

RESEARCH ARTICLE

ASSESSMENT OF IMPACT OF SOCIOECONOMIC STATUS ON QUALITY OF LIFE AMONG WOMEN ATTENDING GUMEL GENERAL HOSPITAL, JIGAWA STATE

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Abstract

Background: Maternal health issues have been one of the cornerstone challenges over decades in developing countries like Nigeria. Factors like socio-economic status and quality of life have been correlated with maternal health. Conditions like anemia, preeclampsia, and birth related complications are all associated with low income and inability to live qualitative life, therefore, the focus of the paper is on maternal health related distresses resulted from low socio-economic status and poor quality of life. This study aimed to assess the impact of socio-economic status and the effect of quality of life maternal health problems. **Methods:** A descriptive study design was employed and 125 women were selected using purposive sampling technique, data was collected using adopted and modified quality of life scale, Socio economic status scale and dietary analysis/diversity. Data was analyzed using statistical package for social science (SPSS) version 23.0. **Results:** Result shown that out of 87 women that are below poverty benchmark 38 (43.68%) have anemia, 16.09% experienced birth related complications while 32.18 present with disease. While the Quality of life results shown that 83 (66.4%) of the respondents have live lower quality of life and 42 (50.60%) of them present with anemia, 43.38% presented with birth complication 4.82 presented with other diseases. **Conclusion:** This correlated low socioeconomic status and poor quality of life with health challenges. Therefore, there is need for effective health policy formulation and resource intervention to curtail these issues to prevent the cases from escalating.

Keywords; Maternal health, socio-economic status, quality of life, disease.

INTRODUCTION

Maternal health focuses on health of women during pregnancy and after delivery, childbirth and the postnatal period are two areas of focus that lead to number of health issues, despite massive interventions worldwide still remained most challenging factor and a corner stone to public health. Every day in 2020, almost 800 women died from preventable causes related to pregnancy and childbirth. Maternal health is the mother's state of well-being before, during, and after conception. Studies have suggested that the increasing maternal mortality rate is preventable provided maternal health services are

accessible during pregnancy (Maitanmi, 2023). A maternal death occurred almost every two minutes. Also, the estimated global maternal mortality rate (MMR) is 211 as at 2024 (Mwaura, 2024), with rates as high as 1150 among African countries. In 2020, the MMR in the African Region was 531 deaths per 100, 000 live births. The African Region accounted for 69% of global maternal deaths in the same year (Sultan, 2024). The major complications, which account for almost 75% of all maternal deaths, are severe hemorrhage, infection, high blood pressure during pregnancy (pre-eclampsia and

eclampsia), complications during childbirth and unsafe abortion (Sultan, 2024). Cardiovascular risk (CVR) has been correlated with maternal complication that later progressed to cardiovascular disease (CVD) among pregnant women (Gongara, 2015). Maternal related complications includes amniotic fluid imbalance too much fluid caused by diabetes, twins or triplets (a multiple pregnancy), infections, incompatible blood types and birth defects. Or little fluid as a result of birth defects, problems with the placenta, slowed fetal growth, early rupture of membranes or fetal death. Other complication includes ectopic pregnancy, miscarriage or foetal loss, placental abruption, placenta previa, and preeclampsia or eclampsia (Gongara, 2015).

Nigeria is one of the top six countries in the world contributing over 50% of the world's maternal mortality. The situation is even more alarming as not much change has been observed since 2000 (Meh, 2019). Maternal and newborn mortality rates are higher in lower- and middle-income countries (LMICs) and Nigeria is one of the countries in this category with the highest maternal mortality rates globally. In 2018 the maternal mortality ratio (MMR) in Nigeria was estimated at 512 deaths per 100,000 live births (Tukur, 2022). The 2023 UN report on Trends in Maternal Mortality from 2000-2020 revealed that nearly 28.5% of global maternal deaths happened in Nigeria. In 2019, the MMR was estimated to be over 800 maternal deaths per 100,000 live births with a neonatal mortality rate at 33 per 1000 live births (Nasir, *et al*, 2022).

