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Mothers' Knowledge of Reproductive Health: A Descriptive Study

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A R T I C L E I N F O

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A B S T R A C T

Introduction: Reproductive health knowledge is essential for maternal wellbeing, family planning, and public health. This study aimed to describe mothers' knowledge of reproductive health in Bulupoddo, Sinjai. A descriptive survey design was employed, involving mothers of reproductive age as study participants. Data were collected using a structured questionnaire covering key aspects of reproductive health, including anatomy and physiology, reproductive hygiene, family planning, and prevention of reproductive health problems. Descriptive statistical analysis was applied to summarize respondents' knowledge levels.The results showed that mothers' knowledge of reproductive health was generally very low. In most assessed domains, the proportion of correct responses was below 50%, indicating insufficient understanding of basic reproductive health concepts. Limited knowledge was particularly evident in areas related to reproductive function, risk factors for reproductive health disorders, and appropriate preventive practices. These findings suggest that the majority of respondents had not received adequate or effective reproductive health information.In conclusion, mothers' knowledge of reproductive health in Bulupoddo, Sinjai remains inadequate and falls below an acceptable level. This condition highlights the urgent need for comprehensive and culturally appropriate reproductive health education programs. Strengthening health promotion and community-based education, particularly through primary health care services, is essential to improve mothers' knowledge and support better reproductive health outcomes.

INTRODUCTION

Reproductive health is a fundamental component of women's health and a critical determinant of population wellbeing across the life course. According to the World Health Organization, reproductive health refers to a state of complete physical, mental, and social well-being in all matters relating to the reproductive system, its functions, and processes, rather than merely the absence of disease or infirmity (1). Adequate reproductive health knowledge enables women, particularly mothers, to make informed decisions regarding fertility, pregnancy, childbirth, contraception, and the prevention of reproductive health problems. Strong evidence demonstrates that improved reproductive health literacy among women contributes to lower maternal mortality, reduced unintended pregnancies, and better maternal and child health outcomes (2). Consequently, reproductive health education is internationally recognized as a core strategy for achieving health equity and sustainable development.

Global policy frameworks have consistently emphasized the importance of reproductive health knowledge. The International Conference on Population and Development (ICPD) positioned reproductive health and rights as central to human development and gender equality (3). More recently, the Sustainable Development Goals (SDGs), particularly Goal 3 and Goal 5, reaffirm the need to ensure universal access to sexual and reproductive health services, including information and education (4). Despite these commitments, disparities in reproductive health knowledge persist across and within countries. Evidence from low- and middle-income countries indicates that many women of reproductive age lack basic understanding of reproductive physiology, family planning, and preventive reproductive health practices (5,6). These gaps highlight that reproductive health knowledge remains unevenly distributed and closely linked to social, educational, and geographical inequalities.

In Indonesia, reproductive health continues to be a major public health concern, especially in rural and semi-rural areas. Although national policies and programs have been implemented to strengthen maternal and reproductive health services, studies suggest that women's reproductive health knowledge remains suboptimal in many regions (7). National survey data indicate variations in knowledge levels across provinces and districts, often correlating with disparities in education, access to health services, and socioeconomic status (8). Mothers occupy

a particularly important position within households, as they are often the primary decision-makers regarding health-seeking behaviors for themselves and their children. Therefore, understanding mothers' reproductive health knowledge is essential for improving family and community health outcomes.

The primary research problem addressed in this study concerns the persistently low level of reproductive health knowledge among mothers in specific local contexts. Limited knowledge is associated with delayed utilization of antenatal care, low uptake of modern contraception, and inadequate preventive practices related to reproductive health (9). These challenges are not solely attributable to individual factors but are embedded in broader structural conditions, including limited access to accurate health information, cultural taboos surrounding reproductive topics, and insufficient community-based education initiatives (10). As a result, many mothers rely on informal sources of information, which may be incomplete or inaccurate, further perpetuating knowledge gaps.

General solutions proposed in the literature emphasize the role of health education and primary health care strengthening. Community-based reproductive health education programs have been shown to improve knowledge and promote healthier behaviors when they are integrated into existing maternal and child health services (11). Health promotion efforts led by midwives, nurses, and community health workers are particularly effective in rural settings, where trust and cultural familiarity facilitate information exchange (12). However, the success of such interventions depends heavily on a clear understanding of baseline knowledge levels within the target population. Without accurate baseline data, educational programs risk being poorly targeted or insufficiently responsive to local needs.

