

Assessment of Husbands' Participation on Birth Preparedness and Complication Readiness in Enderta Woreda, Tigray Region, Ethiopia, 2012

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Abstract

Background: Male involvement in reproductive health has been promoted as a promising new strategy for improving maternal and child health. The promotion of husband participation in the process of antenatal care and in preparations for the delivery is very important.

Objective: To assess husband participation on birth preparedness and complication readiness in Enderta Woreda, Tigray region, Ethiopia, 2012.

Methods: A community based cross-sectional study was conducted among 376 husbands whose wives was delivered within the last 12 months preceding the study in Enderta Woreda northern part of Ethiopia from August to September 2012.

Multi stage stratified sampling technique with Probabilities proportional to size was used. Study subjects again were selected by systematic random sampling technique from 10 randomly selected kebele's in the Woreda. Data was collected using structured interview questionnaire and entered, cleaned and analyzed using SPSS version 16.0 statically package software.

Result: The study revealed that about 60.4% husbands had good practice and participated on birth preparedness. And regarding the husbands complication readiness practice in the labor and delivery, 193 (51.30%) of the respondents were reported that their wives were delivered by skilled birth attendant and the role of those husbands, 174(46.30%) were told their wife to get skilled birth attendant, 152(42.00%) were informed to health facility for their place of childbirth, 99(26.30%) were accompanied their wife to labor room, and 59 (15.70%) had gave money for health services and transportation. In addition, 75(19.90%) of all respondents perceived the actual complications faced for their wives during that delivery.

The respondents major source of information about birth preparedness and complication readiness where, 43.6% heard from health care providers, 23% from Radio/television, and 21.3% discussion with different peoples.

Conclusion and recommendation: Husbands have good practice in birth preparedness, but poor participation in complication readiness of maternity care. The community should be informed husbands to participate in complication readiness, generate income for the normal maternal health care and considering complications in pregnancy, labor and after labor, education for the female youth and promotion of facility birth, health education about husbands' birth preparedness of wife and other studies to be conducted on the husband involvement in maternal health care service.

Keywords: Husband participation; Birth; Complication readiness

Introduction

Male involvement in reproductive health has been promoted as a promising new strategy for improving maternal and child health [1]. In provision of the focused antenatal care service, one of the important elements is promotion of involvement of the husband in the process of Antenatal Care (ANC) and in preparations for the delivery. Birth preparedness is a relatively common strategy employed in implementing safe motherhood programs which may be affected by male partner participation because husbands were the most influential decision-maker and as the key member of the family [2,3].

Globally, more than half a million women still die annually as a result of complications of pregnancy and childbirth, in which 99% of these deaths occurring in the developing world. Besides this, for every 100,000 live births, 240 women died during pregnancy, childbirth, or the postpartum period in which are mostly from developed countries [4,5] Decreasing a maternal by three fourth is one of the Millennium Development Goal five (MDG-5) which is should be achieved 2015 [6].

In Ethiopia, the maternal mortality ratio is estimated to be 676 deaths per 100,000 live births, which is among the highest in the world

[7]. According to the Ethiopian Federal Ministry of Health, health and health related indicators 82.20% coverage for ANC, only 18.4% of the deliveries are attended by health professionals, 42.10% for postnatal care coverage [8].

In Ethiopia, women traditionally enjoy little independent decision making on most individual and family issues, including the option to

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Received December 03, 2013; **Accepted** December 26, 2013; **Published** December 31, 2013

Citation: Gebrehiwot H, Gebregziabher W, Gidey G (2013) Assessment of Husbands' Participation on Birth Preparedness and Complication Readiness in Enderta Woreda, Tigray Region, Ethiopia, 2012. J Women's Health Care 3: 140. doi:10.4172/2167-0420.1000140

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choose whether to give birth in a health facility or seek the assistance of a trained provider [8,9].

This situation makes husbands critical partners for the improvement of maternal health and reduction of maternal mortality by participating in birth preparation. And studies conducted on pregnant mother in Ethiopia showed that one of the factors of affecting antenatal care were 15.5% husband's disapproval for antenatal attendance, and only 21% of pregnant mother were accompanied by their husbands to the antenatal clinic [9,10].

Majority of the studies done on birth preparedness were conducted among mothers, so little is known about the participation male partner/husbands. Therefore, this study aimed to assess husband's participation on birth preparedness and complication readiness in Enderta Woreda, Tigray region, Ethiopia.

