

**CONTEMPORARY ISSUES AND CHALLENGES
IN PUBLIC HEALTH EDUCATION AND HUMAN
MOVEMENT IN THE 21ST CENTUARY**

Pg 136

**Festschrift for
Professor Olufemi Oyeseun Oyerinde**

**Edited by:
Ahmad Makama Getso
Olasunkanmi Adeoye Onifade**

**© CONTEMPORARY ISSUES AND CHALLENGES IN
PUBLIC HEALTH EDUCATION AND HUMAN MOVEMENT
IN THE 21ST CENTUARY**

**For Department of Human Kinetics and Health Education
Bayero University, Kano.
Published in May, 2022**

**All rights reserved, this book is copy right and so no part of it may
be re-produced, stored in a retrieval system or transmitted in any
form or by any means, electronic, mechanical, electrostatic,
magnetic type photocopying or otherwise without prior written
permission of the copy right owner.**

ISBN 978-978-59439-2-4

Published by:
Nuhu Bayero Centre
BUK Kano
GSM: 08065566417

FOREWORD

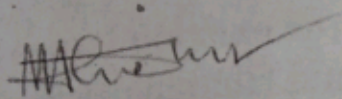
I am pleased to have opportunity to write a foreword for this book entitled 'Contemporary Issues and challenges in Public Health Education and Human Movement in the 21st Century'. This book is in honour of Professor Oyesegun Olufemi Oyerinde retirement, a scholar, a researcher, a mentor, a philanthropist and erudite Professor of Health Education.

I have known Professor Oyesegun Olufemi Oyerinde for the past 20 years, in the Department of Physical and Health Education University of Ilorin, when I was a Ph.D student. He supervised my Ph.D. thesis, of which I learnt a lot from him; indeed he is instrumental to my academic pursuit. Furthermore he is kind, gentle, resourceful and hardworking. Also, I worked with him in the same department of Human Kinetics and Health Education in Bayero University, Kano for at least 10 years. He serves as a teacher, lecturer and administrator at various capacities in different tertiary institutions of Nigeria for more than four (4) decades. His wealth of experience and expertise in Health Education made him to graduate many students of which many of them are Professors.

The idea of writing this book came up from discussion among the students of Professor O.O. Oyerinde from Bayero University Kano, University of Ilorin, Adeyemi College of Education (now University of Education) and other tertiary institutions of Nigeria. Quite numbers of issues relating to human health were raised such as fake health information, cultural beliefs; religious beliefs, ignorance; poverty and many other issues that lead to health challenges such as rejection of immunization services, denial of the existence of COVID-19, HIV/AIDs; diabetes; hypertension, drug abuse and misuse, Obesity and overweight. These challenges lead to health problems such as high morbidity and mortality rate (including maternal and child mortality) and body deformities. The authors contributed about forty (40) chapters on current health issues and challenges facing Nigerian populace. This book is timely, as many people more especially youths are bewildered on where to get genuine health information. Presently, fake and unauthorized information regarding health are spread through social media. The book serves as source of health information to many people including students.

Public health education is a means of educating people on the ways to prevent themselves from disease contraction and other health conditions not only in Nigeria but worldwide, as 'Prevention is easy, cheaper and better than cure'. Therefore public health education is a means for achieving Sustainable Development Goals (MDGs).

Majority of the articles in this book are qualitative research based papers that addressed contemporary issues and challenges of Public Health Education and Human Movement in the 21st century. The papers suggested the possible solutions to the issues and challenges raised. Furthermore, the book will serve as a reference material to researchers in Public Health, Health Education, Human Movement and other related fields.



Ahmad Makama Getso
Associate Professor in Health Education
10th May, 2022

PREFACE

This book of reading with the theme 'Contemporary Issues and Challenges in Health Education and Human movement in the 21st century' was carefully compiled in honour of a retiring Professor; Oyesegun Olufemi Oyerinde, who had served in various capacities (as an academic curriculum developer and season educational administrator) in many tertiary institutions; Colleges of Education and University.

The book of reading, which has over forty articles, focuses mainly on two phenomena; contemporary Issues and challenges in Health Education and Human Movement. Authors in their articles carefully dwell and focus on these two key areas giving educative information to readers, lecturers in tertiary and students.

It was written purposely to proffer solutions to the existing Issues and challenges in the teaching of Health Education and Human movement. Therefore, the book of reading with the educative information would be helpful for students of Health Education, Public Health Students in Physical and Health Education/students in Human Kinetic Education and tourism, and students pursuing degrees in physiology (both in the undergraduate and postgraduate programmes). The information contributed by authors may also serve as manuscripts for lecturers teaching courses related to the theme.

Because of the contemporary (current) challenges tackled in Health Education and Human movement, students in Physical and Health Education, Physiology and students in other allied courses will give this book of reading different names; some will say it is "powerful and sweet", others will say "it is my companion" yet others will say; it is a "book of the moment", and some students will call it "modern book of reading." Therefore, I wish to recommend this book reading to students in Colleges of Education and undergraduate and postgraduate students of universities offering relevant courses related to the theme of this book. They will find this book important in achieving desired successes in their academic programme.

