Household environment and maternal health amongst rural communities in Rivers State

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Abstract

This study was set out to investigate the role of household environment and maternal health amongst rural communities in Rivers State. Household environment in this perspectives has to do with making the monitoring of health and care of pregnancy the sole responsibility of the pregnant mother, authority and compulsion of men on women during pregnancy, giving up to the idea of unsafe local delivery of the expectant mother, poverty and ignorance of signs of complication etc. To be more precise in this argument, the study adopted the theory of Prenatal Attachment of Rubin (1975), with the position that the immediate bond between postpartum mother and neonate was a consequence of prenatal processes that depends entirely on the conduciveness of the household environment the pregnant mother finds herself. This analogy is in tandem with our specific objectives which further revealed that the safety of an expectant mother is not only tied to healthcare delivery but also of a conducive household environment free from the following: making the monitoring of health and care of pregnancy the sole responsibility of the pregnant or expectant mother, authority and compulsion of men on women during pregnancy, giving up to the idea of local delivery of the expectant mother, poverty and ignorance of signs of complication etc. Indeed, this study makes up its geographical and unit scope on Rivers State and its rural communities employing analytical approach as its

design. The study concludes that although, this scenario is most prevalent in rural communities with little or no knowledge to appreciate its negativity to maternal health, yet with all contemporary exposure the socio-cultural practices that influence maternal health status is still a mirage in rural communities. In this regard, the study recommended among others that there should be a holistic approach to serve as a framework to indoctrinate the household environment in identifying and managing maternal mortality risk, as this will be very crucial to assist the already decayed healthcare and its proximity to pregnant women, especially those in the rural areas.

Key words: Household environmental, maternal health, women, mortality

Introduction

The household environment is a collective social issue, with the crisis of maternal mortality rising recently, adversely affecting the overall life and development of the rural people. The World Health Organization (2018) reports that over 830 women die daily from avoidable pregnancy and childbirth-related cause. It is particularly concerning because 99% of maternal fatalities transpire in underdeveloped nations, especially inside rural populations. The compromising attitude of families surrounding these expectant mothers plays the greater role of their safety or complications. Most often attention and care that pregnant women deserve were treated with laxity living them exposed regularly to unsafe environment. Household environment manifested in diver's forms ranging from making the monitoring of the health and care of pregnancy the sole responsibility of the pregnant mother, authority and compulsion of men over women during pregnancy, giving up to local mode of delivery of pregnant mothers, poverty and ignorance of signs of complication, shared or common experience, traditional rules, norms, and practice that is pass down from one generation to another. The domestic environment significantly impacts development, including the prenatal period. The progress occurring throughout the nine months of prenatal development is remarkable; nonetheless, this period also presents significant vulnerabilities. A well-maintained and cultured domestic environment may significantly mitigate or fully eliminate the consequences of several risks. Despite the presence of risks, the overwhelming majority of infants are born in good

health. Recent study has posited that several teratogens, a word denoting the extensive array of situations and substances that might elevate the risk of fetal complications and anomalies, exist (Cherry, 2021).

General health is a primary concern in psychology and psychiatry. Due to the significance of the gestational period, overall health must be taken into account. Various things influence overall health. Understanding the demands and motivations behind human behavior and activities is a fundamental aspect of overall wellness. In addition to oxygen, water, and food, psychological demands such as a sense of security, mental equilibrium, tranquility, personal growth, and a feeling of superiority are essential. Karl Maniger posits that overall health encompasses optimal compatibility between a person and their environment, in addition to enjoyment and beneficial outcomes (Danesh, 2006). Ramazan et al. (2010) characterize general health as the enhancement of social functioning and the absence of depressive and anxious symptoms. Family is crucial in addressing the mental requirements and psychological illnesses of its members, particularly spouses. Besides its autonomous function, the family significantly influences other etiological elements. Poverty within a supportive family setting has reduced adverse impacts (Sneak et al., 2007). Pregnancy is an exhilarating phase during which the fetus develops and is delivered, resulting in physical and mental transformations for the mother (Bazargani, 2007). This phase is critical, since mood disorders and anxiety manifest via alterations in psychological and social domains. Regrettably, many women choose to endure their melancholy and distress in silence, believing they must present themselves as healthy. Many families and relatives want a return to the pre-pregnancy era and its associated performance (Danesh 2006). During this stage, the fetus is influenced by the mother's emotions and condition. The overall health of the mother is affected by the familial environment.