Literature Review

A cross-sectional community based study on male partner participation in promoting skilled attendants in Western Kenya revealed that about 45% husbands considered child-birth is a women's affair without husbands' participation. The male partners were with limited knowledge regarding complications related to child-birth, 40% thought delivery is a natural phenomenon that does not require men's participation [11].

Underlying the medical causes of maternal mortality are a range of social, economic, and cultural factors that contribute to women's poor health before, during, and after pregnancy. In their families and communities, women often have limited decision-making power. This affects their health and the health of their children in a number of ways. Many women cannot seek health care without their husband's permission [12].

A qualitative study conducted in Malawi showed that both men and women viewed pregnancy and childbirth as the domain of women, maternal health services are for women. Although some men accompanied their spouses to antenatal clinic, but it is considered as a taboo for men to enter the labor and delivery room [13].

A cross-sectional institution based study conducted in Nigeria on pregnant women attending antenatal care to assess husband level of participation in pregnancy and birth, the 97.4% encouraged their wives to attend antenatal clinic, 96.5% paying antenatal service bills, 94.6% paying for transport to the clinic. About 72.5% accompanied their wives to the hospital for their last delivery, while 63.9% were present at last delivery [14].

The study conducted on fathers' participation in maternity care in Northern Nigeria revealed that 32.1% of men ever accompanied their spouses for maternity care. It showed that for routine antenatal care, 77.1% provided money for transport and medication and 13.0% accompanied their spouses to the hospital for routine antenatal care, during their delivery 71.4% provided money for transport/drugs 18.7% personally accompanying their spouses to the hospital and only 3.7% donating blood. The trend was maintained during postnatal care where for routine postnatal care, the 80.4% of husbands gave money for transport/drugs with only 12.0% accompanying their spouses and 1.3% donating blood [15].

Qualitative works revealed about men's views of their sexual and family roles and practices.

In Gujarat, India, a program attempting to involve men in an effort

to reduce high levels of maternal mortality found that men believe that a man must not be present during his wife's labor.

Also, all family members, including women, are reluctant to have men donate blood for their wives even in critical situations for fear that this will physically weaken the husbands. The pregnant woman herself does not decide on the place for childbirth, but rather her family members, the husband is the most influential decision-makers. In Ethiopia, women traditionally enjoy little independent decision making on most individual and family issues, including the option to choose whether to give birth in a health facility or seek the assistance of a trained provider. Though women in the country have constitutional rights of participation in decision making, their involvement is limited at all levels [16].

A study conducted in South-West Uganda to the final decision on location of birth taken by the woman herself 36%, woman in consultation with spouse 56% and woman together with other relative or friend 8% [17]. As a contrary to this, there has indeed been a steady move to more male involvement in pregnancy and childbirth in countries in the west. Since the 1970s, men in the United Kingdom have been participating in maternity care. In Sweden, the value of the father's involvement in pregnancy, parent education, childbirth and the care of the newborn baby is emphasized in legislation, and the same as in Norway [18] (Figure 1).

Methods

Study area and period

The study was conducted from August to September in Enderta Woreda, Tigray Regional state, Northern Ethiopia, situated about 776 km North of Addis Ababa. According to the 2011 central statistics report, the Woreda has nearly 123,537 populations. It consists of 17 rural kebelles which has 6 governmental health facilities; 4 health centers and 2 health posts. In addition there are two zonal and one governmental referral hospitals, and private health institutions in the Mekelle city at the center of the woreda. All of health facilities are providing maternal and child healthcare.

Study design and population

A community based cross-sectional study was conducted among households targeting husbands with wife who had at least one child of less one year of age in Enderta Woreda.

All husbands whose wife had a child less than one years of age were included in the study while husbands who were not stay together with their wives during pregnancy and birth of the child and those who were critically ill were excluded from the study.

Sample size and sampling technique

The sample of 398 husbands was determined using single population proportion formula with 95% level of confidence, 5% margin of error and 21% of husbands estimated to be participated in birth preparedness [10]. Since population size was 4324, which is less than 10,000, sample size was adjusted using correction formula, 1.5 design effects and 10% non-response rate. From total 17 kebelles in the Woreda 10 of them were selected by lottery method. For each selected kebeles the sample size was allocated proportionally according to their population. Then sampling frame was formed by conducting a census to register all households of husband with wife having less than one year age child. Finally husbands were selected by systematic random sampling technique in which the sampling interval was determined for each kebele and starting point was selected randomly.