University of Ilorin
May 13th, 2022
Prof. O. A. Onifade

1. **Contemporary Issues in Health Education and Promotion: the Priority Areas in Promoting Health in Nigerian.** *Mustapha, Abdu*
Department of Human Kinetic and Health Education, Federal University Dutsinma, Katsina State. And SULEIMAN, RABIU State Universal Basic Education Board, Katsina State. 1-10
2. **Influence of Location on Knowledge and Utilization of Vaccines Against Preventable Childhood Diseases Among Mothers of Under Five Years Children in Kano State.** *Ahmad Makama Getso (PhD)*
Department of Human Kinetics and Health Education, Bayero University, Kano, Nigeria & Magaji Sarki Kano State College of Health Sciences and Technology, Kano, Nigeria 11-18
3. **Assessment of Gender Differences on the Knowledge and Attitudes of Nurses Towards Disaster Management in Northwestern States, Nigeria.** *Adamu Abubakar Getso (Ph.D.)¹* *Department of Human Kinetics and Health Education, Bayero University, Kano.* 19-25
4. **Knowledge of HIV/AIDS and Adherence to Antiretroviral Therapy Among Patients Attending Comprehensive Health Institutions, Kano State, Nigeria**
Joseph, Yunana Bonatson (Ph.D.)¹, Ajani, Olajide Ezekiel (Ph.D.)², Yusuf, Ja'afar Aliyu³ & Oyerinde, O. O. (Ph.D.)⁴ *Department of Human Kinetics and Health Education, Bayero University Kano¹ & ⁴, Department of Physical and Health Education, School of Secondary Education (Science), Federal College of Education (Technical) Bichi, Kano² & ³,* 26-33
5. **Community Mobilization Strategy: The Source of Reproductive Health Information Among Secondary School Students of Zone B Bauchi State-Nigeria.**
Mustapha S¹ Ado M. K/Madaki (PhD)², Abdullahi Y.S.(PhD)³ *Hospital Management Board Bauchi State, Aliko Dangote College of Nursing Bauchi, Bill and Melinda Gate, College of Health Technology Ningi, Bauchi State.* 34-39
6. **Influence of Demographic Variables on Wastewater Disposal Practices Among Households of Bauchi State, Nigeria.** *Ahmad Makama Getso Ph.D & Sani Balle*
Department of Human Kinetics and Health Education Bayero University, Kano^{1&3} 40-46
7. **Students' Adherence to Consumer Rights and Examination Labels of Health Products in Tertiary institutions of Kano State.** *IBRAHIM YUSUF* *Department of Physical and Health Education Sa'adatu Rimi College of Education Kano* 47-54

8. The Role of *Haure Kal-Kal* A Community-Based Approach in the Control of Drug Use Among Youths In Kofar Nasarawa Kano State-
Nigeria *Sabo Uba Yaranchi* Physical & Health Education Department,
Federal College of Education, Kano & Prof. Oyerinde. Olufemi
Oyesegun Human Kinetics & Health Education Department, Faculty of
Education, Bayero University, Kano 080-321-12982 55-61
9. Assessment of Oral Health Practice among Pregnant Mothers
Attending Antenatal Clinics in Northwest States, Nigeria. Adamu
Umar Wangara Heath clinics, Bayero University Kano, Nigeria 62-67
10. Teachers' Perception on the Influence of School Feeding Programme
on Social Health of Primary School Pupils in Kano State. Mustapha
Shehu Department of Physical & Health Education, School of Science
Education Saadatu Rimi College of Education Kumbotso, Kano. 68-74
11. A Comparative Analysis of Personal Hygiene Practice Among Male and
Female Junior Secondary School Students In Kano State Nigeria AHAMAD
MAKAMA GETSO Ph.D. Department of Physical and Health Education
Bayero University, Kano. SADIQ KASSIM ZAHARA NAN00NO
GIRLS COLLEGE, KANO 75-83
12. Knowledge, Attitude and Practice of Family Planning Among
Residents of Gadon Kaya, Gwale LGA, Kano State. Mustapha Yunusa,
Habiba Nuhu Usman & Magaji Sarki Department of Public Health Kano
State College of Health Sciences and Technology (School of Hygiene,
Kano) 84--93
13. Appraisal of Physical Health Problems of Internally Displaced Persons
(Idps) in North Eastern States Nigeria From 2011-2015 Ado
Mohammed Kafin Madaki (Ph.D)¹ A.Y. Salihu (Ph.D)² Mustapha
Saidu³ Aliko Dangote College of Nursing Bauchi¹, Bill and Melinda Gate
College of Health Technology Ningi, Bauchi State³², Bauchi State Hospital
Management Board⁴ 94-101
14. Fire Disaster Preparedness In Schools: Health Education The Solution Dahiru,
A. RN, AEN, PhD¹ Ahmad, S. RN, RM, BNsc, MSN², Lawal, B. Assoc
Prof.³, Musa, R. RN, RNA, BNsc, PGDE⁴, ^{1,2,4}Lincoln University College
Malaysia ³Ministry of Education, Katsina State, Nigeria 102-109
15. Coping Strategies By Mothers of Children With Cerebral Palsy Ifeoma
m. Okonkwo Federal College of Education, Kano Department of Physical
and Health Education and Oyewole Olusesan Oyerinde, Dept. Of
Public health, Babcock University. 110-117
16. Relationship Between Demographic Variables and Adherence
to Measles Immunization Schedules by Nursing Mothers in
Kano State, Nigeria. ADA'U UBALE RANO¹ & ISA MUSA²
Kano State Primary Health Care Management Board Kano
State Primary Health Care Management Board² 118-125

