

05. Reproductive Health Literacy Among Married Women of Reproductive Age: A Cross-Sectional Study in Rural White Nile State, Sudan.

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Background: Reproductive health literacy is a crucial determinant of women's ability to make informed decisions regarding reproductive health. In rural Sudan, limited access to reliable health information may contribute to low levels of reproductive health literacy, yet evidence from this context remains limited and insufficient. Therefore, this study aimed to assess reproductive health literacy among married women of reproductive age and to determine the factors associated with a good level of reproductive health literacy. **Methods:** An analytical cross-sectional study was conducted among married women in a rural area of White Nile State, Sudan, in March 2026. Participants were selected by convenience sampling from married women aged 15–49 years who were residents of the study area. Data were collected via a structured, pre-tested questionnaire covering three domains: menstrual health knowledge, reproductive health practices, and cervical cancer awareness. The primary outcome was the reproductive health literacy score (0–18), categorized using Bloom's cut-off points as poor (<50%), moderate (50–70%), or good (>70%). Analysis was performed using Statistical Package for the Social Sciences version 21, including descriptive statistics, bivariate analysis, and multivariable linear regression. **Results:** Of 313 women approached, 310 were included in the final analysis. The mean age of participants was 33.1 ± 8.1 years. More than half (56.1%) had university or higher education, and the majority (69.4%) were housewives. The mean reproductive health literacy score was 10.57 ± 4.31 . Overall, 26.5% of participants had poor reproductive health literacy, 41.9% had moderate reproductive health literacy, and 31.6% had good reproductive health literacy. Bivariate analysis showed significant associations between reproductive health literacy and education level, monthly income, and employment status ($p < 0.001$). A significant positive trend was confirmed using the Jonckheere–Terpstra test, with increasing reproductive health literacy across higher levels of education ($Z = 5.08$, $p < 0.001$) and income ($Z = 3.74$, $p < 0.001$). Knowledge scores were highest in menstrual health (median 4, range 0–4) and lowest in cervical cancer awareness (median 1, range 0–6). In multivariable linear regression analysis, age ($\beta = 0.067$, 95% CI: 0.002–0.131, $p = 0.044$), moderate income ($\beta = 2.522$, 95% CI: 1.211–3.834, $p < 0.001$), high income ($\beta = 2.744$, 95% CI: 1.037–4.452, $p = 0.002$), employment status ($\beta = 2.478$, 95% CI: 1.131–3.825, $p < 0.001$), consulting doctors or nurses for health information ($\beta = 2.672$, 95% CI: 1.452–3.892, $p < 0.001$), and use of social media ($\beta = 1.579$, 95% CI: 0.480–2.678, $p = 0.005$) were significant positive

predictors of reproductive health literacy. In contrast, reliance on midwives as a primary source of information was significantly associated with lower reproductive health literacy scores ($\beta = -1.908$, 95% CI: -3.452 – -0.365 , $p = 0.016$). **Conclusion:** Reproductive health literacy among married women in this rural setting was predominantly moderate, with notably low awareness of cervical cancer. Socioeconomic factors including age, income, and employment, along with sources of health information, were independent predictors of reproductive health literacy. Targeted interventions are recommended to improve access to qualified healthcare professionals and strengthen reliable health information channels, particularly for low-income and unemployed women.

Key Words: Reproductive Health, Health Literacy, Women, Rural Population, Sudan, Uterine Cervical Neoplasms

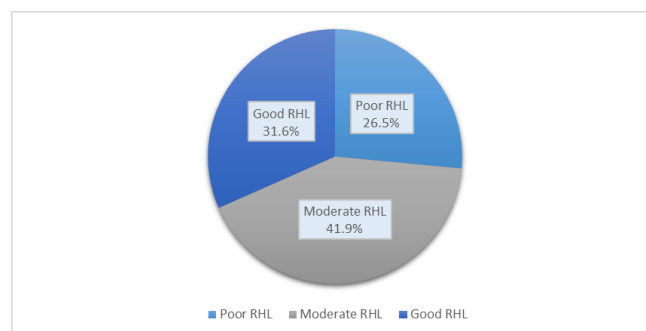


Figure 1: Reproductive Health Literacy among Married Women in a Rural Area of White Nile State, Sudan

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