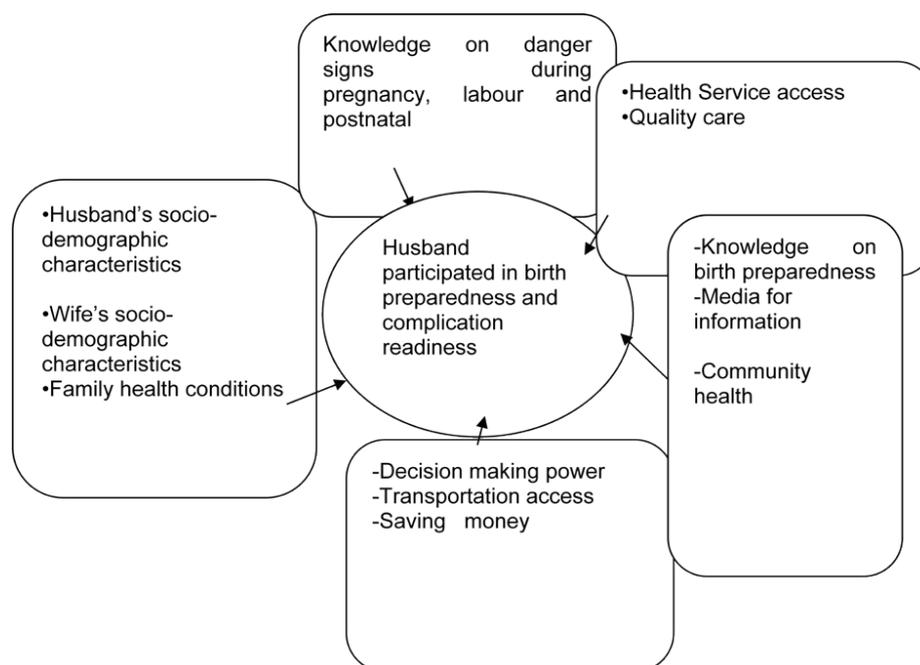


Figure 1: Conceptual frame on birth preparedness and complication readiness among husbands. (Adapted from JHPIEGO tools and indicators in *Maternal & Neonatal Health*, 2004).

Data collection and analysis

Structured questionnaire which was prepared in English and translated by language teacher to the local language Tigrigna used to collect data. Household census was done by trained health extension workers and interview was done by trained nurses after training is given to them.

The questionnaires were checked for completeness, coded and entered into SPSS version 16 software package for cleaning and analysis. Mean and standard deviation determined for continuous variables, and categorical variables were summarized by frequency distributions and percentage. Crude & adjusted odds ratio were used to control the possible confounding variables.

Ethical considerations

The study protocol was reviewed and approved by Health Research Ethics Review Committee of the Mekelle University College of Health Sciences. Permission to undertake the study was obtained from every relevant authority in the Woreda. In addition, verbal consent was obtained from the study participant and data collection was done confidentially.

Results

Socio-demographic characteristics of study subjects

Out of 376 husbands with wife in the reproductive age who had less than one year child were to be interviewed 10 kebelles with about 95% response rate. The mean age of study participant was 37.46 ± 8.27 . Almost all 373 (99.20%) were Tigray in ethnicity and 375 (99.70%) were orthodox. In addition, near half of the respondents, 174 (46.30%) and majority of them were farmers (85.1%) by occupation.

Regarding their wives' socio-demographic characteristics, their mean age was 28.9 (SD \pm 6.9years) and majority 52 (13.80%), them

were less than 20 years old. About 228 (60.60%) were illiterate, and majority of them were farmers 315(83.80%) in occupation. About half of the households, 179 (47.60%), had income less than 500.00 Ethiopian birr monthly (Table 1).

Family health condition of husbands

The family health condition of husbands household, two hundred and twenty (58.20%) were planned to have the index child and for its conception and their wives to be pregnant, more than half 205 (54.50%) have two up to four children. Two hundred and two (53.70%) were with four up to six family size. Not more than half 168 (44.70%) had at least once their child delivered in health institution previously (Table 2).

