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**HEALTH INFORMATION PROVISION AND UTILIZATION AS
PREDICTORS OF SAFE HEALTH PRACTICES OF NURSING
MOTHERS IN IMO STATE, NIGERIA**

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Abstract

The study investigated health information provision and utilization as predictors of safe health practices of nursing mothers in Imo State. Four research purposes and four research questions guided the study. The researcher adopted descriptive design. The population of the study is 9735 nursing mothers in Okigwe Senatorial Zone, Imo State. Using proportionate sampling, 94 nursing mothers were selected from each of the six local government areas in Okigwe Zone, totaling 564. A researcher-made questionnaire “Information Provision and Utilization on Safe Health Practices of Nursing Mothers in Imo State Questionnaire” (IPAUOSHPONIMQ) was used as instrument for data collection. The reliability of the study was tested using Cronbach Alpha with 0.92 reliability coefficient. Descriptive statistics of mean with a criterion mean of 2.5 was used to analyze data. Results showed that Types of health information provided for nursing mother include environmental cleanliness, body cleanliness practices, general baby care, maternal nutrition and breastfeeding. Sources of health information include social media, TV, family members, radio and postnatal clinics. Health journals and health workers are not accepted as nursing mothers’ sources of health information in Imo State. Child care, breastfeeding, hygiene practices, regular postnatal clinic and environmental cleanliness are the health needs for which nursing mothers seek health information. Adequate sleep/rest, avoidance of drug abuse, drinking enough water, good eating habit, avoidance of smoking/alcohol, maintenance of hygiene in the environment, regular visits for medical checkups and washing of breast/body before breastfeeding are the impacts of utilization of health information among nursing mothers in Imo State. it was recommended among others that Government should make health information available for nursing mothers in Imo State for their safe health practices through subsidized medicare, radio and TV jingles. Nursing mothers should consult professional health personnel for their health information through postnatal clinic.

Keywords: Health Information, Provision, Utilization, Safe Health Practices, Nursing mothers

Introduction

The 21st century is critically marked with information proliferation and advancement across all human fields, even in health. People can now access all kinds of health information courtesy of the modern information technology. Against this backdrop, the health information seeking behaviour of people, particularly nursing mothers, has witnessed drastic increase and change. Nursing mothers seek health information for themselves and for their babies. United States Agency for International Development (USAID, 2014). Modern information technology not only provides nursing mothers with a myriad of specific health information but has also given a lot of opportunities and platforms for accessing such information in order to meet their own needs (Adekanye, 2014).

The imperative of comprehensive mother-child health cannot be overemphasised. To this end, Das and Sarkar (2014) stated that sound health is basic to human effective functioning. It can be stated that a healthy population tends to be a productive population that is sine qua non for a growing economy. Therefore, no country can be properly regarded as sound when the generality of the people are poor in health. From the stance of adequate, accessible and utilized health information, The import of the foregoing is that provision for and utilization of health information for nursing mothers may be necessary to improve health outcomes, guide identification of health problems, inform planning and design of health intervention to address public health problems, guide decision-making during allocation of scarce resource, and provide opportunities for monitoring and evaluating progress towards achievement of health goals (Das & Sarkar, 2014). This is diacritically predicated upon myriads of health-related issues

challenging nursing mothers and their babies that have resulted into nursing mothers and infant morbidity and mortality.

A very crucial aspect of public health is the access to timely health information that assists in fighting health menace (Ackerman, 2018) as it may contribute in enhancing mother-child health. This could explain the reason nursing mothers seem to embark on search for relevant health information using available and accessible means like the internet, radio, newspaper, television and other media out of sheer curiosity, need for self-diagnosis, analysis and evaluation of their health concerns (Kumar, 2013).

Sequel to the foregoing, it can be stressed that there seems to a strong nexus seeking health information and health behaviours of nursing mothers, such that provision and utilization of health information could predict their health practices. Folorunso (2017) describes access to adequate and timely information as very critical determiner of the health practices of nursing mothers. In the same vein, Odini (2016) notes that provision and use of health information could be cardinal determinants of health outcomes. In other words, availability and accessibility to adequate, current, and effective information systems are key factors to better health care. However, the seemingly rising cases of maternal and infant morbidity and mortality in Imo State could mean poor provision and utilization of health information, especially among rural nursing mothers. This can be blamed on poor access to relevant and critical health information due to lack of access to radios, televisions, newspapers and smartphones with Internet tools that facilitate timely, relevant and current health information easy and mobile. Therefore, this study examined provision and utilization of health information as predictors of safe health practices among nursing mothers in Imo State.