17. **Gender Based Violence in the Midst of Covid 19 Pandemic**
Sarina, S. I. Department of Physical and Health Education
Sa'adatu Rimi College of Education, Kumbotso, Kano
126-135

✓ 18. **Socio-Cultural Factors Influencing Nutritional Status of Pregnant Women Attending Sobi Specialist Hospital Ilorin, Kwara State**
James, Joke Felicia, Ph.D. Department of Health Promotion and Environmental Health Education, University of Ilorin, Ilorin, Nigeria
136-145

19. **Assessment of Health Service Utilization In Tertiary Institutions of Kano State, Nigeria**
MUHAMMAD ISAH SULAIMAN Ph.D. Department of Physical and Health Education Sa'adatu Rimi College of Education, Kumbotso, Kano
146-153

20. **Knowledge and Practice of Breast Self Examination Among Secondary School Teachers in Ilorin, Kwara State**
Onasoga, Olayinka¹, Anyebe, E.E², Jemilaye Comfort A³, Oyekale Rahmat Aderayo⁴ Onifade, O. Adeoye⁵ and Helen SINDAMA⁶
Department of Nursing Sciences, University of Ilorin, Ilorin, Nigeria^{1,2,3}
Department of Nursing Sciences, Osun State University⁴ Department of Health Promotion & Environmental Health Education, University of Ilorin, Ilorin, Nigeria⁵ Department of Physical and Health Education, Faculty of Education, University of Jos, Plateau State, Nigeria⁶
154-163

21. **Assessment of Forced Marriage Practices Among Fulani in Kaiama Local Government Area, Kwara State, Nigeria**
Umar Ibrahim Babangida¹ Ph.D., Ibrahim Mohammed Daura² M.Sc. & Usman Mohammed Danlami³ M.Sc.
Department of Human Kinetics and Health Education, Kano University of Science and Technology Wudil. Kano State-Nigeria¹
Department of Education, Dr Yusuf Bala Usman College, Daura²
School of Health Technology, Minna. Niger State, Nigeria³
164-170

SOCIO-CULTURAL FACTORS INFLUENCING NUTRITIONAL STATUS OF PREGNANT WOMEN ATTENDING SOBI SPECIALIST HOSPITAL ILORIN, KWARA STATE

James, Joke Felicia, Ph.D.

*Department of Health Promotion and Environmental Health Education,
University of Ilorin, Ilorin, Nigeria*

Abstract

Nutritional status of pregnant women is of great importance because of the influence it has on the health of the fetus. This study examined the social-cultural factors influencing the nutritional status of pregnant women attending Sobi Specialist Hospital, Ilorin. Descriptive research design of survey type was adopted and the population comprised all pregnant women attending the Hospital. Purposive sampling technique was used to select one hundred and ninety-two (192) respondents from all the pregnant women attending antenatal clinic. Researcher designed questionnaire, validated by experts and tested for reliability, which yielded 0.086r was used for the data collection. Inferential statistics of Chi-square was used to test the three postulated null hypotheses at 0.05 alpha level of significance. The results revealed that educational status, occupation and culture significantly influence nutritional status of the pregnant women. It was recommended that seminar, health counseling and workshop should be used to educate expectant mothers on the importance of balanced diet during antenatal and postnatal periods. Efforts should be made in the family to provide adequate nutritional diets to the expectant mothers

Keywords: Nutritional-status, educational status, occupation and culture.

Introduction

Creating offspring is one of man's most cherished achievements and joys. For many it is the main drive for life and the reason to live. Unfortunately, this act of procreation is also in many countries the most dangerous period in life. Maternal mortality remains high in many developing countries and pregnancy is beset with high incidences of miscarriages, pre-term deliveries, low birth weight and birth trauma, which endanger the chances of survival of the mother and the newborn. Maternal nutritional status plays a vital role in the growth of fetus during pregnancy and its influence is seen in the infant throughout life. Many factors influence and contribute to what we can call nutritional status.

Nutrition is the science that interprets the interaction of nutrients and other substances in food in relation to maintenance, growth, reproduction, health and disease of an organism. It includes food intake, absorption, assimilation, biosynthesis, catabolism, and excretion. Nutritional status is the intake of food, considered in relation to the body's dietary needs. Good nutrition is an adequate, well balanced diet combined with regular physical activity and it is the cornerstone of good health. Good nutrition refers to the intake of a well-balanced diet that provides all essential nutrients in optimal amounts and proportions. Poor nutrition, on the other hand is a situation of intake of diet lacking nutrients either from overall insufficient food intake or from imbalance (WHO, 2017). Poor nutrition can lead to reduced immunity, increased susceptibility to diseases, impaired physical and mental development and reduced productivity. According to FAO (2019), Nutrition starts with what we eat, the products of the food and agriculture sector working on

our food system the way we produce, collect, store our foods, diets, our health and our impact on natural resources in lack or in excess. Issues related to nutrition status have continuously posed a tremendous challenge, especially in countries of developing world, where malnutrition spreading over the lifecycle has contributed to reduction in the quality of life and overall economic productivity, thereby stalling human development (Adinma, Umeononihu & Umeh, 2017). Problems on nutrition always encompass inappropriate choices and practices.