Previous studies have demonstrated that targeted educational interventions can significantly improve women's reproductive health knowledge. For instance, community-based interventions focusing on family planning and reproductive hygiene have been associated with increased knowledge scores and improved contraceptive use (13). Educational programs delivered through women's groups and community health posts have also shown positive effects on awareness of reproductive anatomy, menstrual health, and prevention of reproductive tract infections (14). These findings suggest that structured and contextually adapted educational approaches can be effective in addressing knowledge deficits among women, including mothers.

In the Indonesian context, research highlights the importance of culturally sensitive reproductive health education. Studies conducted in various regions have shown that interventions incorporating local language, cultural norms, and family involvement are more effective than standardized, one-size-fits-all approaches (15). Mothers have been identified not only as recipients of reproductive health information but also as key agents in disseminating knowledge within households and communities (16). Nonetheless, these studies also reveal substantial variability in outcomes across different settings, indicating that contextual factors play a crucial role in shaping the effectiveness of educational interventions.

A review of the existing literature reveals a notable gap in localized evidence on mothers' reproductive health knowledge in certain districts, including Bulupoddo, Sinjai Regency. While national and provincial surveys provide valuable macro-level insights, they often fail to capture micro-level variations and community-specific realities (8,17). There is limited empirical evidence describing the baseline reproductive health knowledge of mothers in this area, making it difficult for local health authorities to design targeted and effective educational interventions. This lack of localized data represents a critical gap in the current body of knowledge.

Therefore, this study aims to describe mothers' knowledge of reproductive health in Bulupoddo, Sinjai, using a descriptive survey design. The study seeks to provide empirical evidence on the level of reproductive health knowledge among mothers and to determine whether knowledge levels fall below acceptable thresholds. The novelty of this study lies in its focus on a specific, under-researched local context, contributing to a more nuanced understanding of reproductive health knowledge disparities in Indonesia. The findings are expected to inform local health promotion strategies and support the development of culturally appropriate reproductive health education programs. The scope of this study is limited to describing knowledge levels and does not assess causal relationships; however, it provides a critical foundation for future analytical and interventional research.

METHODS

Study Design

This study employed a descriptive survey design to assess mothers' knowledge of reproductive health. A descriptive approach was chosen to provide a systematic overview of the existing level of knowledge without attempting to establish causal relationships. This design is appropriate for baseline assessments and for informing health promotion planning at the community level (18).

Study Setting

The study was conducted in Bulupoddo Subdistrict, Sinjai Regency, South Sulawesi, Indonesia. Bulupoddo is a predominantly rural area characterized by limited access to health information, reliance on primary health care services, and strong sociocultural influences on health-related knowledge and practices. Primary health services in this area are delivered mainly through community health centers (Puskesmas) and integrated health posts (Posyandu), which serve as key entry points for maternal and reproductive health education.Study Population and Participants. The study population consisted of mothers of reproductive age residing in Bulupoddo Subdistrict. Mothers were selected as the target population because of their central role in reproductive decision-making and family health management. Inclusion criteria were: (1) women aged 15–49 years, (2) currently married or having been married, (3) residing in Bulupoddo for at least six months, and (4) willing to participate in the study. Mothers who were seriously ill or unable to communicate effectively at the time of data collection were excluded.

Sample Size and Sampling Technique

The sample size was determined using a descriptive study approach, considering feasibility and accessibility of respondents within the study area. A non-probability sampling technique, specifically convenience sampling, was applied to recruit eligible participants who met the inclusion criteria. This approach is commonly used in descriptive community-based surveys where the primary objective is to obtain an overview of knowledge levels rather than to generalize findings to a wider population (19).

Data Collection Instrument

Data were collected using a structured questionnaire developed based on relevant literature and reproductive health education guidelines (1,3). The questionnaire consisted of two main sections: (1) sociodemographic characteristics of respondents, and (2) knowledge of reproductive health. The knowledge section included questions covering key domains such as basic reproductive anatomy and physiology, reproductive hygiene, family planning, prevention of reproductive health problems, and utilization of reproductive health services. Responses were measured using multiple-choice and true–false formats.Prior to data collection, the questionnaire was reviewed for content clarity and relevance. A pilot test was conducted among a small group of mothers outside the study area to ensure comprehensibility and feasibility. Necessary revisions were made based on feedback obtained during the pilot testing process.