The findings indicate a lack of research on the correlation between family environment and the overall health of pregnant women. This study seeks to examine this link.In many underdeveloped nations, pregnancy consistently poses a life-threatening risk, and its consequences diminish the life expectancy of women who have children. The WHO (2000) said that around 37,000 maternal fatalities transpired in Nigeria in 1999 alone. The maternal mortality ratio was reported to

range from 700 to 1,500 per 100,000 live births in 2005 (State of Nigeria Health, 2006). An estimate indicated that more than 52,000 women succumbed to pregnancy problems in Nigeria in 2007 (Dada, 2008). The Nigeria Demographic Health Survey (NDHS) of 2008 reported a maternal death rate of 545 per 100,000 live births for the seven years from 2001 to 2008. For each woman who succumbs to pregnancy-related complications, more than 20 others endure permanent disability, all attributable to the family environment of these expectant women. This scenario remains pervasive despite the implementation of several programs aimed at addressing this tendency and enhancing maternal health. Examples of these programs include the "Safe Motherhood Initiative," designed to propose strategic interventions aimed at decreasing maternal mortality and morbidity in Nigeria, and the Integrated Maternal, New-born and Child Health (IMNCH) Strategy, launched in 2007 to expedite high-impact intervention packages encompassing nutritional supplements, immunization, insecticide-treated mosquito nets, and the prevention of mother-to-child transmission of HIV (Ugal, 2010).

Consequently, it is evident that these interventionist programs have either been ineffective, particularly in rural areas, or are misaligned in tackling the problem of maternal morbidity and death. The majority of these fatalities and associated impairments indicate that the home environment's impact on maternal health is not just a result of reproductive hazards, but rather a consequence of several maternal health concerns previously unaddressed. Despite the United Nations International Children's Emergency Fund (2020) reporting a 44 percent decline in the global maternal mortality ratio from 385 to 216 deaths per 100,000 live births between 1999 and 2018, further efforts are necessary in Nigeria to reduce or potentially eradicate such occurrences, particularly in the rural communities of Rivers State and among self-centered men in marriage. Apart from globalization and its attendant manifestation of drastic change, effort is still very low by all and sundry in working to enhance and indoctrinate the household environment of pregnant women. This perturb situation is very prevalent amongst rural communities, not only in Rivers State but Nigeria as a whole. And this has translated into a monumental social problem with an indoctrinated fear of death on every expectant mother. It is indeed a worrisome situation in Nigeria. Of more concern is the classification of maternal mortality, defined as the fatalities of

women during the perinatal period owing to complications arising from pregnancy, as avoidable deaths (Nwokocha, 2008).

Maternal and newborn mortality rates serve as social indices for assessing a country's growth, and the circumstances in Nigeria are particularly alarming (Okeke, Oluwuo & Azil, 2016).Despite the establishment and endorsement of the Sustainable Development Goals (SDGs) by the United Nations at the conclusion of the Millennium Development Goals (MDGs) period in 2015, significant progress in reducing maternal mortality remains unaccomplished. Elem & Nyeche (2016), in their study titled "Health Inequality and Empowerment of Reproductive Age Women for Development in Rivers State: Primary Health Care Strategy in the Reduction of Maternal Mortality (2007-2015)," asserted that a primary objective of the Millennium Development Goals (MDGs) is to enhance the health of pregnant and nursing mothers (maternal health) and to decrease maternal and child mortality by 2030. Despite worldwide awareness and dedication, the mortality of women due to inadequate home conditions during pregnancy remains a significant concern in rural areas of Nigeria, particularly in Rivers State. Notwithstanding governmental commitments and efforts throughout time, little progress has been achieved in preserving women's lives. The United Nations (2008) said that its Millennium Development Goal 5—to decrease maternal mortality by 75 percent and attain universal access to reproductive health care by 2015—has seen the least advancement among all MDGs, mostly owing to the domestic environment of pregnant women. Globally, maternal mortality declined by under 1 percent year from 1990 to 2005, much below the required 5.5 percent annual reduction to achieve the aim. At the current pace, MDG 5 will not be achieved in Asia until 2076 and would be delayed much further in Africa (Olawande et al, 2018). The WHO (2013) study on Nigeria said that maternal mortality results in 59,000 female deaths per year. Health in the post-2015 development agenda asserts that Nigerian women are 500 times more likely to die during delivery compared to women in most industrialized countries. Salami et al. (20120) assert that Nigeria ranks second globally, behind India, in maternal incidence rates and is the most affected country in Africa. This difficulty may be related to the inadequate domestic environment and maternal healthcare system in the country. On this note, the present study aim to examine the home environment and maternal health of rural women in Rivers State, focusing