Nutrition plays important roles in maternal and child health. Poor maternal nutrition status has been associated with poor maternal and fetal outcomes. Apart from this, biological, socioeconomic, and demographic factors in different populations also influence poor birth outcomes. Pregnancy and breastfeeding can predispose under-nutrition due to deficient intake of appropriate food requirements as a result of increased nutritional demand or losses (Adinma, Umeononihu & Umeh, 2017). Malnutrition is one of the most common health problems among women in developing countries. It is usually a result of a combination of inadequate dietary intake and infection. Inadequate food intake is a consequence of insufficient food available at the household level, improper feeding practices, or both. Feeding practices include both the quality and quantity of foods taken by the individual (Kassa, Muche, Berhe & Fekadu, 2017).

Nigeria is the most populous country in Africa, with a national Bureau of Statistics (NBS) population estimate of 193 million at Dec 30, 2016, has increased to 213 million in year 2020. The country harbors the highest population of black people in the world. Over the years, nutrition has not performed very well in Nigeria. The 2003 National Demographic health survey report indicated that under nutrition among child bearing age women aged 15-49 years in Nigeria showed value of 15%, reducing to only 11% by 2013. Trends in over nutrition were even worse increasing from 21% in 2003 to 25% in 2013. Under nutrition was found to be more prevalent among rural child bearing age women (13%) compared to urban dwellers (10%) a pattern which had been similarly reported from previous work in Nigeria (Oluwafolahan, Catherine & Oluwaukunola, 2014).

Duraisamy, (2015) carried out research on how level of education is strongly associated with health status all over the world. The result revealed that, parental education particularly mother's education has a very decisive role to play in terms of her child's health. Mother's education has a positive association with child's health because of a number of reasons. Education enhances the information available to the mother by increasing her exposure to the outside world. It also strengthens her decision-making power either by promoting financial independence or emotional independence or both. Also, an educated mother typically faces lesser constraints in physical mobility and interaction with the outside world. Education enhances the information available to the mother by increasing her exposure to the outside world. Secondly, it strengthens her decision-making power either by promoting financial independence or emotional independence or both. Also educated mother typically faces lesser constraints in physical mobility and interaction with the outside world

Kuche, (2014) pointed how pregnant women residing in rural and low-income areas, have been observed to be mostly affected due to high consumption of inadequate

amount of micronutrients as a result of limited resources. Intake of micronutrients less than the recommended values increase women's risk of micronutrient deficiencies. Women who work in office tend to be more occupied with the office work thereby forgetting to eat sometimes or taken junk foods that have poor nutritional value. Furthermore, occupational status of the husband may also determine the quality and quantity of food available for the pregnant women. A woman whose husband is jobless or doing menial jobs will find it difficult to provide adequate nutritious foods for the pregnant wife. A study carried out in slum areas of Bangladesh (Dhaka) reported that 54% of the pregnant women are underweight and gave birth to underweight babies because of poverty that stemmed out of joblessness that ravaged the town (Ashraful, Nurul, & Golam, 2016). Food restrictions taboos, as a result of cultural beliefs, have been reported in many communities in Nigeria and many parts of Kwara State. The result is inadequacy of nutrient intake by pregnant women in such communities. Factors associated with adherence to food taboos include prim gravidity, teenage pregnancy, lack of formal education, low household income, signifying low socioeconomic status and a low body mass index. Dietary restrictions are a common feature during pregnancy in many developing countries (Sholeye, Catherine & Olubukunola, (2019).

Poor maternal nutrition is the key factor contributing to poor fetal development, which increases the risk that the baby born will be ill or die. Research shows that maternal nutritional status during pregnancy plays a more important role in determining fetal health and predisposition to some diseases, than genetic factors (a genetic predisposition to obesity). For example, studies show that in gestational surrogacy (where one woman bears a child conceived from the egg of another woman), factors relating to the recipient mother (the woman bearing the child) influence fetal health more so than those of the donor mother (the woman whose eggs were used (Virtual Medical Centre, 2015).

According to World Health Organization (2019), maintaining good nutrition and healthy diet during pregnancy is critical for the health of the mother and unborn child. Nutrition education and counselling is a widely used strategy to improve the nutritional status of women during pregnancy. The strategy focuses primarily on; Promoting a healthy diet by increasing the diversity and amount of food consumed, promoting adequate weight gain through sufficient and balanced protein and energy intake, Promoting consistent and continued use of micronutrient supplements, food supplements or fortified foods. It was recommended by WHO that counselling about healthy eating and keeping physically active during pregnancy is recommended for pregnant women to stay healthy and to prevent excessive weight gain during pregnancy.

Iron: This is the most used mineral in the body; it is used to make hemoglobin (a protein in the red blood cells) that carries oxygen to the tissues. Pregnancy increases the volume of blood present in the body in order to accommodate the changes within the body as well as help the developing baby create its own blood supply. Iron deficiencies can lead to the onset of auditory nervous system development, making it difficult to comprehend around.

Calcium: This is a very important mineral for making bones stronger. Mother's developing baby requires calcium for the development of strong teeth. It ensures that your nervous system, muscles and the circulation are at its peak. Research suggests that calcium deficiency in mothers can lead to the development of high blood pressure in the newborn.

Vitamin D: Vitamin D plays an extremely important role in the development of the baby's bones and teeth. A lack or deficiency of vitamin D can lead to abnormal bone growth, fractures, or rickets in newborns. The best intake of vitamin D is through fatty fish.

Zinc: One essential mineral that plays an impact role in all stages of pregnancy is zinc. It is easily found in beef, crabmeat, fortified cereals, nuts and beans. Research suggests the inadequate levels of zinc can lead to miscarriage in the early stages of pregnancy. This mineral also plays an important role in the construction of the babies DNA.

