

Research Article

Situation of Safe Motherhood: A Study of Aatharai Rural Municipality- 4, Iwa, Terhathum

Ganesh Bimali

Teaching Assistant, Myanglung Campus Terhathum, Nepal



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Corresponding Author

Ganesh Bimali

Assistant Professor,
Terhathum Multiple Campus,
Terhathum, Nepal

E-mail

bimaliji007@gmail.com

Orcid

<https://orcid.org/0009-0006-6632-1415>

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ABSTRACT

Safe motherhood is a critical issue in reproductive health, and the role of husbands is vital in ensuring the safety and well-being of mothers. This study aims to examine the practices of antenatal care, delivery care, and postnatal care among married men and women of reproductive age (15-49). The study utilizes primary data collected through questionnaires, supplemented with information from secondary sources.

The sample size for this study consisted of 170 households, selected through snowball sampling. The criteria for inclusion in the sample were households with at least one childbirth involving both the woman and her husband. The sample areas were selected using cluster 2 and 3, determined through a lottery method.

While the search results did not provide specific studies directly related to the objectives of this study, they did offer insights into related topics such as reproductive health and maternal care. For example, one study emphasized the importance of birth preparedness for clean delivery and referral, as well as newborn care. Another study highlighted the need for comprehensive sex education to mitigate teenage pregnancy. In conclusion, this study on safe motherhood and the role of husbands in reproductive health aims to shed light on the practices of antenatal care, delivery care, and postnatal care among married men and women. By examining these practices, it is hoped that strategies can be developed to improve the safety and well-being of mothers during the reproductive process.

Keywords: male participation, delivery care, married women, health

Introduction

Safe motherhood is a critical issue in the 21st century and an essential component of reproductive health. It is related to the age group of reproductive women (15-49). Safe delivery services can be accessed at either a health post or a hospital with qualified medical personnel to reduce health risks to mothers and children. Safe motherhood concerns women's health and has three stages: antenatal care, delivery care, and postnatal care. Safe motherhood is determined by various factors, including socio-economic, demographic, religious, cultural, and others. Men play a role in influencing safe motherhood, as they are key persons in households and society. The slogan of the world is "Men as partners in maternal health" (UNFPA, 2007). However, in many developing countries, men do not have access to information, education, and communication about reproductive care and safe motherhood due to limited resources and patriarchal, religious, and cultural beliefs (Roth & Mbizv, 2007).

The safe motherhood conference was held in Nairobi, Kenya, in 1987, with a focus on maternal health. The Millennium Development Goals also aim to improve women's health and reduce maternal mortality. MDG goals 3, 5, and 6 promote gender equality and empowerment of women, improvement in maternal health, and combating HIV/AIDS, malaria, and other diseases, respectively (Patthak, 2007).

In Nepal, safe motherhood was identified as a priority program in the new health policy developed by the first elected democratic government in 1991. The national safe motherhood plan (2002-2007) has been revised with extensive partner participation, and the revised safe motherhood and neonatal health long-term plan (safe motherhood, 2006-2007) includes recognition of the importance of addressing neonatal health as an integral part of the safe motherhood program. The policy for skilled birth attendants, health sector reform initiatives, legalization of abortion, and the

integration of safe abortion services under the safe motherhood have been implemented (MOHP, 2007). Similarly, the 2007 interim constitution and constitution of 2072 of Nepal declared for the first time that health is a basic human right with the state's responsibility for it. It recognized that the health sector consists of three main groups of providers: public sector, private sector (for profit), and NGO sector not for profit. The World Health Organization (2007) recommends at least four visits for pregnant women to doctors. Postnatal care refers to the care of mothers and newborn babies after delivery (Kafle, 2006).

Statement of Problems

Developed and developing countries are serious about reproductive and safe motherhood. In the world, approximately 810 women die due to pregnancy-related causes, with 94 percent of deaths occurring in low and lower-middle-income countries (WHO, 2019). Today, the total fertility rate is slowly reducing, and health care facilities are increasing, but maternal mortality is still high, with 57 percent of deliveries attended by skilled manpower and 69 percent of women receiving four or more antenatal care visits in Nepal (Ministry of Health & New ERA, 2016).