In many low-resource settings like Gumel Local Government area of Jigawa state, healthcare service delivery is very poor. Jigawa, for example, ranks among the worst in access and quality of healthcare services. It is ranked 42 by the World Bank in its delivery of healthcare coverage in the country (Maitanmi, 2023). Women in Nigeria has a 1 in 19 lifetime risk of dying during pregnancy, childbirth, or postpartum, compared to other places, the lifetime risk is 1 in 4900 (Healthy Newborn Network, 2023).

Maternal health outcomes are profoundly influenced by socioeconomic determinants, posing significant challenges to achieving equitable care for pregnant women worldwide (Janaki, 2024). Significant relationship has been correlated between socioeconomic factors (occupation and income level) and utilization of maternal health services among pregnant women (Maitanmi, 2023).

Higher SES is associated to better pregnancy outcomes. Efforts are required in order to eliminate health disparities in pregnancy especially in Jigawa and Gumel local area.

Quality of life is a relative term and measuring it will depend on many factors including location, preference, status or age. Quality of life (QOL), according to Janaki, *et al* (2024) is "an individual's perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns". Standard indicators of the quality of life in Nigeria may include wealth, employment, environment, physical and mental health, education, recreation and leisure time, social belonging, religious beliefs, safety, security and freedom (First Bank of Nigeria, nd). Few women that belong to higher socioeconomic class meet these indicators making over 80% of the women population vulnerable and at risk of maternal health challenges leading to complications, most women prefer home delivery as a result of poor quality of life that hinders them from accessing and affording the healthcare services.

In Gumel General Hospital, it was observed that higher socioeconomic status is associated with better maternal health outcome that includes delivery of newborns, less complications, and fast recovery among maternal women.

The rise and fall in the maternal mortality rate made Nigeria the second-largest contributor to maternal mortality worldwide, ranking her at the tenth position in the world health indicators of maternal mortality record.

Hence, there is need for effective intervention through identifying the leading causes of these challenges to address and formulate policies to reduce the maternal mortality and related complication. Therefore, the aim of the present study is to assess the impact of socio-economic status and the effect of quality of life maternal health problems among maternal women at Gumel general hospital.

MATERIALS AND METHODS

Study Design: This research utilized a descriptive study design to assess the impact of Socio-Economic Status on Quality of Life Among Women Attending Gumel General Hospital, Jigawa State. This design is appropriate for capturing a snapshot of the maternal health status of women at a single point in time, allowing for the identification of effect of various factors on maternal health outcomes.

Study Setting: The study was conducted at Gumel General Hospital Gumel, located along Kano Road in Jigawa State, Nigeria. The hospital comprises several units and wards, including Maternity ward, Pediatric ward, eye clinic, and laboratory unit. The Hospital is offering various services accessible to diverse population that predominantly comprises Hausa-Fulani tribe that speak Hausa, Fulfulde, and English.

Study Population: The target population included all maternal women attending and utilizing healthcare services at the hospital. A total of 125 women were selected as participants using a simple random sampling technique to ensure that every maternal woman had an equal chance of being included in the study.

Sample Size Determination: The sample size was calculated using Yamane (1973):

$$n = \frac{N}{1 + N(e)^2}$$

Where:

- n = sample size
- N = total population
- e = margin of error (0.05)

Using the formula 125 women were selected for the purpose of the study

Given the rate of the hospital inpatient flow, the sample size was determined to be adequate for statistical analysis.

Data Collection Instrument: Data was collected using a structured self-administered questionnaire that included the following validated scales:

1. Modified Kuppaswamy Socio economic status scale (Saleem, 2019)
2. Modified WHO Quality of life scale (WHO, 2004)

The questionnaire was adapted to capture relevant variables related to socioeconomic status and Quality of Life while minimizing biases. The validation process ensured that the instruments were suitable for the study context.

Data Collection Procedure: questionnaire was distributed among the targeted population and retrieved

on time. Participants were informed about the study's purpose, procedures, and their rights regarding voluntary participation and confidentiality. Informed consent was obtained from all respondents before administering the questionnaires. A total response rate of 100% was achieved as all distributed questionnaires were retrieved.