Iodine: Iodine is necessary for the production of thyroid hormones during pregnancy, thyroid hormone production increases by 50%. A deficiency in iodine during pregnancy leads to decreased intellect in children.

DHA/Omega-3 Fatty Acids: The omega-3 fatty acid that helps baby's brain development. It helps the baby gain a better attention span and a greater learning capacity. A deficiency of the same can lead to low birth weight and make the mother more susceptible to maternal depression after pregnancy. The most important thing for pregnant women to keep in mind is to always consult a Gynaecology Specialist (WHO, 2019).

Hypotheses

1. Educational background will not significantly influence the nutritional status of pregnant women attending Sobi Specialist Hospital, Ilorin.
2. Occupation will not significantly influence the nutritional status of pregnant women attending Sobi specialist hospital, Ilorin.
3. Cultural background will not significantly influence the nutritional status of pregnant women attending Sobi Specialist Hospital, Ilorin.

Methodology

A descriptive research design of survey type was adopted for this study. The population for the study comprises all pregnant women attending antenatal clinic in Sobi Specialist hospital, Ilorin. One hundred and ninety-two pregnant women visit antenatal clinic per week. The sample that was used for this study comprised all the pregnant women that attended the clinic in a week. Purposive sampling technique was used to select all the attendees on the week of the distribution of questionnaires at the antenatal clinic. The research instrument that was used for data collection was a researcher developed structured questionnaire with modified four points Likert rating scale of strongly Agree (SA), Agree (A), Disagree (D) and Strongly Disagree (SD). The questionnaire contains two sections. Section A and B. Section A collects demographic information of the respondents, while section B contains questions based on the postulated hypotheses. To ascertain the content and face validity of the instrument, copies of the questionnaire was validated by three experts. To determine the reliability of the instrument, the researcher adopted a split-half method. Pearson Product Moment Correlation was used for the analyses and a reliability coefficient of 0.86 was obtained. The administration of the instrument was carried out by the researcher with the help of two research assistants. The data obtained during administration was coded and subjected to appropriate statistical analysis. Section A was analysed using descriptive statistics of frequency count and percentage, while inferential statistics of Chi-square (χ^2) was used to analyse the three postulated null hypotheses at 0.05 alpha level, using Statistical Package for Social Sciences (SPSS) version 26.0.

Results: Educational background will not have significant influence on the nutritional status of pregnant women attending Sobi Specialist Hospital, Ilorin.

Table 1: Chi-square (X^2) analysis showing the result of educational background and nutritional status

S/N	STATEMENT	SA	A	D	SD	Df	Cal. Value	Table Value	Remarks
1	Educated pregnant women add more vegetables and fruits to their food during pregnancy	140 (72.9%)	52 (27.1%)	0 (0.0%)	0 (0.0%)				
2	Educated pregnant women know the importance of large quantity of nutrients during pregnancy	130 (67.7%)	54 (28.1%)	8 (4.2%)	0 (0.0%)				
3	Uneducated pregnant women take food that may affect their health	60 (31.3%)	80 (41.7%)	38 (19.8%)	14 (7.2%)	9	68.90	16.92	Ho rejected
4	Uneducated pregnant women do overcook their vegetables thereby reducing its nutrients before consumption.	76 (39.6%)	66 (34.4%)	40 (20.8%)	10 (5.2%)				
Column Total		406	252	86	24				

Table 1 revealed the critical x^2 value of 68.90 being greater than the table value of 16.92 @ 0.05 alpha level at the degree of freedom of 9. Therefore, the null hypothesis which stated that educational background will not influence the nutritional status of pregnant women in Kwara State Specialist Hospital, Sobi Ilorin is rejected.

Ho2: Occupational status will not influence the nutritional status of pregnant women attending Sobi Specialist Hospital, Ilorin.

Table 2: Chi-square (X^2) analysis showing the result of occupation and nutritional status.

S/N	STATEMENT	SA	A	D	SD	Df	Cal. Value	Table Value	Remarks
1	Career women tends to neglect their food intake during pregnancy	52 (27.1%)	56 (29.2%)	72 (37.5%)	12 (6.2%)				
2	Pregnant women working in office have limited time for food.	36 (18.8%)	112 (58.3%)	36 (16.7%)	12 (6.2%)				
3	Working class pregnant women tends to consume junks easily more than nutritious diet.	78 (40.6%)	72 (37.5%)	28 (14.6%)	14 (7.3%)	9	59.49	16.92	Ho rejected
4	Increase in workload in the office increases the duration of sitting of pregnant women thereby affecting their health	56 (50.0%)	72 (37.5%)	18 (9.4%)	6 (3.1%)				
Column Total		262	312	150	44				

Table 2 revealed that occupational status is a significant factor influencing the nutritional status of pregnant women attending Sobi Specialist Hospital, Ilorin, because the critical χ^2 value of 59.49 is greater than the table value of 16.92 @ 0.05 alpha level at df9. Therefore, the null hypothesis was rejected.

Table 3: Chi-square (χ^2) analysis showing the result of cultural background and nutritional status.

