbalance the perceived barriers for the health-seeking behaviour to occur. Perceived barriers to practising health-seeking behaviour that reduces the risk of musculoskeletal disorders.

## Materials and Methods

This cross-sectional study was conducted among 224 migrant fishermen along Taylor Creek in Bayelsa State. The Taylor Creek stretches from Bisini clan to Gbarain clan both in Yenagoa Local Government Areas of Bayelsa State in the Niger Delta region. The creek lies between longitude  $6^{\circ} 17'$  to  $6^{\circ} 21'$  E and latitude  $5^{\circ} 01'$  to  $5^{\circ} 05'$  N. The communities found around the creek are Ikrama-Okordia, Kalaba-Kordia, Akumoni-Okordia and Agbobiri Community.

The sample size for this study was determined using Cochran's sample size formula (Cochran, 1977) which yielded a sample size of 224 migrant fishermen. A respondent-driven sampling technique was used to select respondents along Taylor Creek by the use of initial identification and

contact of migrant fishermen in each community along the creek before referrals of other respondents were made. The initial contact of respondents along the communities facilitated the administration of the structured questionnaire through the referrals process until the sample size for the study was completed.

Data for this study were generated using a structured questionnaire that was designed according to the overall and specific objectives of the study. Hence, in addition to the socio-demographic variables of the respondents captured in the research instrument includes; the origin of migrant fishermen, types of musculoskeletal pains experienced by the respondents, and health-seeking behaviour of migrant fishermen for musculoskeletal pains. The validity of the research instruments was determined using face validity, while the reliability of the quantitative data was determined using Cronbach's alpha coefficient, which yielded  $\alpha = 0.7$  showing that the instrument for the study measured what it purported to measure.

The method of analysis of the research was carried out at univariate levels which employed the use of percentage distribution tables and charts. To ensure the ethical standard for this study, verbal consent was sought from individual respondents before proceeding with the administration of the research instrument. The researcher also ensured that all ethical standards such as confidentiality, non-maleficence, anonymity, justice, neutrality etc were observed as set by the National Health Research Ethics Code (NHREC).

## **Results**

### **Socio-demographic characteristics of the respondents**

Table 1 shows the socio-demographic characteristics of the respondents, which ranged from gender, age in years, marital status, religion, education, family type to average income. On the gender of the respondents, more than half of them were male respondents (57.1%), while 42.9% of them were female respondents. On the age of the respondents, the average age of the respondents was 33 years, while the highest proportion of the respondents (28.6%) falls within the age bracket of 25 – 30 years. On the marital status of the respondents, more than three-quarter of the respondents were married (80.4%). The religious affiliation of the respondents, more than half of the respondents were protestants (62.5%).