Data Collection Procedure

Data collection was carried out by trained data collectors with a background in health sciences. Participants were approached during community health activities or home visits. After providing a clear explanation of the study objectives and procedures, informed consent was obtained from all participants. The questionnaire was administered through face-to-face interviews to minimize misunderstanding and to accommodate participants with varying literacy levels.Measurement of Knowledge Reproductive health knowledge was assessed by calculating the proportion of correct responses for each respondent. Knowledge scores were converted into percentages and categorized based on predefined criteria. In this study, a knowledge level below 50% was classified as very low, reflecting insufficient understanding of reproductive health concepts. This cutoff point has been used in previous descriptive studies to identify critical gaps in health knowledge (20).

Data Analysis

Data were analyzed using descriptive statistical methods. Frequencies, percentages, means, and standard deviations were used to summarize respondents' characteristics and reproductive health knowledge levels. Results were presented in tables and narrative form to provide a clear overview of the findings. No inferential statistical analysis was performed, as the primary aim of the study was descriptive.

RESULT AND DISCUSSION

RESULTS

Respondent Characteristics

Table 1. Respondent Characteristics

Characteristics	N	%
Gender		
Male	0	**0**
Female	30	**100**
Level Education		
Elementary school	15	50
Junior High School	4	13,3
Senior High School	10	33,3
University	1	3,3
Job/Work		
Housewife	23	76,6
Private employee	3	10
Civil servant	4	13,3

Table 2. Knowledge of Reproductive Health

Knowledge	n	%
High	4	13,3
Moderate	5	16,6
Low	21	70

DISCUSSION

Characteristics Respondent

The finding that all respondents in this study were women reflects the intentional focus on mothers as the primary population of interest. This approach is consistent with reproductive health research that positions women, particularly mothers, as central actors in reproductive decision-making and household health management (21). Previous studies have shown that mothers' knowledge significantly influences the utilization of reproductive health services, contraceptive uptake, and maternal care-seeking behavior, especially in rural communities (22). Therefore, the exclusive inclusion of women strengthens the relevance of the findings for maternal and reproductive health programming.

The educational profile of respondents indicates that basic education dominated, accounting for approximately half of the sample. This finding is in line with evidence from rural areas in Indonesia and other low- and middle-income countries, where women's educational attainment remains relatively low compared to urban populations (23). Education is widely recognized as a key social determinant of health knowledge, including reproductive health literacy. Women with lower educational levels often face difficulties in accessing, interpreting, and applying health information, particularly when such information is delivered through written materials or digital platforms (24).

Several empirical studies have demonstrated a strong association between educational attainment and reproductive health knowledge. For example, a study in Nepal reported that women with only primary education were significantly less knowledgeable about reproductive physiology and family planning methods than those with secondary or higher education (25). Similar findings have been observed in Indonesia, where women with limited schooling showed lower awareness of reproductive health risks and preventive practices (26). The predominance of basic education among respondents in this study may therefore contribute to the generally low level of reproductive health knowledge observed.

In terms of occupational status, the majority of respondents were homemakers (76.6%). This occupational pattern is consistent with demographic trends in rural Indonesia, where women's labor force participation outside the household is relatively limited (23). Previous research suggests that homemakers may have fewer opportunities to access diverse sources of health information compared to women employed in the public or private sector (27). Employment outside the home is often associated with increased social interaction, exposure to workplace-based health information, and greater engagement with mass media (28).

Comparative studies have shown that women who are employed tend to demonstrate higher reproductive health knowledge than homemakers. A study conducted in Bangladesh found that employed women were more likely to be knowledgeable about contraception and maternal health services than those not engaged in paid work (29). Similarly, research in Southeast Asia reported that women working in formal sectors had better access to reproductive health information and services, partly due to increased autonomy and social networks (30). In contrast, homemakers often rely primarily on primary health care facilities, such as community health posts, as their main source of reproductive health information.

The intersection of low educational attainment and predominance of homemakers observed in this study reflects broader structural factors influencing reproductive health knowledge. These characteristics have been consistently associated with lower health literacy in previous studies conducted in rural and resource-limited settings (31). Such findings suggest that reproductive health knowledge deficits among mothers are not solely individual-level issues but are embedded within social and economic contexts that limit access to information and learning opportunities.

Taken together, the characteristics of respondents in this study reinforce the need for reproductive health education strategies that are tailored to mothers with limited formal education and those primarily engaged in domestic roles. Evidence from prior interventions indicates that community-based education, use of simple and culturally appropriate messages, and direct engagement through primary health care services are effective approaches for improving reproductive health knowledge among similar populations (32). Therefore, the findings of this study are consistent with existing literature and underscore the importance of context-specific, equity-oriented reproductive health promotion efforts in rural communities.