Sl. Statement	SA	A	D	SD	df	Cal. Value	Table Value	Remarks
1. Some cultural belief such as food taboos rebels with nutritional needs of pregnant	84 (43.8%)	75 (36.5%)	28 (14.6%)	10 (5.2%)				
2. Some food avoidance exposes the expectant mothers to nutritional deficiency	68 (35.4%)	92 (47.9%)	16 (8.3%)	14 (7.3%)				
3. Cultural beliefs shape the intake of pregnant women during pregnancy.	54 (28.1%)	94 (49.0%)	38 (19.8%)	6 (3.1%)	9	17.36	16.92	Ho rejected
4. Superstitious & beliefs tends to make pregnant women avoid certain food that may be nutritious to them during pregnancy.	86 (44.8%)	64 (33.3%)	30 (15.5%)	12 (6.3%)				
Column Total	159	137	59	28				

Table 3 revealed that cultural background is a significant factor influencing the nutritional status of pregnant women attending Sobi Specialist Hospital, Ilorin because the critical χ^2 value of 17.36 is greater than the table value of 16.92 @ 0.05 alpha level at df 9. Therefore, the null hypothesis is rejected.

Discussion

The result of hypothesis one: revealed that the critical χ^2 value of 68.90 is greater than the table value of 16.92 at the degree of freedom of 9 @ 0.05 alpha level. The hypothesis was therefore rejected. This implies that educational background influences the nutritional status of pregnant women attending Sobi Specialist Hospital, Ilorin. This finding is in line with the recommendation made by WHO (2010) that counselling about healthy eating and keeping physically active during pregnancy is recommended for pregnant women to stay healthy and to prevent excessive weight gain during pregnancy. According to World Health Organization (2019), maintaining good nutrition and healthy diet during pregnancy is critical for the health of the mother and unborn child. Nutrition education and counselling is a widely used strategy to improve the nutritional status of women during pregnancy.

The result of hypothesis two: shows that occupational status is a factor influencing the nutritional status of pregnant women attending Sobi Specialist Hospital, Ilorin, because the critical χ^2 value of 59.49 is greater than the table value of 16.92 at the degree of freedom of 9 @ 0.05 alpha level. The null hypothesis is therefore rejected. This implies that occupational status is a factor influencing the nutritional status of pregnant women attending Sobi Specialist Hospital, Ilorin. This finding

corroborates with the report of Kuche (2014), which stated that pregnant women residing in rural and low income areas have been observed to be mostly affected due to high consumption of inadequate amount of micronutrients as a result of resource limitation, intake of micronutrients less than the recommended values increase women's risk of micronutrient deficiencies.

The result of hypothesis three: revealed that cultural background is a factor influencing the nutritional status of pregnant women attending Sobi Specialist Hospital, Ilorin because the critical χ^2 value of 17.36 is greater than the table value of 16.92 at the degree of freedom of 9@ 0.05 alpha level. The null hypothesis is therefore rejected. This implies that cultural background has influence in the nutritional status of pregnant women attending Sobi Specialist Hospital, Ilorin. The report of this finding is in agreement with the result of Ertem & Ergun (2012) that stated that, the presence of culture and its subsequent effect is seen in virtually every areas of the world. And the strict adherence to several cultural practices can be harmful to the general health.

Conclusion and Recommendations

Based on the findings, the study concluded that educational background, occupational status and cultural background are factors influencing the nutritional status of pregnant women attending Sobi Specialist Hospital, Ilorin. It was recommended that Seminars, workshops and social media should be used to educate specifically expectant mother, and generally all as sundry on the importance of good nutritional intakes during antenatal and postnatal periods. Government should implement a policy that would reduce the working duration for pregnant women in governmental organizations, so as to enable them have enough time to focus on their nutritional needs. And Pregnant women should be given adequate information by health educators, health counsellors or health personnel on the need to guide against superstitious beliefs that can prevent pregnant women from taking some nutritious food such as egg, milk, yam, snail and the likes.

References

- Adinma, J., Umeononihu, O. S. & Umeh, M. N. (2019). Maternal nutrition in Nigeria. *Tropical Journal of Obstetrics and Gynaecology*, 34: 79-84.
- Ankita, P., Hardika, K. & Girija, K. (2013). A study on taboos and misconceptions associated with pregnancy among rural women of surendranagar district. *Healthline*, 4: 40-43.
- Ashraful, I.; Nurul, I. & Golam, H. (2016) Socio-Economic and demographic factors influencing nutritional status among early childbearing mothers in Bangladesh. *BMC Women's Health* 58 (16) 98-116.
- Blössner, M., De Onis, M. & Prüss-Üstün, A. (2015). *Malnutrition: quantifying the health impact at national and local levels*. Geneva: World Health Organization.
- Daivadanam, M., Wahlström, R., Thankappan, K. R. & Ravindran, T. K. (2015). Balancing expectation amidst limitations: the dynamics of food decision-making in rural Kerala. *BMC Public Health*, 15:644.
- Daivadanam, M., Wahlström, R., Thankappan, K. R. & Ravindran, T. K. (2015). Balancing expectation amidst limitations: the dynamics of food decision-making in rural Kerala. *BMC Public Health*, 15:644.
- Dodd, J. M., Ahmed, S., Karnon, J., Umerger, W., Deussen, A. R. & Tran, T. (2015). The cost-effectiveness of providing antenatal lifestyle advice for