The most vulnerable groups, including women and children, the rural population, the poor, the underprivileged, and the marginalized, require equitable access to quality essential health care services with full community participation and gender sensitivity by technically competent and responsible health personnel throughout the country (MOHP, 2009).

There is still a lack of research about the knowledge of antenatal care, delivery care, and postnatal care among men and married women of reproductive age (15-49).

Objectives of the Research

This study examines the practices of antenatal care, delivery care, and postnatal care among men and married women of reproductive age (15-49).

Methodology

The study area selected for this research is Atharai Rural Municipality-4 Iwa, Terathum, where people from different castes, ethnicities, and religious groups reside with varying socio-economic characteristics. The study selected 170 males and 170 females from the selected 170 households using snowball sampling from 2 clusters. Cluster 2 and 3 were selected using lottery methods. A structured questionnaire was administered through face-to-face interviews in the study area to married women and their husbands. Secondary sources such as books and journals were also used to complete the study. The collected data were analyzed descriptively

using the SPSS program, and the results were presented in tables.

Data Analysis

The knowledge of safe motherhood of male and women 15-49 based on demographic and socio-economic, include education, occupation, caste/ethnicity and religion characteristics of the respondents of study area.

ANC by Women Education

Education is most important weapon of human civilization. Educated women were sincerer for their checkup at the time of pregnancy then uneducated women.

Table 1: Distribution of antenatal checkup by women Education

Literacy Status	Antenatal Checkup					
	Yes		No			Percent
	Number	Percent	Number	Percent	Total	
Literate	97	76.4	30	23.6	127	
Illiterate	9	20.9	34	79.1	43	
Total	106	100	64	100	170	
If literate						100
Secondary	53	88.3	7	11.7	60	100
Higher	14	93.3	1	6.7	15	100
Total	106		21		127	100

Source: Field Survey, 2022

Based on the search results, the study found that the level of education of women and their husbands played a significant role in the frequency of antenatal checkups. The study area had a diverse population of different castes, ethnicities, and religious groups with varying socio-economic characteristics. The study selected 170 males and 170 females from the selected 170 households using snowball sampling from two clusters. Cluster 2 and 3 were selected using lottery methods. The study found that more than 76 percent of literate women had received antenatal checkups compared to only

21 percent of illiterate women. Similarly, women who had completed secondary and higher levels of education had better antenatal care visits than women with a primary level of education. The data indicated that literate women received more antenatal checkups than illiterate women in the study area. The study also found that husband education positively influenced women's antenatal care visits. The study used a structured questionnaire administered through face-to-face interviews to married women and their husbands. The collected data were analyzed descriptively using the SPSS program,

and the results were presented in tables. Similar studies have found that knowledge of safe motherhood practices is generally poor among women in rural communities in developing

countries, and increasing knowledge about safe motherhood practices is associated with attendance at antenatal care visits, being employed, or acquiring some level of education.

Table 2: Distribution of antenatal checkup of respondent their husband's level of education

Husband's education	Antenatal checkup					
	Yes		No		Total	
	Number	Percent	Number	Percent	Number	Percent
Literate	106		41		147	
Illiterate	6		17		23	
Total	112		58		170	
Primary	26	55.3	21	44.7	47	100.0
Secondary	54	77.1	16	22.9	70	100.0
Higher	26	86.7	4	13.3	30	100.0
Total	106		41		147	100.0

Source: Field Survey, 2022

ANC by Women Education

Education is most important weapon of human civilization. Educated women were sincerer for

their checkup at the time of pregnancy then uneducated women.