specifically on rural populations. To clarify our perspective, the following fundamental inquiries would be addressed: How has the home environment impacted the maternal health of rural women in Rivers State? (b) What strategies may be used to address the issues of home environment and maternal health among rural women in Rivers State? These inquiries need responses due to the undeniable necessity of enhancing the maternal healthcare system in Nigeria, which is a crucial component of sustainable development. The particular purpose of this research is to examine the impact of home environment on maternal health among rural women in Rivers State. Our geographical and unit scope encompasses Rivers State and its rural areas, using an analytical method as the design framework.

Conceptual Clarification

Certain concepts were used in this study; as though they are familiar concepts yet deserve our explanation to show their essence herein. These concepts include: household environment, maternal mortality, maternal morbidity and maternal health care.

Household Environment

The household environment is critical to maternal health; yet, few efforts have been made to ascertain the environmental circumstances that predispose women to morbidity and death in many rural settings. A household refers to a social unit consisting of one or more persons living together in the same residence, regardless of their familial relationships. The family environment is a significant predictor of prenatal morbidity among some female household members. Establishing a healthy population is unattainable without cultivating a conducive family environment. This research evaluates the effect of changes in home environmental circumstances on maternal mortality among rural women.

Maternal mortality

Maternal mortality denotes the death of a woman due to complications arising from pregnancy or within 42 days postpartum, regardless of the timing or location of the pregnancy, resulting from factors associated with or exacerbated by pregnancy management, excluding accidents or incidental causes (Ibrahim, 2016). In addition to medical disorders, other social, economic, and cultural variables

significantly contribute to maternal mortality in Nigeria (Hendrsen & Abedinya, 2010). Notably, maternal death in the majority of rural regions in Nigeria is attributed to many non-medical triggering causes. The factors include poverty, inadequate or nonexistent education, restricted food access, limited purchasing power, and detrimental cultural beliefs and practices. Furthermore, the implementation of user fees in state and federally owned hospitals has led a significant proportion of women, particularly in rural areas, to seek care from faith clinics and traditional practitioners as alternative health options (Ibrahim, 2016).

Maternal morbidity

This pertains to the condition encountered by pregnant women. This often leads to dysfunction and adversely impacts the victim's economic, social, and reproductive functions (WHO, 2013). In sub-Saharan Africa, the danger of death during pregnancy or childbirth is known as maternal mortality is 175 times higher when compared to other developed nations of the world, and risk for pregnancy-related illnesses and adverse consequences after child delivery is much higher (UNICEF, 2015). Suffice to say therefore that when a woman dies from any preventable childbirth complication, a total of 500,000 deaths is recorded per year within the sub-Saharan African region.

Maternal Health Care

Maternal health as used in this study is referred to the result of cumulative effects of household environment, cultural practices, attitudes and behaviours. This is the overall wellbeing of women at the stage of pregnancy and children below age. Maternal healthcare is comprehensive as it includes educational, social, nutritional services as well as medical care during and posts pregnancy. As has been observed, some reasons have been attributed to why many pregnant and nursing mothers chose not to make use of appropriate antenatal and postnatal cares. Some of these reasons can be cultural, hereditarily related to the social, economic and political developments. This implies that both the natural environment-biological-and the social environment perform powerful and critical functions in healthcare utilization behaviour of women across most African societies. Cultural factors, therefore, are a major determining factor influencing health care utilization behaviour of pregnant women in Nigeria. Therefore, improving the household environment and behavior could improve maternal health. This could be achieved

through improvement of health services and information in the rural communities.