- women who are overweight or obese: the LIMIT randomised trial. *BMC Obesity*, 2: 14.
- Emelumadu, O. F., Ukegu, A. U., Ezeama, N. N., Kanu, O. O., Ifeadike, O. & Onyeonoro, U. U. (2014). Socio-demographic determinants of maternal health-care service utilization among rural women in Anambra State, South East Nigeria. *Annals of Medical and Health Sciences Research*, 4: 374-382.
- Emelumadu, O. F., Ukegu, A. U., Ezeama, N. N., Kanu, O. O., Ifeadike, O. & Onyeonoro, U. U. (2014). Socio-demographic determinants of maternal health-care service utilization among rural women in Anambra State, South East Nigeria. *Annals of Medical and Health Sciences Research*, 4: 374-382.
- Englund-ogge, L., Brantsæter, A. L., Sengpiel, V., Haugen, M., Birgisdottir, B. E., Myhre, R., Meltzer, H. M. & Jacobsson, B. (2014). Maternal dietary patterns, and preterm delivery; results from large prospective cohort study. *BMJ*, 348;
- Food and Agriculture Organisation (FAO, 2019). The United Nation Global Plan Action for the Conservation and Sustainable Utilization of Plant Genetic Resources for Food and Agriculture.
- Food and Agriculture Organisation (FAO, 2019). The United Nation Global Plan Action for the Conservation and Sustainable Utilization of Plant Genetic Resources for Food and Agriculture.
- Hanson, M. A., Bardsley, A., De-Regil, L. M., Moore, S. E., Oken, E. & Poston, L. (2015). The International Federation of Gynecology and Obstetrics (FIGO) recommendations on adolescent, preconception and maternal nutrition: Think Nutrition First. *International Journal of Gynecology and Obstetrics*, 131: S213-53
- Hillesund, E. R., Overby, N. C., Engel, S. M., Klungsyr, K., Harmon, Q. E., Haugen, M. & Bere, E. (2014). Association of adherence to the new Nordic diet with risk of preeclampsia and preterm delivery in the Norwegian Mother and Child Cohort Study (MoBa). *European Journal of Epidemiology*, 29(10): 753-65.
- Islam, M. R. (2010). *Maternal Morbidity and Mortality among Indigenous People in Bangladesh: A Study of the Mru Community*. Unpublished Master Thesis, Department of Indigenous Studies, University of Tromsø, Norway.
- Islam, M. R. (2010). *Maternal Morbidity and Mortality among Indigenous People in Bangladesh: A Study of the Mru Community*. Unpublished Master Thesis, Department of Indigenous Studies, University of Tromsø, Norway.
- Islam, M. R., Islam, M. A. & Banowary, B. (2010). Antenatal and postnatal care seeking behavior in a matrilineal society: A Study on the Garo of Bangladesh. *Journal of Family Welfare (Forthcoming)*.
- Kassa, G. M., Muche, A. A., Berhe, A. K. & Fekadu, G. A. (2017). Prevalence and determinants of anemia among pregnant women in Ethiopia; a systematic review and meta-analysis. *BMC Hematol.* 17:17.
- Kassa, G. M., Muche, A. A., Berhe, A. K. & Fekadu, G. A. (2017). Prevalence and determinants of anemia among pregnant women in Ethiopia; a systematic review and meta-analysis. *BMC Hematol.* 17:17.
- Manjunath, T. L., Shilu, M. Z., Mahesh, V., Muninarayana, C. & Ananya, L. (2017). Nutritional assessment of women in the reproductive age group (15-49 years) from a rural area, Kolar, Kerala. *India International Journal of Community Medicine and Public Health*, 4(2): 542.
- Manjunath, T. L., Shilu, M. Z., Mahesh, V., Muninarayana, C. & Ananya, L. (2017). Nutritional assessment of women in the reproductive age group (15-49