Table 3: Distribution of antenatal checkup by women Education

Literacy Status	Antenatal Checkup					
	Yes		No		Total	Percent
	Number	Percent	Number	Percent		
Literate	97	76.4	30	23.6	127	
Illiterate	9	20.9	34	79.1	43	
Total	106	100	64	100	170	
If literate						
Basic	39	75.0	13	25.0	52	100
Secondary	53	88.3	7	11.7	60	100
Higher	14	93.3	1	6.7	15	100
Total	106		21		127	100

Source: Field Survey ,2022

The study found that higher levels of education among women and their husbands were associated with a higher frequency of antenatal checkups. The study area had a diverse population of different castes, ethnicities, and

religious groups with varying socio-economic characteristics. The study selected 170 males and 170 females from the selected 170 households using snowball sampling from two clusters. Cluster 2 and 3 were selected using

lottery methods. The study found that more than 76 percent of literate women had received antenatal checkups compared to only 21 percent of illiterate women. Similarly, women who had completed secondary and higher levels of education had better antenatal care visits than women with a primary level of education. The data indicated that literate women received more antenatal checkups than illiterate women in the study area. The study also found that husband education positively influenced women's antenatal care visits. The study used a structured questionnaire administered through face-to-face interviews to married women and their husbands. The collected data were analyzed descriptively using the SPSS program, and the results were presented in tables. The

search results provided additional studies that supported the findings of the study, indicating that higher levels of education among women were associated with better antenatal care utilization (Islam, M. R., Islam, M. K., Hasan, M. M., & Hossain, M. A. (2018); Ezeonu, C. T., & Ugwu, E. O. (2021); Ratna, D. W., Wulandari, R., & Laksono, A. D. (2022); Ntenda, P. A. M., Chuang, K.-Y., & Tiruneh, F. N. (2020). Another study found that husband education was positively associated with their involvement in antenatal care visits (Islam, M. R., Islam, M. K., Hasan, M. M., & Hossain, M. A. (2018)). The results of the study suggest that education plays a significant role in improving the frequency of antenatal checkups among women and their husbands.

Table 4: Distribution of antenatal checkup of respondent their husband's level of education

Husband's education	Antenatal checkup					
	Yes		No		Total	
	Number	Percent	Number	Percent	Number	Percent
Literate	106		41		147	
Illiterate	6		17		23	
Total	112		58		170	
Primary	26	55.3	21	44.7	47	100.0
Secondary	54	77.1	16	22.9	70	100.0
Higher	26	86.7	4	13.3	30	100.0
Total	106		41		147	100.0

Source: Field Survey, 2022

ANC by Occupation

Occupation essential component to manage ANC visit the time of pregnancy. Table 5 present that the respondent (40%) have no ANC checkup who are enjoyed in agriculture occupation. Most of the private and government job holder who have received ANC checkup during their

pregnancy. The study focused that the of ANC visit depends upon the quality of jobs. Similarly, the table no presents that the agriculture and foreign employment of husband have lower ANC checkup during their pregnancy then others job holders.

Table 5: Distribution of antenatal checkup by occupation of women

Level of Occupation	Antenatal checkup					
	Yes		No		Total	
	Number	Percent	Number	Percent	Number	Percent
Agriculture	82	59.9	55	40.1	137	100.0
Private service	8	72.7	3	27.3	11	100.0
Gov. service	7	77.8	2	22.2	9	100.0
Trade/Industries	5	71.4	2	28.5	7	100.0
Foreign Employment	4	66.7	2	33.3	6	100.0
Total	106		64		170	100.0

Source: Field Survey, 2022

Table 6: Distribution of antenatal checkup by occupation of husband

Level of Occupation	Antenatal checkup					
	Yes		No		Total	
	Number	Percent	Number	Percent	Number	Percent
Agriculture	36	57.1	27	42.9	63	100.0
Private service	23	67.6	11	32.4	34	100.0
Gov. service	8	72.7	3	27.3	11	100.0
Trade/Industries	7	70.0	3	30.0	10	100.0
Foreign Employment	32	61.5	20	38.5	52	100.0
Total	106		64		170	100.0

Source: Field Survey, 2022

Place of delivery by education attainment of husband

husband's education and delivery. Place of safe delivery is determined by the level of husband education.