Statement of the Problem

Despite various commentaries in the national dailies, radio and television and even on talk shows, on safe health practices among nursing mothers, nursing mothers still experiences health challenges. Even with the availability of many health centres and health workers in rural communities, the issue of nursing mothers having access to health information for their safe health practices like regular washing of hands, good immunization, good diet still remain a critical challenge. This is also coupled with the dearth of contextualized and localized studies focusing on the type, sources, utilization and impact of health information for health practices among nursing mothers. Therefore, it can be contended that nursing mothers still do not possess adequate information that may encourage safe health practices in Imo State. Against this backdrop, this study was conducted to ascertain the provision and utilization of health information as predictors of safe health practices of nursing mothers in Imo State.

Aim and Objectives of the Study

The study was conducted to examine the provision and utilization of health information as predictors of safe health practices of nursing mothers in Imo State, Nigeria. Objectives of the study include to:

1. find out the types of health information available to nursing mothers for safe health practices
2. ascertain sources of health information for nursing mothers for safe health practices
3. examine the health information needs of nursing mothers for safe health practices

4. investigate the impact of the utilization of health information among nursing mothers on safe health practices

Research Questions

The study was guided by the following research questions:

- 1 what are the types of health information available to nursing mothers for safe health practices?
- 2 what are the sources of health information for nursing mothers for safe health practices?
- 3 what are the health information needs of nursing mothers for safe health practices?
- 4 what is the impact of the provision and utilization of health information among nursing mothers on safe health practices?

Health Information

Defining health information calls for elucidation of what health entails. Health is generally taken to mean the condition of the body or mind. From a comprehensive and technical stance, the World Health Organization described health as a state of complete physical, mental, social and spiritual well-being of an individual and not merely the absence of disease or infirmity (WHO, 2013). In line with the above, Folorunso (2017) opine that good health consists in the holistic wellbeing of people anchored on free access to efficient health care, better nutrition, improved living conditions, useful health information and absence of avoidable premature deaths. Ama-Abasi, Egbe and Otun (2022) describe information as acquired or received knowledge based on facts, figures, opinions, ideas and inferences, stressing that information is critical for decision-making, solving problems and decreasing ambiguity on any subject of interest. Health

information could mean specific or generation information needs of patients in solving their health issues (Wasike & Tenya, 2013). Similarly, Abasi and Undie (2021) describes health information as the relationship between health education and health promotion. Possessing the right health information could promote wellness in terms of physical, spiritual and emotional stability. Specific scopes of health information cover sanitation rules and regulations (environmental cleanliness), family planning, disease control, drugs, immunization, location of good hospitals and clinics, infant care, diagnostic results. It also includes news about standard health practices as adopted by international bodies and agencies responsible for global health activities, such as world Health Organization (WHO) and United Nations Fund for Population Activities (Tsawe, Moto, Netshivhera, Ralesego, Nyathi & Susuman, 2015).

Tsawe et al (2015) look at health information from two perspectives: while health information is knowledge, facts and news generated from various sources, necessary for good physical and mental condition of human beings, it is a determinant of the right to the highest attainable standard of health including access to such information as protected by the right to exchange and import information.

Nursing Mothers and their Health Information Needs

Prasad (2013) cited in Agba, Aduaka, Enang and Agba (2022) established a relationship between nursing mothers' health information needs and their quality of life and concluded that nursing mothers with unsatisfied health needs presented a lower mean quality of life of the score. Ama-Abasi, Egbe and Otun (2022) found out that pregnant women's resource utilization is significantly related to their need for health information, nutrition information, delivery information, and breastfeeding information. Amoajei and Almaraobi (2016) reported that a

strong effect of cultural values on one's preference and decisions. It also highlights the importance of a communicative relationship between the physicians and the patients from the study, it can be concluded that in order to understand one's needs, the cultural perspective of that society should be considered.