Husband's knowledge in birth preparedness

The opinions of the majority of respondents, 88.00% were replied as they knew husband birth preparedness. Among those 301 (80.10%) were informed to the mother and new born clean clothes preparation, 287 (76.30%) were to saving money for child birth, 234 (62.20%) to identification of place of birth, 123 (32.70%) were to identification of skilled birth attendance and few 65 (17.30%) had the information about identifying blood donor for complications in birth (Table 3).

Source of information of birth preparedness of husbands

The respondents were also assessed for their source of information about birth preparation, of which 43.6% were heard from health care providers, 23% from Radio/television, 21.3% discussion with people, 3.7% reading printed materials and 7.9% from other sources in their life (Figure 2).

Complication readiness practice of husbands during pregnancy

The husbands' practice in complication readiness for their wives

Variables	Frequency	%
Age in years		
18-29	60	16.00
30-39	174	46.30
40-49	112	29.80
≥50	30	8.00
Ethnicity		
Tigray	373	99.20
Amhara	3	0.80
Religion		
Orthodox	375	99.70
Muslim	1	0.20
Husband's education		
Illiterate	174	46.30
Read and write	123	32.70
Formal education	79	21.00
Husband's occupation		
Farmer	320	85.10
Employed	32	8.50
Self business	24	6.40
Wife's age		
<20	52	13.80
20-34	223	59.30
35-49	101	26.90
Wife's education		
Illiterate	228	60.60
Read and write	42	11.20
Formal education	106	28.20
Wife's occupation		
Farmer	315	83.80
Employed	15	4.00
Self business	46	12.20
Monthly income in Ethiopian birr		
<500	179	47.60
500-1000	133	35.40
>1000	64	17.00

Table 1: Socio-Demographic characteristics of respondents in Enderta Woreda, Tigray region, Ethiopia, September, 2012 (N=376).

Variables	Frequency	%
Number of wife's previous facility delivery		
None	208	55.30
Once	120	31.90
Twice	40	10.60
Three times	7	1.90
Four times	1	0.30
Living House dependency		
Ling independently	361	96.0
Depend on others	15	4.00
Husband's number of wives		
One	351	93.40
Two	16	4.30
Three	8	2.10
Four	1	0.30
Nearby to health facility felt		
Yes	267	71.00
No	109	29.00

Table 2: Family health conditions of respondents in Enderta Woreda, Tigray Region, Ethiopia September 2012(N=376).

during pregnancy was assessed. About 259 (68.90%) of the respondents were reported their wives got antenatal care. Their role during the antenatal care, 229 (60.90%) were told their wives to get skilled

antenatal care, 208 (55.30%) were told their wife the health facility for antenatal care, 107 (28.50%) had gave money for health services and transportation, 93 (24.70%) were accompanied their wife, and few 16 (4.30%) were donate blood or made ready for complications. Of all wives of the husbands, 93 (25%) were faced with actual complications during that pregnancy (Table 4).

Complication readiness practice of husbands during labor and delivery

Regarding the husbands complication readiness practice in the labor and delivery, the 193 (51.30%) of the respondents were reported that their wives were delivered by skilled birth attendant. The role of those husbands,174(46.30%) were told their wife to get skilled birth attendant,152(42.00%) were told their wife the health facility for the childbirth, 99(26.30%) were accompanied their wife to labor room,59(15.70%) had gave money for health services and transportation, and a few 8(2.10%) were made blood ready or donated. In addition, 75(19.90%) of all respondents perceived the actual complications faced for their wives during that delivery (Table 5).

Complication readiness practice of husbands during postpartum period

From a total of 376 husbands in this study, 214(56.90%) of them were replied their wife got postnatal care, of those 185(49.20%) were told their wives to get skilled attendant of their health and child, 78(20.70%) had gave money for health services and transportation,

Variable	Know (N=376)	
	Yes (%)	No (%)
Arranging for postpartum cultural food expenses	280 (74.50)	96 (25.50)
Saving money for Mother's health care	287 (76.30)	89 (23.70)
Identifying a mode of transportation	246 (65.40)	130 (34.60)
Identifying place of delivery	234 (62.20)	142 (37.80)
Clean clothes & other materials for Baby/Mother's	301 (80.10)	75 (19.90)
Savings for emergencies	215 (57.20)	161 (42.80)
Awareness an emergency & it immediately action	193 (51.30)	183 (48.70)
Arrangement for skilled birth assistance	123 (32.70)	253 (67.30)
Identifying decision maker for emergency	166 (44.10)	210 (55.90)
Arranging blood donors	65 (17.30)	311 (82.70)
Identifying date of birth	219 (58.20)	157 (41.80)
Prevention of HIV mother to child	222 (59.00)	154 (41.00)

Table 3: Knowledge of husbands on birth preparedness in Enderta Woreda, Tigray region, Ethiopia, September, 2012.