- years) from a rural area, Kolar, Kerala. *India International Journal of Community Medicine and Public Health*, 4(2): 542.
- Mengesha, A. D. & Ayele, T. T. (2015). The Impact of Culture on the Nutritional Status of Children and Mothers Durrinng Recurring Food Insecurity: The Case of Boreicha Woreda (SNNPRS). *American Journal of Educational Research*, 3(7): 849-867.
- Mengesha, A. D. & Ayele, T. T. (2015). The Impact of Culture on the Nutritional Status of Children and Mothers Durrinng Recurring Food Insecurity: The Case of Boreicha Woreda (SNNPRS). *American Journal of Educational Research*, 3(7): 849-867.
- Ministry of Health and Population (2019). *Nepal Demographic and Health Survey: Key Findings*. Kathmandu, Nepal: Ministry of Health and Population.
- Novak S. (2018). Fasting While Pregnant or breastfeeding. www.whattoexpet.com/pregnancy/fasting-while-pregnant-breastfeeding/
- Novak S. (2018). Fasting While Pregnant or breastfeeding. www.whattoexpet.com/pregnancy/fasting-while-pregnant-breastfeeding/
- Olatunbosun, O. A., Abasiattai, A. M., Bassey, E. M., James, R. S., Ibanga, G. & Morgan, A. (2014). Prevalence of anemia among pregnant women at booking in the University of Uyo teaching hospital Uyo, Nigeria. *Biomedical Research International* 2014:849080.
- Olatunbosun, O. A., Abasiattai, A. M., Bassey, E. M., James, R. S., Ibanga, G. & Morgan, A. (2014). Prevalence of anemia among pregnant women at booking in the University of Uyo teaching hospital Uyo, Nigeria. *Biomedical Research International* 2014:849080.
- Oluwafolahan, O. S., Catherine, A. B. & Oluwabukunola, A. J. (2014). Dietary habit of pregnant women in Ogun- East Senatorial Zone, Ogun State Nigeria; A Comparative Study. *International Journal of Nutrition and Metabolism*, 6: 42-9.
- Oluwafolahan, O. S., Catherine, A. B. & Oluwaukunola, A. J. (2014). Dietary habit of pregnant women in Ogun- East Senatorial Zone, Ogun State Nigeria; A Comparative Study. *International Journal of Nutrition and Metabolism*, 6: 42-9.
- Omane-Adjakum, O. (2010). *Medicines usage in pregnancy*. Kwame Nkrumah University of Science and Technology, Kumasi, University Press.
- Oni, O. A. & Tukur, J. (2012). Identifying pregnant women who adhere to food taboos in rural community: A community-based study. *African Journal of Reproductive Health*, 16: 68-76.
- Oni, O. A. & Tukur, J. (2012). Identifying pregnant women who adhere to food taboos in rural community: A community-based study. *African Journal of Reproductive Health*, 16: 68-76.
- Park, K. (2015). *Parks Textbooks of preventive and social medicine*. 23rd edition. India: Bangrasidals Bhanot Publishers.
- Ramakrishnan, U., Lowe, A., Kumar, S. V., Raj, R. M. & Chaturvedi, A. (2012). Public health interventions, barriers and opportunities for improving maternal nutrition in India. *Food Nutrition Bulletin*, 33: 71-92.
- Rasmussen, M. A., Maslova, E., Halldorsson, T. L. & Olsen, S. F. (2014). Characterization of dietary patterns in the Danish national birth cohort in relation to preterm birth. *PLoS One*. 9(4): e9364.
- Sebanjo, I. O., Olayiwola, I. O., Afolabi, W. A. & Senbanjo, O. C. (2018). Maternal and Child undernutrition in rural and urban communities of Lagos state Nigeria; The relationship and risk factors. *BMC Res Notes*, 6: 286.

- Sebanjo, I. O., Olayiwola, I. O., Afolabi, W. A. & Senbanjo, O. C. (2018). Maternal and Child undernutrition in rural and urban communities of Lagos state Nigeria; The relationship and risk factors. *BMC Res Notes*, 6; 286.
- Shiva, R. A., Jeevan, B. & Diwash, P. T. (2017). Factors associated with nutritional status of women of reproductive age group in rural, Nepal. *Asian Pacific Journal of Health Sciences*, 4(4).
- Shiva, R. A., Jeevan, B. & Diwash, P. T. (2017). Factors associated with nutritional status of women of reproductive age group in rural, Nepal. *Asian Pacific Journal of Health Sciences*, 4(4).
- Sholeye, O. O., Catherine, A. B. & Olubukunola, A. J. (2014). Dietary habit of pregnant women in Ogun-East senatorial zone, Ogun state, Nigeria: A comparative study. 6: 42-9.
- Sholeye, O. O., Catherine, A. B. & Olubukunola, A. J. (2019). Dietary habit of pregnant women in Ogun-East senatorial zone, Ogun state, Nigeria: A comparative study. 6: 42-9.
- Shomya, S. (2015). *Taboos in food Practices during Pre and Post -natal period: A Comparative Study between Tribal and Non- Tribal Women in Odisha*. A Dissertation Submitted to the Department of Humanities and Social Sciences, National Institute of Technology, Rourkela.
- Shomya, S. (2015). *Taboos in food Practices during Pre and Post -natal period: A Comparative Study between Tribal and Non- Tribal Women in Odisha*. A Dissertation Submitted to the Department of Humanities and Social Sciences, National Institute of Technology, Rourkela.
- Shwetta, T. M., Swetha, R., Iyengar, K. & Rani, U. S. (2017). Food taboos among pregnant and lactating mothers in Tumkur: a qualitative study. *International Journal of Community Medicine and Public Health*, 4: 1060-5.
- Shwetta, T. M., Swetha, R., Iyengar, K. & Rani, U. S. (2017). Food taboos among pregnant and lactating mothers in Tumkur: a qualitative study. *International Journal of Community Medicine and Public Health*, 4: 1060-5.
- Synareun, V., Hansana, V., Somphet, V., Xayavong, S., Phengsanh, A. & Popeonoe, R. (2012). Reasons Rural Laotians Choose Home Deliveries over Delivery at Health Facilities: A Qualitative Study. *BMC Pregnancy and Childbirth*, 12: 86-70.
- Virtual Medical Centre (2010). www.myvmc.com/pregnancy/importance-of-health-eating-before-and-during-pregnancy
- Virtual Medical Centre (2015). www.myvmc.com/pregnancy/importance-of-health-eating-before-and-during-pregnancy/
- WHO (2017). *World Health Organization Recommendations for Prevention and Treatment of Pre-eclampsia and Eclampsia*. Geneva: World Health Organization.
- WHO, (2017). Essential nutrition actions: Improving maternal, newborn, infant and young child health and nutrition. Geneva: World Health Organization.
- WHO, (2013). Essential nutrition actions: Improving maternal, newborn, infant and young child health and nutrition. Geneva: World Health Organization.
- World Health Organisation, (2019). Saving the lives of mothers and children outcomes during parturition. *East Africa Medical Journal*, 78: 255-58.
- World Health Organisation, (2019). Saving the lives of mothers and children outcomes during parturition. *East Africa Medical Journal*, 78: 255-58.