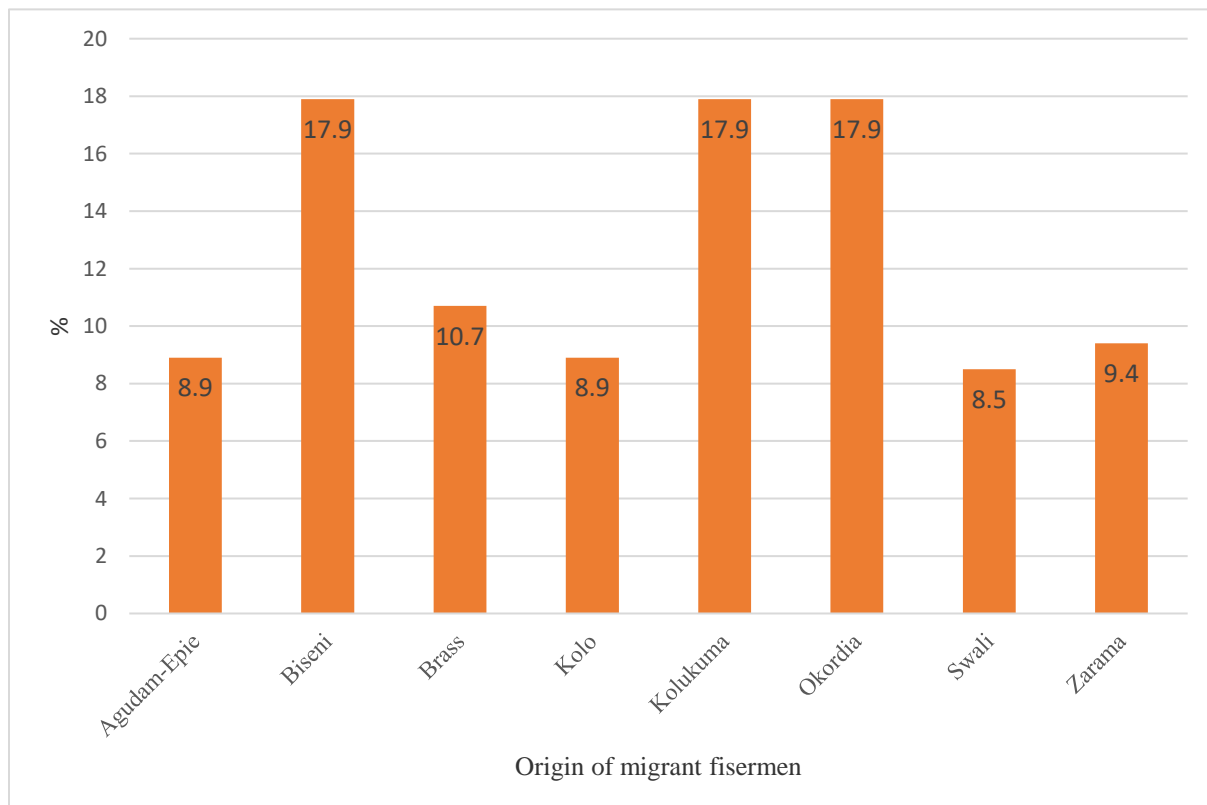
On the family type of the respondents, more than half of the respondents (53.6%) were from monogamous family while 46.4% of them were from a polygamous family. The average income of the respondents indicated that the highest proportion of the respondents (35.7%) earned between N101,000-N150,000, followed by those who earned less than N50,000 (28.6%).

**Table 1: Socio-demographic characteristics of the respondents**

Socio-demographic variables	Frequency (n=224)	Percentage (%)
<b>Gender</b>		
Female	96	42.9
Male	128	57.1
<b>Age in years (Mean age=33.02± 8.12)</b>		
18 – 24	40	17.9
25 – 30	64	28.6
31 – 34	20	8.9
35 - 39	60	26.8
40 years and above	40	17.9
<b>Marital status</b>		
Single	-	-
Married	180	80.4
Cohabiting	44	19.6
<b>Religion</b>		
Catholic	44	19.6
Protestants	140	62.5
Islam	40	17.9
<b>Education</b>		
No formal education	20	8.9
Primary	40	17.9
Secondary	80	35.7
Tertiary	84	37.5
<b>Family type</b>		
Monogamy	120	53.6
Polygamy	104	46.4
<b>Average income</b>		
Less than N50000	64	28.6
51000 – 100000	40	17.9
101000 – 150000	80	35.7
151000 – 200000	20	8.9
201000 – 250000	20	8.9

### The origin of migrant fishermen

Figure 1 presents the distribution of the respondents by place of origin. The study revealed that nearly one out of every five respondents had their origin traced to Biseni, Kolukuma and Okordia respectively, while at least one out of every ten respondents had their origins traced to Brass. Given these origins, it implies that all respondents had their origins in various Local Government Areas of Bayelsa State where the study was conducted. In other words, they all had inter-local migration rather than an inter-regional typology of migration.



**Figure 1: Distribution by the origin and ethnic groups of the respondents**

### Types of Musculoskeletal Pains Experienced or Experiencing

In multiple responses, table 2 reveals that majority of the respondents had experienced low back pain (91.1%), muscle pain (82.1%), joint pain (82.1%), tendon and ligament pain (73.2%), bone pain (62.5%), tunnel syndromes (62.1%) and chronic headaches (62.5%). Also, more than half of them have experienced myofascial pains (53.6%). Finally, the least form of health challenges experienced by the respondents is fibromyalgia (44.6%).



**Table 2: Distribution of the respondents by the types of musculoskeletal pains experienced**

<b>Types of musculoskeletal pains</b>	<b>Frequency</b>	<b>Percentage</b>
Bone pain (usually results from severe injury)	140	62.5
Muscle pain (muscle spasm)	184	82.1
Tendon and ligament pain	164	73.2
Fibromyalgia (pains in the tendons or ligaments caused by injuries)	100	44.6
Joint pain (arthritic pain)	184	82.1
Tunnel syndromes (pain due to nerve compression)	140	62.5
Myofascial pains (chronic muscle pain)	120	53.6
Chronic headache	140	62.5
Low back pain	204	91.1

### Health seeking behaviour of migrant fishermen

Table 3 reveals the various health facilities visited for health care services among the migrant fishermen. Concerning the modern health care delivery categories as revealed by the respondents in multiple responses, the study revealed that all respondents indicated that they have visited modern healthcare services at one point or the other.