Paternal-Fetal Attachment

In keeping with the growth of interest of the maternal household environment the paternal awareness of transition to fatherhood makes a resounding legibility. Both Weaver & Cranley (1983) and Condon (1985) hypothesized that, complementary to maternal-fetal bonding, a paternal-fetal attachment process exists. Their research with an adaptation of the Paternal Fetal Attachment Scale (PFAS), suggested some differences in attachment to the fetus. Men scored higher than women on the subscales "Differentiation of self" and "Role-taking," while women scored higher on "Interaction with the fetus," "Attributing characteristics and to the fetus," and "Giving of self''. A further research on home environment indicated that the quality of both mother and paternal prenatal attachment was positively correlated with the quality of the marital relationship (Weaver & Cranley, 1983). Paternal adaptations of the MFA measures have been progressively included into prenatal research, with many studies suggesting their significance in the transition to parenting. Currently, research results are conflicting; some studies report no difference in maternal and paternal-fetal attachment (Ramazan et al., 2010), while others indicate that maternal-fetal attachment scores surpass father ratings. Nonetheless, as previously stated in this discourse, the absence of standardized apparatus and measuring techniques constrains the interpretation of various investigations.

Theoretical Framework

This book articulates its theoretical foundation using Rubin's Prenatal Attachment theory. The formulation of a formal theory of Prenatal Attachment had a convoluted path, originating primarily with a nurse named Rubin (1975), who specialized in maternity care during her PhD studies at the University of Chicago. The theoretical concept of attachment originates from the expectant mother's experiential connection to her surroundings before to delivery, as she investigates women's acquisition of the maternal role. She asserts that the initial connection between the postpartum mother and newborn results from prenatal processes and the supportive nature of the family setting in which the expectant woman resides (Rubin, 1975). She delineated four distinct duties that the women she studied

undertook throughout their pregnant journey before to childbirth: (a) Securing safe passage for themselves and their baby, (b) assuring the baby's acceptance by important people, (c) "binding-in," and (d) self-sacrifice. These tasks established the reciprocal framework for her understanding of the psychological experience during pregnancy. Although she did not employ the term "attachment," (Ruben, 1975, p. 145) asserts that:

> By the end of the second trimester and the favorable conditions of her pregnancy, the pregnant woman becomes acutely aware of the child within her and attributes immense value to him, possessing something profoundly cherished and significant, which brings her substantial pleasure and pride.

An Australian perinatal epidemiologist, during interviews with primigravidas at various stages of pregnancy, observed that these women often experience heightened anger and aversion towards their surroundings. Consequently, he advocated for the integration of psychological and social support within their pregnancy experience. The study indicates that pregnant women progressively envisioned their baby in a more humanized manner over time (Jokar, 2001). The advent of ultrasonography during pregnancy prompted women in this situation to investigate the effects of a visual representation of the fetus on maternal bonding and the delight of seeing the infant (Lumley, 1980). Lumley's results indicated that this first perception of the fetus improved a mother's capacity to recognize it as a "little person."Continuing analogous research in the United States, Leifer, a psychologist at the Illinois Institute of Technology, produced a monograph detailing findings from a study of 19 primigravida women regarding the psychological changes resulting from their environment throughout gestation (Leifer, 1977). She determined that the environment of a pregnant individual plays several functions in her well-being. Pregnancy is characterized by emotional turmoil and significant role transformation, as well as developmental growth. Leifer (1977) brought the concept of personality into the psychological condition of pregnancy, stating that the level of personality integration attained during the first months of pregnancy might forecast psychological development throughout the remainder of pregnancy and into early motherhood. Müller, a researcher who employed Cranley's construct of maternal-fetal attachment, determined that this

approach was overly concentrated on behaviors, thereby neglecting the thoughts and fantasies she posited also indicated the developing bond between mother and fetus, as well as attachment to the environment (Muller, 1992; Muller & Ferketich, 1993).