Data Analysis: The collected data were entered into SPSS for analysis. Descriptive statistics were used to summarize demographic characteristics and relevant outcomes. Variables were analyzed and presented as frequencies and percentages.

Ethical Considerations: Ethical approval for this study was obtained from the Research Ethics Committee of the Jigawa State Ministry of Health. Participants were assured that their responses would remain confidential and used solely for research purposes. They were also informed about their right to withdraw from the study at any point without any consequences. This modified Materials and Methods section provides a comprehensive overview of the study's design, setting, population, data collection instruments, procedures, analysis methods, and ethical considerations while maintaining clarity and specificity appropriate for an academic paper.

RESULTS

Table 1: Demographic distribution of the respondents

| Variables | Frequencies | Percentage |
|-----------------|-------------|------------|
| Age Groups | | |
| 20-24 | 57 | 45.6 |
| 25-29 | 46 | 36.8 |
| 30-34 | 22 | 17.6 |
| Education level | | |
| Illiterate | 34 | 27.2 |
| Primary | 24 | 19.2 |
| Middle | 21 | 16.8 |
| High school | 16 | 12.8 |
| Graduate | 18 | 14.5 |
| Post graduate | 12 | 9.6 |
| Working status | | |
| Working | 28 | 22.4 |
| Nonworking | 97 | 77.6 |

Table 1 shows the distribution of data on demographic factors; age group 20-24 has the highest participants of 57 out of 125, while on the level of literacy about 27% of the subjects are illiterates. Likewise, about 97 of the 125 subjects are not working.

Table 2: Distribution on level of socioeconomic status in relation to health problem

| SES | Total | | Anemia | | Birth related complications | | Other disease | | No disease | |
|--------------------|-------|------|--------|-------|-----------------------------|-------|---------------|-------|------------|-------|
| | No. | % | No | % | No. | % | No. | % | No | % |
| Below poverty line | 87 | 69.6 | 38 | 43.68 | 14 | 16.09 | 28 | 32.18 | 7 | 8.05 |
| Middle | 34 | 27.2 | 10 | 29.41 | 7 | 20.59 | 13 | 38.24 | 4 | 11.76 |
| High | 4 | 3.2 | 2 | 50.00 | 0 | 0.00 | 2 | 50.00 | 0 | 0.00 |

Source; field survey

From Table 2, the distribution according to the SES have shown that subjects that falls below poverty line has the highest number of 47 out of 125 with 37.6%, and out of which 20 are anemic, 7 have birth complication, 13 have other disease and 7 are free from disease. Subjects that falls in poverty line are 40 out of which 45% of them are

anemic, 10% has birth related complications, 37.5% has some other disease and 7.5% of them are free from any disease. With the high class having the lowest number of participants of only 1 subject which has some other disease.

Tabl3: Distribution of maternal health by quality of life

| QOL | Total | | Anemia | | birth defects | | other disease | | no disease | |
|----------|-------|------|--------|-------|---------------|-------|---------------|-------|------------|-------|
| | No | % | no | % | No | % | no | % | no | % |
| High | 14 | 11.2 | 4 | 28.57 | 2 | 14.29 | 5 | 35.71 | 3 | 21.43 |
| Moderate | 28 | 22.4 | 8 | 28.57 | 5 | 17.86 | 10 | 35.71 | 5 | 17.86 |
| Low | 83 | 66.4 | 42 | 50.60 | 36 | 43.38 | 4 | 4.82 | 1 | 1.20 |

Source; field survey

From Table 3, the distribution according to the QOL variable shown that subjects with low QOL has the highest percentage of about 66.4%, and out of which 42 are anemic, 36 has birth complication, 4 have other disease, and 1 has no disease. Subjects with high QOL are 11.2% out which 4 are anemic, 2 have birth defects, 5 have some other disease, and 3 are free from any disease. Likewise, the moderate class with 22.4% that are 28 in number, 8 of them are anemic, 5 have birth defects, 10 has other disease.