**Table 3: Distribution of respondents by the health care services utilized for the treatment**

<b>Facilities visited for health care</b>	<b>Frequency (n=224)</b>	<b>Percentage (%)</b>
<b>Modern health care</b>		
Health centre	224	100.0
Government hospital	60	26.8
Visit chemist	204	91.1
Visit physician at home	164	73.2
<b>Traditional health care</b>		
Meditation	124	55.4
Massage therapy	184	82.1
Acupuncture	60	26.8
Movement therapy	144	64.3
Relaxation techniques	224	100.0
Spinal manipulation	40	17.9
Healing touch	64	28.6
Hypnotherapy	44	19.6
<b>Application of natural products</b>		
Probiotics	80	35.7
Herbs	204	91.1
Animal fats	60	26.8
Prayers	184	82.1
Others	124	55.4

Also, most of the respondents (91.1%) indicated that they have visited the chemist for health care services, and the home of a physician (73.2%). In the categories of traditional health care, it was further revealed that all respondents indicated that they have adopted relaxation as a technique in relieving pains emanating from their occupations. More than half of the respondents have used massage therapy (82.1%), movement therapy (64.3%) and meditation (55.4%). Other traditional methods utilised by the respondents included healing touch (28.6%), acupuncture (26.8%), hypnotherapy (19.6%), spinal manipulation (17.9%), etc. The results further revealed that respondents applied some forms of natural products to speed up their recovery and these ranged from the use of herbs (91.1%).

### Discussion of Findings

Findings on the origin of the respondents showed that nearly one out of every five respondents had their origin traced to Biseni, Kolukuma and Okordia respectively, while at least one out of every ten respondents had their origin traced to Brass. Given these origins, it implies that all respondents had their origins in various Local Government Areas of Bayelsa State where the study was conducted. In other words, they all had inter-local migration rather than an inter-regional typology of migration.

Lawrie *et al.* (2004) earlier research has indicated that chronic physical problems are linked to heavy labour and behaviour. Findings on the types of musculoskeletal pains experienced or still being experienced by migrant fishermen revealed that majority of the respondents had experienced different forms of musculoskeletal pains which ranged from low back pain, muscle pain, joint pain, tendon and ligament pain, bone pain, tunnel syndromes, chronic headaches, myofascial pains and fibromyalgia. Given that one form of musculoskeletal pains or the other was indicated by the respondents, this finding corroborates the study of Woodhead *et al.* (2018) who found that fishing is a dangerous occupation in which fishers are exposed to health risk both on- and offshore.

Findings on the health-seeking behaviour of the respondents revealed that majority of the respondents visited the health centre, chemists (pharmacy) including the home of a physician for medical advice. In fact, they tend to utilize both modern and traditional health care services for

musculoskeletal pains. These findings contradict the studies of Emery *et al.* (2014) and MacCalman *et al.* (2011) that fishermen tend to prioritize opportunities to fish over health as well as being less likely to seek medical help when they had health problems. This follows that even though most communities where fishing activities were carried out were far from the available health facilities, migrant fishermen still ensure that they conveyed themselves to any available health facilities for medical care particularly for musculoskeletal pains.

### **Conclusion and Recommendations**

This study examined the health-seeking behaviour of migrant fishermen for musculoskeletal pains along Taylor Creek in Bayelsa State. It is evident that different forms of musculoskeletal pains affected migrant fishermen due to the nature of their work and the environmental conditions they were subjected to. However, the study has shown that there were both modern and traditional health care services utilized by the migrant fishermen for their health. This is by implication suggesting that migrant fishermen are more conscious of their health while they employed different health-seeking behaviour for musculoskeletal pains to get well.

Given the findings of the study, the following are the recommendations of the study:

- a) Migrant fishermen should be sensitized on the use of preventive medicine rather than the use of curative medicine.
- b) Migrant fishermen should be sensitized on the use of modern health care delivery systems than the traditional methods of health care delivery.
- c) The government should ensure that modern health care facilities are located close to their respective communities to facilitate quick recovery from musculoskeletal pains.

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