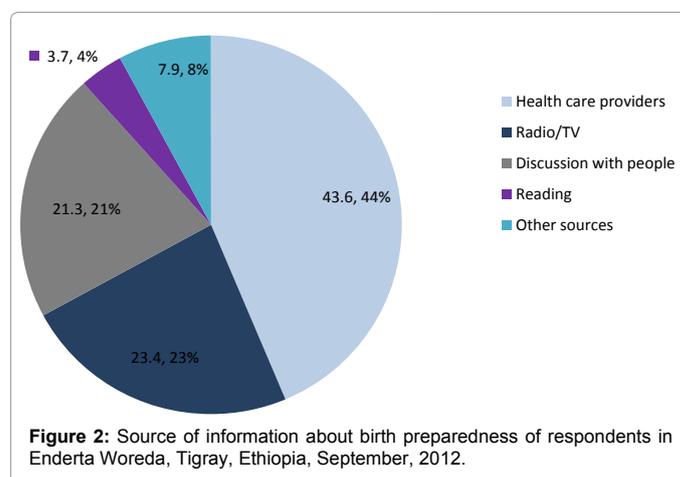


Figure 2: Source of information about birth preparedness of respondents in Enderta Woreda, Tigray, Ethiopia, September, 2012.

Variables	Yes (%)	No (%)
Identified skilled birth attendance	229 (60.90)	147 (39.10)
Identified health facility	208 (55.30)	168 (44.70)
Gave permission to go herself	181 (48.10)	195 (51.90)
Identified transportation	82 (21.80)	294 (78.20)
Gave money for transport/drugs	107 (28.50)	269 (71.50)
Personally accompanied	93 (24.70)	283 (75.30)
Blood made ready/donated	16 (4.30)	360 (95.70)
Actually Complication faced wives	93 (24.70)	283 (75.30)

Table 4: Complication Readiness Practice in Pregnancy in Enderta Woreda, Tigray region, Ethiopia, September, 2012.

Variables	Yes (%)	No (%)
Identified skilled birth attendance	174 (46.30)	202 (53.70)
Identified health facility	158 (42.00)	218 (58.00)
Gave permission to go herself	91 (24.20)	285 (75.80)
Identified transportation	50 (13.30)	326 (86.70)
Gave money for transport/drugs	59 (15.70)	317 (84.30)
Personally accompanied	99 (26.30)	277 (73.70)
Blood made ready/donated	8 (2.10)	368 (97.90)
Actually complication faced wives	75 (19.90)	301 (80.10)

Table 5: Complication Readiness Practice of Labor/Delivery in Enderta Woreda, Tigray, September, Ethiopia, 2012.

Variables	Yes (%)	No (%)
Identified skilled birth attendance	185 (49.20)	191 (50.80)
Identified health facility	169 (44.90)	207 (55.10)
Given permission to go herself	105 (27.90)	271 (72.10)
Identified transportation	50 (13.30)	326 (86.70)
Gave money for transport/drugs	78 (20.90)	298 (79.30)
Personally accompanied	67 (17.80)	309 (82.20)
Blood made ready/donated	6 (1.60)	370 (98.40)
Actually complication faced wives	60 (16.00)	316 (84.00)

Table 6: Complication readiness in postpartum in Enderta-Woreda, Tigray, Ethiopia, Sept, 2012.

67(17.80%) were accompanied their wife, and a few 6(1.60%) were made blood ready or donate during postnatal complications. And the 60(16.00%) wives of respondents faced actual complications during that time (Table 6).

Decision makers for maternal health care when complications faced during pregnancy, labor and after labor

The decision making issue for facility based maternal health services was assessed for who decides during antenatal, labor and postnatal period for routine services or during complications faced in the time of the index child health. The 39.10%, 32.7% and 31.90% decisions were by husbands only in antenatal, labor and postnatal period respectively. The 16.8%, 18.6% and 23.70% decisions were only by wives in the antenatal, labor and postnatal period respectively. Whereas 35.10%, 41.50% and 38.30% decisions were made by both husbands and wife in ANC, labor and PNC respectively (Figure 3).