Safe Health Practices of Nursing Mother: General Analysis

Safe health practices refer to the prevention of health errors that could portend health dangers and risks. Such health risk practices include self-medication, overdose and presumptuous diagnosis. It is believed that prevention is much safer and cheaper than cure. Therefore, nursing mothers are expected to indulge safe health practices for their own benefit and that of the baby. Bookari, Yeatman and Williamson (2017) defined safe health practices as those that reduce the risk of adverse events related to exposure to medical care across a range of diagnoses or conditions. Nursing mother safe health practices is a necessity in our contemporary society. It is imperative that nursing mothers stay healthy and strong via safe practices since such time is a very delicate one (Tsehay, 2014).

Given the above, safe health practices among nursing mothers has long been accorded a priority attention and policy in public health due to recurring high decimal of maternal and infant mortality around the world, especially in a developing nation like Nigeria, since the 1980s (Chorongor, 2016). Most public health professionals accept that safe health practices among nursing mothers and babies in early post-partum is the most effective means of ensuring that both short and long term positive health outcomes for individuals and families are attained. Sheikh (2014) notes that once mothers feel confident, empowered and less stressed through effective health education and safe practices, they seem to cope better, no matter what their

socioeconomic status or risk status might be. This underlines the fact that good health and positive outcomes are extremely important for nursing mothers and their babies. Wasike and Tenya (2013) stated that access to health information by nursing mothers helps them to maintain good health practices for themselves and for their babies.

Provision of Health Information for Safe Health Practices of Nursing Mothers

Sheikh (2014) reported that parents require different patterns of information provision depending on the type of event. The study also observed that when information provision matches the needs of nursing mothers, there is more positive attention to safe health practices than when an existing information provision does not match their needs. Oдини (2016) revealed that respondents were found to consult health information more from the family members or friends as compared to health care providers. Folayan, Adeosun, Adeosun and Adedeji (2017) reported that out of 142 responses received, 109 nursing mothers (76.7%) reported using the Internet to find health information. 105 nursing mothers (96.3%) out of the 109 consult the internet for answers to their babies' health problems before consulting a doctor or a care giver. 81.6% of the nursing mothers adhere to the online physician's advice thereby leading to self medication. An aggregate of 101 (92.6%) nursing mothers accepted that the internet influences their health seeking decisions. Therefore, it was concluded that there was a significant relationship between the use of internet and health seeking behaviours of nursing mothers and also between the use of internet and self-medication among them.

Oдини (2016) stated that there was a strong need for health information of all types; information needs are based on day-to-day health problems that are not adequately satisfied by the existing information systems and services due to poverty, lack of awareness of adequate health

information resources, illiteracy, and poor information communication channels, among others while major sources of health information includes face-to-face communication, cell phone, radio, and television. Choice of information sources was influenced by the respondent's level of education, income, age, occupation and distance to and location of information sources. Chukwuji and Umeji (2019), in their studies, revealed high availability of information on breastfeeding, majorly through antenatal and postnatal clinics and that the nursing mothers in Onitsha Metropolis of Anambra State engage in exclusive breastfeeding as a result of the information on breastfeeding they received. Similarly, Agba, Aduaka, Enang and Agba (2022) stated that that majority (87.2%) of respondents use paper based routine health information system due to inadequate knowledge of informatics, lack of comprehensive training of nurses on ICT utilization, unavailability of health information technology tools, lack of constant power supply.

Methodology

The study adopted the descriptive research design. The population of the study is **9735** nursing mothers in Okigwe Senatorial Zone, Imo State. This figure represents registered nursing mother across the study area between October 2022 and March, 2023 (Medical Personnel at the Imo State Ministry of Health, Owerri). Using proportionate sampling, 94 nursing mothers were selected from each of the six local government areas in Okigwe Zone, namely: Ihitte Uboma, Okigwe, Isiala Mbano, Ehime Mbano, Onuiom and Obowo respectively, totaling 564. The population of nursing mothers chosen from the various LGAs in the study area was based on number of those who registered in public hospitals in the area. In each health centre visited, available nursing mother was chosen. A researcher-made questionnaire titled "Information

Provision and Utilization on Safe Health Practices of Nursing Mothers in Imo State Questionnaire” (IPAUOSHAPONIMQ) was used as instrument for data collection. Out of 564 copies of questionnaires distributed, 520 representing 92% were duly returned and completed. The study used the returned copies of questionnaire for the study. The reliability of the study was tested using Cronbach Alpha with 0.92 reliability coefficient, which showed that the instrument was reliable. The researcher used descriptive statistics of mean with a criterion mean of 2.5 to answer the research questions.