Knowledge of Reproductive Health

The findings of this study indicate that mothers' knowledge of reproductive health in Bulupoddo, Sinjai was predominantly low, with approximately 70% of respondents classified as having low knowledge. This result is consistent with evidence from many low- and middle-income country settings, where limited reproductive health literacy among women remains a persistent public health challenge (33). Low levels of reproductive health knowledge have been widely associated with poor utilization of maternal health services, low contraceptive uptake, and increased vulnerability to preventable reproductive health problems (34).

Several international studies have reported similar patterns of low reproductive health knowledge among women in rural and socioeconomically disadvantaged communities. A cross-sectional study conducted in rural Ethiopia found that more than two-thirds of women of reproductive age had inadequate knowledge of reproductive health, particularly regarding reproductive physiology and prevention of reproductive tract infections (35). Comparable findings were reported in South Asia, where women with limited education and restricted access to health information demonstrated low awareness of family planning methods and maternal health risks (36). These similarities suggest that low reproductive health knowledge is a widespread phenomenon influenced by structural and contextual factors rather than isolated individual deficits.

The predominance of low knowledge observed in this study may be closely linked to respondents' educational and occupational characteristics. As discussed earlier, low educational attainment and the dominance of homemakers among respondents likely constrained exposure to formal and informal sources of reproductive health information. Previous studies have shown that women with limited education often experience difficulties in understanding health messages delivered through conventional channels, particularly when such messages are not adapted to their literacy level or cultural context (37). Consequently, reproductive health information may not be effectively internalized, resulting in persistently low knowledge levels.

Moreover, access to reproductive health information in rural settings is often mediated by primary health care services, such as community health posts and maternal health clinics. While these services play a critical role in health promotion, evidence suggests that reproductive health education delivered through routine services is frequently limited in scope, time, and depth (38). Studies from Indonesia and other Southeast Asian countries

indicate that reproductive health counseling is often focused on immediate clinical needs, with less emphasis on comprehensive reproductive health education (39). This service delivery gap may contribute to the low level of knowledge identified in this study.

International literature also highlights the influence of sociocultural norms and gender dynamics on women's reproductive health knowledge. In many settings, reproductive health topics remain sensitive or taboo, limiting open discussion and information exchange (40). Women may rely on traditional beliefs or informal advice from family members, which can perpetuate misconceptions and incomplete understanding of reproductive health. Such dynamics have been shown to significantly hinder improvements in reproductive health literacy, even in contexts where health services are available (41).

The high proportion of mothers with low reproductive health knowledge observed in this study underscores the need for more effective and context-sensitive educational interventions. Evidence from systematic reviews suggests that community-based reproductive health education programs, particularly those using participatory approaches and simple, culturally appropriate messaging, are effective in improving women's knowledge and health behaviors (42). Interventions that actively involve mothers, community health workers, and local leaders have demonstrated sustained improvements in reproductive health literacy in rural populations (43).

Overall, the findings of this study are consistent with international evidence indicating that low reproductive health knowledge remains a significant barrier to improving maternal and reproductive health outcomes. Addressing this issue requires not only increasing the availability of information but also ensuring that reproductive health education is accessible, understandable, and responsive to the specific needs of women with limited education and predominantly domestic roles. The results of this study provide important empirical support for strengthening community-based reproductive health education as a priority strategy in similar rural settings.

CONCLUSION

This study concludes that mothers' knowledge of reproductive health in Bulupoddo, Sinjai is generally inadequate. The findings show that the majority of respondents were women with basic educational attainment and predominantly engaged as homemakers, reflecting a population group that is structurally vulnerable to limited access to reproductive health information. Approximately 70% of mothers demonstrated low levels of reproductive health knowledge, indicating substantial gaps in understanding fundamental reproductive health concepts. The dominance of low reproductive health knowledge appears to be closely associated with respondents' educational and occupational characteristics. Limited formal education and restricted exposure to diverse sources of health information likely constrained women's ability to acquire and apply accurate reproductive health knowledge. These findings are consistent with international evidence highlighting education and employment status as key social determinants of reproductive health literacy.

Overall, the study underscores the need for strengthened, community-based reproductive health education that is culturally appropriate and tailored to mothers with low educational attainment and predominantly domestic roles. Enhancing the role of primary health care services and community health workers in delivering accessible and comprehensive reproductive health information is essential. The findings provide empirical evidence to support targeted health promotion strategies and serve as a foundation for future research and intervention development aimed at improving reproductive health knowledge and outcomes in similar rural settings.

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