Young Children” using 1245 sample using cross-sectional study found 595 (47.8%) children in less income families according (WHOBM) had 3 times higher odds (3.08; 95% CI) of having iron deficiency and iron deficiency anemia than children in the highest family income group also in a study conducted by Ignatius *et al* (2024) “Analysis of some socio-economic factors affecting maternal health in Nigeria” using error correction model (ECM) found mothers and children are at the highest risk of disease and death. Deaths of infants and children under5 years are peculiar and closely related to maternal health, and the risk of death of children increases if their mothers die in childbirth and results show that poverty, literacy and government provision of healthcare facilities are major socio-economic factors affecting maternal health in Nigeria , while among 34 middle income class 30 respondents constituting 88.24% presented with anemia, birth complications and other disease which is validated by study conducted by Meh, *et al* (2019) “Levels and determinants of maternal mortality in northern and southern Nigeria” using sample of 51,492 in a cross-sectional study found that the middle class, compared to the poor, had higher odds of maternal death due to high incidence of abortion to maintain smaller family size that puts them at risk of maternal mortality

DISCUSSION

Result of the findings revealed considerable impact of low socioeconomic status on manifestation and presentation of related maternal health diseases; it also indicated a significant concern in relation to quality of life and maternal health risks among the women, with 87 of the respondents falling below poverty line (WHOBM) and 38 (43.68%) have anemia, 16.09% experienced birth related complications while 32.18% presented with disease this is in line with study conducted by Bayoumi, *et al* (2020) in the study “Risk of Food Insecurity With Iron Status in

and complications. Among the High class, 2 respondents constituting 1.6% of the entire population presented with anemia which is insignificant and may be caused due to other underlying health conditions.

While the Quality of life results shown that 83 (66.4%) of the respondents lives lower quality of life and 42 (50.60) of them presented with anemia, 43.38% presented with birth complication and 4.82% presented with other diseases. This finding is consistent with previous research “Health related quality of life and its predictors among postpartum mother in Southeast Ethiopia: A cross-sectional study” the findings shown that the postpartum women reported a lower overall quality of life, with a mean score of 43.80 ± 27.88 (Gamora, *et al*, 2024).

The study identified 23 respondents (18.4%) that are partially satisfied and comfortable with life amenities (moderate quality of life) that develop maternal related complications. This aligns with findings from a qualitative study conducted by (Ntoimo *et al*, 2019) that delved into “the underutilization of primary health centers (PHCs) for pregnancy care among rural women in Nigeria, uncovering a range of contributing factors” the findings revealed factors that include accessibility issues stemming from poor transportation infrastructure and irregular facility hours, perceptions of poor quality care driven by various deficiencies in healthcare services, high costs of services, and the absence of partner support are associated with poor quality of life (QoL)

With the high level of anemia, diseases, and birth complications among maternal mothers, there is an urgent need for effective interventions aimed at promoting health and well-being within this population. Healthcare institutions should consider implementing comprehensive health programs that include awareness program, health education, and access to basic life amenities. Additionally, fostering a supportive community understanding and importance of maternal health can help reduce maternal related complications and mortality.

Another study highlighted the critical need for effective strategies to promote male involvement in maternal healthcare. Drawing inspiration from India’s successful “Janani Suraksha Yojana” (JSY) initiative, which has significantly reduced maternal and neonatal mortality rates in resource-constrained environments (Rai, 2012), Nigerian policymakers can consider tailored approaches. Elements of the JSY initiative, such as conditional cash transfers (CCTs) to encourage facility-based deliveries, innovative transportation options, and a strong emphasis

on institutional deliveries with skilled attendants, offer valuable insights. By adopting these strategies and promoting male engagement through community education, Nigeria can make substantial progress in improving maternal and newborn healthcare, particularly in remote and underserved regions (Ajegbile, *et al*, 2023).

Conclusion

In conclusion, the findings of the study highlighted the impact of socioeconomic status and quality of life among the maternal woman at Gumel catchment area Jigawa state. The main key indicators from the study indicated that maternal mortality and related complications are highly associated with the level of the mother’s socioeconomic status. Provision of basic life amenities and support by Government that will foster good quality of life among the study population will greatly help in reduction of maternal death and birth related complication.

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