Results

Table 1: Mean responses on types of health information provided for nursing mothers in Imo State for their safe health practices (N=520)

ITEMS	SA	A	D	SD	Mean(x)
Environmental cleanliness	200(800)	310(930)	7(14)	3(3)	3.4
Body cleanliness practices	320(1280)	200(600)	0(0)	0(0)	3.6
General baby care	300(1200)	218(654)	2(4)	0(0)	3.6
Maternal nutrition	400(1600)	120(360)	0(0)	0(0)	3.8
Breastfeeding	350(1400)	170(510)	0(0)	0(0)	3.7

Table 1 contains analysis of data to answer research question one. Result shows that the types of health information provided for nursing mother include environmental cleanliness, body cleanliness practices, general baby care, maternal nutrition and breastfeeding.

Table 2: Mean responses on sources of health information needs for nursing mothers in Imo State for their health practices (N=520)

ITEMS	SA	A	D	SD	Mean(x)
Health Journals	20(80)	5(15)	290(580)	200(200)	1.7
Social media	250(1000)	180(540)	50(100)	40(40)	3.2
Health workers	120(480)	97(291)	153(306)	150(1500)	2.4
TV	200(800)	220(660)	82(164)	12(12)	3.1
Family members	300(1200)	220(660)	0(0)	0(0)	3.6
Radio	120(480)	390(1170)	9(18)	1(1)	3.2
Postnatal clinics	310(1240)	208(624)	2(4)	0(0)	3.6

Table 2 contains analysis of data to answer research question two. Result indicates that respondents accepted that sources of health information include social media, TV, family members, radio and postnatal clinics. Health journals and health workers are not accepted as their source of health information.

Table 3: Mean responses on health information needs of nursing mothers in Imo State for their health practices (N=520)

ITEMS	SA	A	D	SD	Mean(x)
Child care	300(1200)	200(800)	10(20)	5(5)	3.9
Breastfeeding	359(1436)	161(483)	0(0)	0(0)	3.7
Hygiene practices	253(940)	240(720)	20(40)	7(7)	3.3
Regular postnatal clinic	280(1120)	230(690)	2(4)	1(1)	3.5
Environmental cleanliness	302(906)	218(654)	0(0)	0(0)	3

Table 3 contains analysis of data for research question three. Based on the result, child care, breastfeeding, hygiene practices, regular postnatal clinic and environmental cleanliness are the health needs for which nursing mothers seek health information.

Table 4: Mean responses on the impact of utilization of health information of nursing mothers in Imo State for their health practices (N=520)

ITEMS	SA	A	D	SD	Mean(x)
Adequate sleep/rest	400(1600)	118(354)	2(4)	0(0)	3.9
Avoidance of drug abuse	330(1320)	190(570)	0(0)	0(0)	3.6
Drinking enough water	370(1480)	147(441)	3(6)	0(0)	3.7
Good eating habit	282(1128)	220(660)	0(0)	0(0)	3.4
Avoidance of smoking/alcohol	293(1172)	227(681)	0(0)	0(0)	3.6
Maintenance of hygiene in my environment	129(516)	391(1173)	0(0)	0(0)	3.2
Regular visits for medical checkups	411(1644)	109(327)	0(0)	0(0)	3.8
Washing of breast/body before breastfeeding	327(1308)	208(624)	2(4)	0(0)	3.7

Table 4 answers research question four. Based on the result, adequate sleep and rest, avoidance drug abuse, drinking enough water, good eating habit, avoidance of smoking/alcohol, maintenance of hygiene in the environment, regular visits for medical checkups and washing of

breast/body before breastfeeding are the impacts of utilization of health information among nursing mothers in Imo State.