Level of husband participation in birth preparedness and complication readiness

In the complication readiness, only 101(26.9%) were practiced in at least two complication readiness practices in each maternal care, pregnancy, labor and delivery, and postnatal period. They were also considered as participated in complication readiness. Those practiced poorly, less than two practices in complication readiness were 45.5% in pregnancy, 60.7% were in labor and 60.4% after labor in each

component. Out of the total the, 275(74.10%) of the respondents were non participants in complication readiness (Table 7).

Discussion

This community-based study has attempted to identify the husband participation in birth preparedness and complication readiness during pregnancy, labor and postpartum period in Enderta Woreda.

This study revealed that 101(26.90%) husbands were participated in complication readiness of maternal health care of their wives at least in practicing two components of complication readiness in pregnancy, labor and postpartum each.

This finding is lower as compared with institutional based cross sectional study conducted in 2009 in Nigeria 72.5% Western India around 50% husbands participated in the routine maternal care [19]. Even if husbands in Western India had been responsible and willing for their participation, they were not actually participated in maternity care [20]. This higher difference could be due to their industrialization and socio-economical changes of these states. But there is similarity with the findings in Northern Nigeria 32.1 % [21]. The similarity could be due to both the countries have agricultural economy and similar social structure with Ethiopia, especially Tigray region.

Underlying the medical causes of maternal mortality are a range of social, economic, and cultural factors that contribute to women's poor health before, during, and after pregnancy. They often have limited decision-making power for their health and can't seek care without their husbands or other family permission. This affects their health and the health of their children in a number of ways [22].

The study showed that husbands' practice during the pregnancy, giving money for transportation to antenatal care was 21.50%. It is lower compared to the study in Northern Nigeria 77.10%, Nigeria 94.61% and Rural Uganda 44.30% [19,21,23]. But it is higher to another study in Nepal (5.0%) [24].

This study showed that husband accompanying his wife to antenatal clinic was 24.7%. This is similar with the institution based study conducted recently in Harar region 21%, Ethiopia in 2011. It is higher from the study in Northern Nigeria 13% but lower than a study conducted in India, the institutional study conducted in 2001 in rural Uganda, 42.90%, and 40.7% in Nepal [3,12,21,23]. This low participation could be viewing pregnancy as women's issue.

The husband's complication readiness practice during labor, in identifying skilled birth attendant was 46%. It is higher to the finding 7.9% in Nepal [24]. This higher finding in identifying birth attendant could be to the presence and consideration of the health extension worker in each kebeles and active participation of the women development army groups.

The husbands saving money for birth was 15.70%. This percentage is lower when compared to Nepal 45.50 % and 71.40% in Northern Nigeria [21,24]. This lower finding could be due to the male dominance in financial use in Ethiopian culture. Husband accompanying wife to the labor and delivery was 26.30%. This is similar with the study result in Northern Nigeria 18.70% [21], but lower than other study in India 66.10%, in Nigeria 63.9%, Rural Uganda 43.4%, and in Nepal 59.30% [12,19,23,24]. This low practice could be due to the cultural influence considering a taboo for men to enter the labor and delivery room as studies indicated in Malawi [13].

This study showed that wives only as decision makers for labor and delivery service was 18.6%, both husband and wife mutually as decision