There is a strong relationship between

Table 7: Distribution of antenatal checkup by occupation of women

Place of delivery	Primary		Secondary		Higher		Total
	N	%	N	%	N	%	N
Health post/ Hospital	15	31.9	30	42.9	25	83.3	70
Home	32	68.1	40	57.1	5	16.7	100
Total	47	100.0	70	100.0	30	100.0	147

Source: Field Survey, 2022

Table 7 shows that the quality of safe delivery place is increased with the husband's education. Husband having higher level of education have signification contribution in delivery their baby

at hospital. It can be seen in table that 68 percent women delivered at home whose husbands have completed primary and 83 percent delivery at hospital who have achieved higher education.

Postnatal care After Delivery

Table 8: The percentage distribution of postnatal care after delivery

Days after delivery	Number	Percent
1	2	1.2
2	7	4.1
3	53	31.2
7	18	10.6
21	1	0.6
24	1	0.6
No Checkup	88	50.6
Total	170	100.0

Source: Field Survey, 2022

More than fifty percent (50.6 %) mother did not visited for postnatal checkup. The respondents who have visited service delivery point for postnatal checkup are 31.2 percent who have visited after 3 days from the day of delivery. Only one respondent visited for postnatal checkup after 21 and 24 days each after the delivery had taken place.

Table 9: Distribution of respondents according to times receive postnatal Checkup with 42 days

Times received post checkup within 42 days	Number of respondents	Percent
One times	6	3.5
Two times	20	11.8
Three times	56	32.9
No times	88	51.8
Total	170	100.0

Source: Field Survey, 2022

The women should visit health service delivery point for three postnatal checkup-up within 42 days after delivery. The majority of respondents (51.8 %) did not past checkup within 42 days of delivery received. Nearly 33% visited three times, 11.8 percent respondents visited 2 time

to receive postnatal checkup after delivery. Only 3.5 percent respondents received postnatal checkup one times.

Place of Postnatal Check-up

The post- natal checkup is essential for good health of mother and child. Many places are available for post-natal checkup. The study area has available hospital, health post, sub-health post, private clinic.

Table 10: Percentage distribution of respondents by place of postnatal checkup

Place of received PNC	Number	Percent
Hospital	19	23.2
Health-post	34	41.5
Sub-Health post	27	32.9
Private Clinic	2	2.4
Total	82	100.0

Source: Field Survey, 2022

In study area health post and sub health post are accessible and affordable. Most of the respondents received postnatal checkup at sub-health post and health post. (41.5 percent and 32.9 percent respectively). Very few respondents (2.4%) received postnatal checkup from private clinic while 23.2 percent respondents received postnatal checkup from hospital.

NC Literacy status and educational attainment of women respondents

Education is the back bone of knowledge, attitude and skill in our human life. It determined our way of present and future our world. Generally, educate people are concerned their and their family health.

Table 10 Shows that among literate respondents, 60.6 percent receive postnatal checkup while in illiterate population only 11.6 percent received that service. Illiterate respondents do not seek and receive postnatal checkup (88.4%). Similarly, most of the respondents who have higher level of education have better postnatal checkup practice, which is 80 percent.

The receiving trend of postnatal checkup is decreasing while the level of education is decreasing. Among secondary level completed

respondent's 67 percent receive this checkup while only 48 percent respondents with primary level of education received postnatal check-up.

Table 11: Postnatal checkup by level of education of husband respondent

Level of education	Postnatal checkup					
	Yes		No		Total	
	Number	%	Number	%	Number	%
Literate	77	60.6	50	39.4	127	100.0
Illiterate	5	11.6	38	88.4	43	100.0
If literate	82		88		170	
Primary	25	48.1	27	51.9	52	100.0
Secondary	40	66.7	20	33.3	60	100.0
Higher	12	80.0	3	20	15	100.0
Total	77		50		127	100.0

Source: Field Survey, 2022

PNC by literacy status and educational attainment of respond's husband

In Patriarchal society, the attitude and perception of a male in family plays important

role on determining the access to postnatal service, therefore the situation of postnatal checkup with reference to the educational status of husband is discussed below.