In her research, she described prenatal attachment to the environment as "the distinctive relationship that evolves between a woman and her fetus." These emotions are independent of the woman's self-perception about her pregnancy or her identity as a mother" (Bazargain, 2007). He suggested a novel model of attachment during pregnancy, suggesting that an expecting mother's first encounters with her surroundings foster the formation of internal representations, which subsequently affect her attachments to family, spouse, and friends. This mechanism ultimately facilitated a woman's adaptation to pregnancy and her attachment to the fetus. The latest theory of prenatal attachment to the environment seeks to integrate behavioral, cognitive, and emotional methods in observable contexts (Bazargain, 2007). This hypothesis encapsulates several concepts explored in this research, since prenatal attachment is notably effective when the expecting mother's environment is socially, psychologically, and medically supportive and accommodating. This abstract term signifies the affiliate connection between a pregnant mother and the fetus, presumably linked to cognitive and emotional capacities to imagine another human being within the ecological system.

Methodology

This study adopted secondary research methodology where data was sourced from textbooks, articles, research papers, Journals, newspapers, Television reports and Internet sources. Data collected through these sources gave flesh to discrete sub-headings discussions and categorical analysis.

Literature Review

Health Care Delivery System in Rural Environment

The history of healthcare services in Nigeria has always been in comatose. For instance, the World Health Statistics has shown that from 2012 to date there is observable crisis in the healthcare services among the developing countries of the world. Several of these crises are clearly associated with a deficiency of adequately

trained health personnel, the emigration of skilled workers both domestically and internationally, inadequate staff motivation and commitment, reluctance of health workers to serve in specific regions—such as rural areas—ineffectiveness or absence of supportive supervision, and insufficient monitoring and evaluation of health workers' services (Nte, 2012). The situation has degenerated to the point that services of retired midwives in Nigeria had to be recalled since the adopted Midwives Service Scheme (MSS) was not enough. Pregnant women in this category have been severely affected and due time submitted themselves to the detrimental and orthodox practices of local midwives. This has culminated to a lot of deaths during and child delivery. One of the primary function of government is to is to provide and ensure good health care services especially in the rural areas where the availability of such infrastructures are always impossible to be easily accessed. As posited by Irikana (2014), human health has gone beyond ordinary none existence of sickness or disease but rather encompasses both the physical, mental and psychological wellbeing of the people. He went further to declare expressly that social factors such as poverty, ignorance, poor environment are known to have adverse effect on human health. Lending their voices to this scenario Okodudu and Wabah (2014) maintained that more than 26,000 children under the age of five die around the world on daily bases from preventable diseases and nearly all of them are from the developing countries of the world. However, most of this infant deaths, especially at their early stage of life may be traceable to ignorance of complications during pregnancy and none proximity to health facilities.

Sadly, more than one third of these children die during the first month of their life at home. Evidently, most of these deaths are traceable to lack of access to essential health services, basic commodities that might save lives and ignorance of the essential components of the household environment of the expectant mother during pregnancy. Research conducted in Britain, the United States, and other Western nations demonstrates that health and access to healthcare services are consistently prioritized over other dimensions of well-being, such as housing, financial resources, income, social status, education, family life, and leisure (Abraham, 1976; Akpochafo, 2009; Irikana, 2014). Here in Nigeria the case is in the opposite, even with the exposition of varied studies which has certified that skilled health workers have significant engagement on maternal and child survival; yet

government in developing countries have failed to consecrate financial aid to the training of these health workers. So far, this has caused the recurrent acute insufficiency of health workers and personnel in most health facilities across the nation. It completely shows from these perspectives that the corresponding high rate of infant mortality and increasing cases of maternal morbidity in Nigeria and especially in her rural communities is a manifestation of these variables. Settlement pattern here is one in which the constituent houses are typically dispersed and planted in isolation. Beginning from the colonial period up till this contemporary age rural inhabitants our country Nigeria has been redundant. The temperament of the government at different desperations regarding these rural dwellers has always been of subjective negligence. Regardless of compatibility in the national income over the years and resources of the oil boom the livelihood of the rural people of Nigeria has not shown any atom of transformation in term of development, especially in the area of health as one of the very essence of government. We cannot write off the fact that every successful endeavor of man be it economic, social, political and emotional are prerequisites of good health. And this is entirely supportive of the axiom that ''health is wealth''.