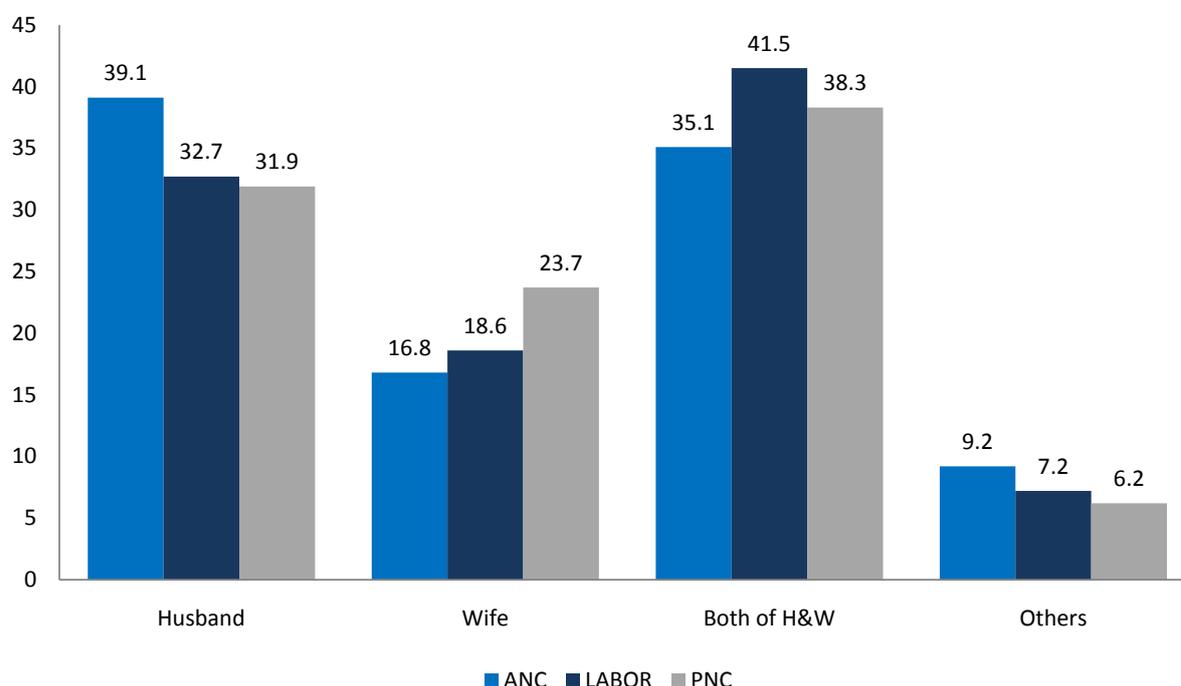


Figure 3: Decision makers for maternal health care or for complications faced during pregnancy, labor and after labor.

Variables	Frequency	%
Complication Readiness practice in pregnancy		
Poor practice	171	45.5
Good practice	205	54.5
Complication readiness practice in Labour		
Poor practice	229	60.7
Good practice	147	39.3
Complication readiness practice in postnatal		
Poor practice	227	60.4
Good practice	149	39.6
Participated in complication readiness(Over all practices)	101*	26.90*

Table 7: The Level of husbands' participation in birth preparedness and complication readiness in Enderta Woreda, Tigray Region, Ethiopia, September 2012(N=376).

makers in labor was 41.50%. It is lower than the study conducted in South-West Uganda to the final decision on location of birth taken by the woman herself 36%, woman in consultation with spouse 56% and woman together with other relative or friend 8% [17]. In this study, there is high decision power of husbands only and higher mutual decision making by both husband and wife compared to wife only decision maker for the maternal complications and during routine care. A husband alone as decision maker is 39.10%, 32.70% and 31.9% in ANC, labor and PNC respectively. Though women in the country have constitutional rights of participation in decision making, their involvement is limited at all levels [16].

Conclusion and Recommendations

Husbands have poorly practiced and participated in birth preparedness and complication readiness during pregnancy, labor and delivery and for postpartum complications. Especially low practice in identifying mode of transportation, providing money for maternal health services and transport, accompanying wife to health facility, arrangement for blood donation in case complications that would happened.

Therefore the policy makers should work to promote the male partners involvement on the birth preparedness and complication readiness during antenatal, delivery and postnatal periods. And inform the community about the importance of husbands' participation for child and mothers. The woreda health office should also strengthen the health education about husbands' participation in birth preparedness and complication readiness to increase the Maternal and child health services.

In addition to this, strong counseling service should be given for mothers by health care providers during antenatal, delivery and immunization period to convince their husbands about the health risks and the actual maternal health problems which in turns make husbands save money, pay in case emergency arise, identify mode of transportation to health facility, identify blood donor ahead before emergency happen. Lastly we recommend conducting further studies on husbands' participation in maternal care services.

Acknowledgment

Our deepest gratitude goes to Mekelle University and Tigray Regional State, Technical Educational and Vocational Training Bureau for sponsoring the research. And we would like to extend our sincere gratitude to Enderta Woreda

administration, data collectors, supervisors and the study participants for being involved in this study.

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