Table 12: Postnatal Checkup by literacy level of Husband

Husband Level of Education	Postnatal checkup					
	level of education		No		Total	
	Number	%	Number	%	Number	%
Literate	76	51.7	71	48.3	147	100.0
Illiterate	6	26.1	17	73.9	23	100.0
Total	82		88		170	100.0
If literate						
Primary	11	23.4	36	76.6	47	28.2
Secondary	43	61.4	27	38.6	70	34.3
Higher	22	73.3	8	26.6	30	37.5
Total	76		71		147	100.0

Source: Field Survey, 2022

Table 11 shows that the respondent whose husband is illiterate, has not visited any health service delivery point to receive health service after delivery (26.4%). But nearly one in two (48.3%) respondents did not received postnatal checkup even their husbands are literate. Similarly, postnatal checkup is seen increasing

as level of education of husband increases. Nearly 27 percent husband do not involve in post-natal checkup who have attained higher level of education while the statistics shown 61 percent and 23 percent for secondary and primary level respondents past-natal checkup.

PNC by Occupation of respondent's

According to occupation, in study area the postnatal checkup is found varying. Nearly 80 percent respondents are involving in agriculture sector. There is low post- natal checkup who have involved in agriculture occupation. Among

respondents who are involved in agriculture more than 84 percent did not receive postnatal checkup. Nearly 44 percent women participated in post-natal checkup which is lowest percentage among other job. The government job holder has highest (85%) participated in PNC checkup.

Table 13: Postnatal checkup by occupation of respondents

Occupation	Postnatal checkup					
	Yes		No		Total	
	Number	%	Number	%	Number	%
Agriculture	60	43.8	77	56.2	137	100.0
Private service	7	63.6	4	36.4	11	100.0
Government service	7	84.8	2	15.2	9	100.0
Trade. Industries	5	71.4	2	28.6	7	100.0
Foreign Employment	3	50.0	3	50.0	6	100.0
Total	82		88		170	100.0

Source: Field Survey, 2022

PNC by Caste / ethnicity of respondent's

The table 13 shows that percentage distribution of respondents by caste. Most of the Brahmin/ Chhetri have taken postnatal checkup 53

percent than Other castes. The data shows that Tamang caste has low PNC checkup. Where Tamang women and child have more risk during the delivery time.

Table 14: Postnatal checkup by caste/ethnicity of respondents

Caste	Postnatal checkup					
	Yes		No		Total	
	Number	%	Number	%	Number	%
Birahamin/chhreti	51	52.6	46	47.4	97	100.0
Limbu	21	44.7	26	55.4	47	100.0
Tamang	6	37.5	10	62.5	16	100.0
Gurung	4	40.0	6	60.0	10	100.0
Total	82		88		170	100.0

Source: Field Survey, 2022

The study found that among the total number of 170 respondents, 65 percent had knowledge about antenatal care and received at least one ANC checkup, which was 62 percent. The study also found that educated women had a positive relationship with ANC checkups. Government job holders had the highest percentage of ANC checkups at 78 percent, while agriculture

workers had 60 percent ANC checkups. Similarly, husbands with higher education levels had more ANC checkups. The study also found that 59 percent of the respondents delivered at home, while only 41 percent delivered at a health center such as a hospital, health post, or private clinic. Out of the respondents, 48 percent received postnatal checkups, while 52

percent did not receive any checkup. Among the 82 PNC visitors, most of them received services from health posts, sub-health posts, hospitals, and clinics (42, 32, 23, and 2 percent, respectively). The study also found that out of the 170 respondents, 77 percent of husbands, 7 percent of mothers-in-law, 11 percent of other family members, and 5 percent of relatives helped during the period of complications during pregnancy and delivery.