The Challenge of Birth Preparedness

Maternal fatalities are believed to arise from three primary delays: delays in the decision to seek treatment, delays in accessing care, and delays in obtaining care. The delays stem from several factors, including logistical and financial challenges, unhelpful policies, service deficiencies, and insufficient community and family awareness on maternal and newborn health matters (WHO, 2006). Delays in pursuing medical treatment may result from an inability to identify indicators of problems, a refusal to acknowledge the seriousness of the disease, financial concerns, prior adverse experiences with the healthcare system, and transportation challenges. Barriers to accessing treatment may arise from the distance between a woman's residence and a healthcare institution, the quality of road infrastructure, and insufficient emergency transit options. Delays in obtaining treatment may stem from unprofessional provider attitudes, shortages of supplies and essential equipment, insufficient healthcare professionals, and inadequate abilities of healthcare practitioners. The reasons of these delays are typical and foreseeable. Birth Preparedness (BP) entails strategizing for a standard delivery and anticipating necessary measures in the event of an emergency.

Responsibility for blood pressure management must be collectively assumed by all stakeholders in safe motherhood, including policymakers, facility managers, healthcare professionals, communities, families, and women, since a concerted effort is essential to mitigate the delays that lead to maternal and neonatal fatalities (Deoki, 2009). The Birth Preparedness framework is subject to criticism for its premise that enhancing knowledge of complications and treatment options, alongside eliminating practical obstacles like financial constraints and transportation access, will lead to behavioral changes and an increase in the utilization of emergency obstetric care services. This assumption has been contested in many studies, which argue that it overlooks the complexity of behavior change and the numerous elements that decide and impact behavior, in addition to non-health determinants including educational, social, and economic indicators. This critique suggests that to improve behavior change, the execution of a birth preparedness project requires the ongoing engagement and participation of community and health system stakeholders, enabling the identification, acknowledgment, and management of additional contributing and inhibiting factors (Caravan, 2009).

Conclusion and Recommendation

This research was designed to examine the home environment and maternal health of rural women in Rivers State. The household environment, from our viewpoint, extends beyond the health of the expecting woman. Some accounts imply that Nigeria accounts for around 23% of the global maternal mortality ratio, adversely affecting women's well-being and the nation's socio-economic growth. The fundamental risk factors may be classified as political influences, limited access to healthcare, insufficient usage of health facilities, inadequate family planning support, and intricate pregnancy-related illnesses. Other variables in our own perspectives dwell on the household environment of the prenatal mother. These include the monitoring of the health of a pregnant woman as only her sole responsibility, authority and compulsion of men over women, local mode of child delivery, poverty and ignorance of signs of complication, shared or common experience, traditional rules, norms, and practice that is pass down from one generation to another. The intricate interconnections among the variables complicate the identification of the most hazardous ones impacting women's reproductive health and child mortality, while current intervention options

inadequately address the issue. The consequence is that any advice must be relevant to the unique environmental conditions and community structures to enhance maternal health outcomes.

The recommendations derived from the aforementioned are categorized into three primary activities: sensitization and education, governmental and community involvement, and academic dissemination of scientific knowledge. Moreover, a comprehensive strategy is necessary to provide a framework for recognizing and addressing maternal mortality risk within the family setting. This will be essential to support the deteriorated healthcare system and the accessibility for pregnant women, particularly in remote regions. The domestic conditions in rural areas are detrimental to the health of women during childbirth. Consequently, immediate action is required to alter the current perception of marginalizing rural communities in the placement of health services. In areas with incomplete infrastructural amenities, health clinics should be established to enhance health services for the residents, since a significant portion of the country's population lives there.

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