Summary of Findings

The findings of the study are hereunder itemized: Types of health information provided for nursing mother include environmental cleanliness, body cleanliness practices, general baby care, maternal nutrition and breastfeeding. Sources of health information include social media, TV, family members, radio and postnatal clinics. Health journals and health workers are not accepted as nursing mothers' sources of health information in Imo State. Child care, breastfeeding, hygiene practices, regular postnatal clinic and environmental cleanliness are the health needs for which nursing mothers seek health information. Adequate sleep/rest, avoidance of drug abuse, drinking enough water, good eating habit, avoidance of smoking/alcohol, maintenance of hygiene in the environment, regular visits for medical checkups and washing of breast/body before breastfeeding are the impacts of utilization of health information among nursing mothers in Imo State.

Discussion of Findings

The findings of the study are hereunder discussed:

Type of health information provided to nursing mothers in Imo State for their safe health practices

The findings of the study showed that the types of health information provided for nursing mother include environmental cleanliness, body cleanliness practices, general baby care, maternal nutrition and breastfeeding. In aligning with the findings of the present study, Isibor

(2014) stated that the provision of health information is essential for comprehensive mother-child health. Chukwuji and Umeji (2019) revealed high availability of information on breastfeeding, majorly through antenatal and postnatal clinics, which has led to positive safe health practices. Odini (2016) notes that provision and accessibility to adequate, current, and effective information systems are key factors to better health care.

Sources of Health information of nursing mothers in Imo State for on safe health practices

Result indicates that sources of health information include social media, TV, family members, radio and postnatal clinics while health journals and health workers are not accepted as nursing mothers' sources of health information. This finding agrees with Kumar (2013) who reported that sources of health information include the internet, radio, newspaper, television and other media. The finding agrees also with Folayan, Adeosun, Adeosun and Adedeji (2017) who reported that majority of nursing mothers use the Internet to find health information on their babies' health problems before consulting a doctor or a care giver

Health information needs on safe health practices of nursing mothers in Imo State

The findings of the study indicated that child care, breastfeeding, hygiene practices, regular postnatal clinic and environmental cleanliness are the health information needs of nursing mothers in Imo State. This finding is in line with Prasad (2013) cited in Agba, Aduaka, Enang and Agba (2022) who reported that health information needs of nursing mothers include sleep and rest, family support, in the environment domain, access to health services, an appropriate environment to breastfeed and professional support and good mental health. Ama-Abasi, Egbe and Otun (2022) reported that pregnant women's needs for health information features nutrition information, delivery information, and breastfeeding information.

Impact of utilization of health information of nursing mothers in Imo State for health practices

The findings of the study revealed that adequate sleep and rest, avoidance of drug abuse, drinking enough water, good eating habit, avoidance of smoking/alcohol, maintenance of hygiene in the environment, regular visits for medical checkups and washing of breast/body before breastfeeding are the impacts of utilization of health information among nursing mothers in Imo State. Odini (2016) notes that provision and accessibility to adequate, current, and effective information systems are key factors to better and safe health practices while Wasike and Tenya (2013) stated that access to health information by nursing mothers helps them to maintain good health practices for themselves and for their babies. Furthermore, Sheikh (2014) stated that when information provision matches the needs of nursing mothers, there is more positive attention to safe health practices than when an existing information provision does not match their needs. Chukwuji and Umeji (2019) revealed that the nursing mothers in Onitsha Metropolis of Anambra State engage in exclusive breastfeeding as a result of the information on breastfeeding they received. The finding of this study also supports Onuoha (2013) who found that health information literacy is positively associated with health promoting behaviour, such as regular exercise and healthy eating habits, and good physical fitness.

Recommendations

Based on the findings of the study the following recommendations have been made:

- i. Government should make health information available for nursing mothers in Imo State for their safe health practices through subsidized medicare, radio and TV jingles.

- ii. Health workers should provide information needs of nursing mothers in Imo State for their health practices.
- iii. Nursing mothers should consult professional health personnel for their health information through postnatal clinic.
- iv. Relevant health bodies such as Non Governmental Organizations (NGOs) should provide safe health practices for nursing mothers in the State.

Conclusion

The study investigated provision and utilization of health information as predictors of safe health practices of nursing mothers in Imo State, Nigeria. The findings of the study reveal dearth of health information among nursing mothers. Most nursing mothers in Imo State are not properly guided on how to get information concerning their health and proper utilization of such information is not well managed by concerned agencies of government.

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