The findings of the study are consistent with other studies that have shown the importance of antenatal care utilization in reducing pregnancy-related morbidities and mortalities (Frontiers. (2023): Hounghinin, R. L., Sossa, J. C., & Saka, B. (2021): Mihretie, G., & Yohannes, A. G. (2018): Gebremeskel, G. G., & Gebru, A. H. (2017): Abosse, Z., Woldie, M., & Ololo, S. (2019): Dejene, G., & Yemane, D. (2022). The study highlights the need for increasing awareness and utilization of antenatal care services, especially among women with lower levels of education and those who deliver at home. The study also emphasizes the importance of involving husbands and other family members in the care of pregnant women and during the period of complications. The study provides insights into the factors that influence ANC utilization, such as education level, occupation, and type of health facility. The findings of the study can be used to inform policies and programs aimed at improving maternal and child health outcomes.

Due to a lack of knowledge, geographic complications, lack of government provision, and health facilities, reproductive health in developing countries is a crucial part of women's health. Safe motherhood is a main component of reproductive health. ANC, PNC visits, and delivery preparation are essential components of safe motherhood. The Nepal Demographic and Health Survey (NDHS) 2016 presents that ANC checkups from skilled personnel were 94 percent, four-time checkups were 81 percent, 80 percent of deliveries were skilled, and 70 percent of women received post-natal services

within two days after delivery. Similarly, the NDHS (2016) presented that the maternal mortality rate was 239, ANC visited four times was 69 percent, and basic vaccination was 78 percent. The World Health Organization (2023) pointed out that the MMR in Nepal is 194, indicating that maternal health is improving regularly. The study found that 67 percent of women had knowledge about delivery care, 49 percent of women delivered in a health center under the health expert as a doctor, nurse, and 52 percent of husbands encouraged hospital visits during pregnancy and delivery. NDHS (2016) found that childbirth with skilled personnel (doctor, nurse, etc.) was 57 percent in Nepal and 44 percent in rural areas. Only 33 percent had three-time PNC checkups within 42 days after delivery. Among the 170 respondents, 62 percent visited at least one time, with government job holder women at 78 percent and husbands at 73 percent ANC checkup. Similarly, 48 percent of women received PNC services in health institutions. Husbands played a positive role in completing the pregnancy process, with nearly 77 percent of husbands helping. NDHS (2016) showed that 63 percent of mothers who had a live birth in the two years preceding the survey and were assisted by health personnel received an oxytocin injection immediately after delivery.

Safety of life, liberty and property are always in risk in developing country like Nepal. This can be illustrate from the labour status in one of the most booming industry like construction of Nepal, where safety of worker are under high risk, which is even made worse during covid (Mishra, A. K., Pokharel, A., & Aithal, P. S., 2023; Mishra A. K., 2020; Maskey, A., & Mishra, A. K., 2018; & Mishra, A. K., Sudarsan, J. S., & Nithiyanantham, S., 2022).

Conclusions

The study highlights the importance of male participation in safe motherhood practices, especially during the prenatal and postnatal period. The findings suggest that education,

occupation, and communication of both males and females directly affect safe motherhood practices. The study found that only 51 percent of the total respondents had knowledge about safe motherhood. The study also found that the government job holders had the highest knowledge and practice, while agriculture job holders had the lowest knowledge and practice. The study found that male participation had a positive relationship with ANC and PNC checkups and delivery care, compared to postnatal checkup visits. The study concludes that ANC, PNC, and delivery checkups are less than the national level. The study provides insights into the factors that influence ANC utilization, such as education level, occupation, and type of health facility. The findings of the study can be used to inform policies and programs aimed at improving maternal and child health outcomes. The study highlights the need for increasing awareness and utilization of antenatal care services, especially among women with lower levels of education and those who deliver at home. The study emphasizes the importance of involving husbands and other family members in the care of pregnant women and during the period of complications. The study findings are consistent with other studies that have shown the importance of antenatal care utilization in reducing pregnancy-related morbidities and mortalities.

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