

Attitude and Involvement of Male Partner in Maternal Health Care in Addis Ababa, Ethiopia: a Cross-sectional Study

Zeytuna Mohammed Umer

Kotebe Metropolitan University

Endalew Gemechu Sendo (✉ endalew.gemechu@aau.edu.et)

Addis Ababa University <https://orcid.org/0000-0001-7768-0196>

Research

Keywords: Male partner involvement, Men's Attitude, Maternal Health care, Addis Ababa, Ethiopia

Posted Date: March 1st, 2021

DOI: <https://doi.org/10.21203/rs.3.rs-256292/v1>

License:  This work is licensed under a Creative Commons Attribution 4.0 International License.

[Read Full License](#)

Abstract

Background: The participation of men in maternal health care [MHC] is recognized as a crucial strategy to enhance maternal health care. Research assessing male participation in MHC and factors influencing their involvement in Ethiopia is minimal, despite the important role of men in maternity care.

Objective: To assess the attitude and involvement of the male partner in maternal health care in Nifas Silk Lafto sub-city, Addis Ababa, Ethiopia.

Methods: A community-based cross-sectional study was conducted from April to June 2020. A sample of 411 married men was recruited using a systematic random sampling technique. The data were collected using a structured interviewer-administered questionnaire. Data were entered in Epidata version 4.6 and SPSS version 25 used for analysis. The association between the dependent variable (Male partner involvement in maternal health care) and independent variables was checked using Multivariable logistic regression.

Results: A composite score was obtained by adding the level of participation in all three aspects of maternity care together, and the overall level of participation in maternity care was 103 (25.1%) with good participation and 308 (74.9 %) with poor participation. Almost half of the study participants [48.7%] had a positive attitude towards maternal health care.

In multivariate analysis, men whose spouse had unplanned pregnancy (AOR = 0.46, 95% CI: 0.222 - 0.956), who did not reside with their partner (AOR = 0.09, 95 % CI: 0.011- 0.804), who did not obtain information in prenatal and postnatal clinics (AOR = 0.101, 95% CI: 0.056-0.181) were variables significantly correlated with male participation compared to their counterparts.

Conclusion: The level of men's involvement in maternity care was poor. In this study, access to information on men's involvement in maternity care, education, and living conditions were the determinants of men's participation in maternity care. These findings provide a useful guide for targeting future strategies for potential male participation.

Plain English Summary

The involvement of men in maternal health care [MHC] is recognized as a key strategy to improve maternal health care. Research evaluating male participation in MHC and factors affecting their involvement in Ethiopia is limited, despite the important role of men in maternity care. This study assessed the attitude and participation of the male partner in maternal health care in Nifas Silk Lafto sub-city, Addis Ababa, Ethiopia. A community-based cross-sectional research was conducted from April to June 2020. A sample of 411 married men was recruited using a systematic random sampling technique. The data were obtained using a structured interviewer-administered questionnaire.

A composite score was obtained by adding the level of participation in all three aspects of maternity care together, and the overall level of participation in maternity care was 25.1 percent with good participation while the majority (74.9 percent) with poor participation. Almost half of the study participants [48.7 percent] had a positive attitude on maternal health care. The study finds that men whose spouse had unplanned pregnancy, who did not live with their wife, who did not obtain information in prenatal and postnatal clinics were variables considerably linked with male participation relative to their counterparts.

In summary, the degree of men's participation in maternity care was low. In this research, access to information on men's involvement in maternity care, schooling, and living conditions were the determinants of men's participation in maternity care. These results provide a valuable guide for targeting possible strategies for potential male participation.

Background

Maternal health care (MHC) is the health service given to women during pregnancy, childbirth, and the postpartum period. Pre-conception care, antenatal care (ANC), mother-to-child transmission prevention (PMTCT), intrapartum care, postnatal care (PNC), and obstetric emergency care/obstetric complication management are included in these health services (1). The involvement of men in their partners' health may play a significant role in improving health outcomes(2). Men are responsible for making important decisions in most parts of the world about the allocation of financial resources and behaviors in health care that could directly affect the health of mothers and infants (3). They can use this opportunity to ensure that their pregnant wives seek maternity care or arrange skilled care during delivery (4).

Men's actions would also impact the reproductive health of their wives and children (5). Studies have found that the effect of male involvement on women's health outcomes is directly linked to men's awareness, attitudes, and behaviors (6). Men's understanding of pregnancy-related care and a positive gender mindset reinforces the use of maternal health care and decision-making on women's health care, while their engagement in prenatal care visits substantially increases the chances of women's delivery in health institutions (7).

The degree of male participation in maternity care varies across cultures and nations. Different variables could decide the extent of involvement of males. These may be socio-demographic, cultural, or even inherent factors in health delivery systems(8). Research exploring male participation in MHC and factors influencing their involvement in Ethiopia is minimal, despite the important role of men in maternal health. The few available studies have deliberated to a great degree the point of view of women, but not men. The purpose of this community-based study is to assess male partner participation in MHC and related factors in Addis Ababa, Ethiopia. The results of the current study contribute to the design of intervention strategies to surge male involvement in MHC programs in Ethiopia.

Methods

Study setting and period

A community-based cross-sectional study was conducted in Nifas Silk Lafto Sub-city, Addis Ababa, from April to June 2020. Addis Ababa is Ethiopia's capital city and the African Union's diplomatic capital. It has ten sub-cities and 116 districts. Among the ten sub-cities of the Addis Ababa city government, the Nifas Silk Lafto sub-city is one of the largest sub-cities randomly chosen for the present study. Located in the southwest part of Addis Ababa, this district covers an area of 68.3 sq. km and is divided into 12 districts. It has an estimated population of 335,74 of which 158,126 are males and 177,614 are females.

Population and the eligibility criteria

The source population was all married men living in the Nifas Silk Lafto Sub-City. The research included married men aged 18 years and older who lived together with their partners in the same household, whose partner at the time of data collection had a child aged two years or younger and was willing to participate in the study. The survey excluded men who had lived in the study area for less than six months had no children or whose last child was over two years of age and was unable to participate in the study. The men whose partners had a history of abortion in the 12 months before the study was also omitted from the study to mitigate any potential psychological trauma for the respondents by evoking the incidents connected with it.

Sample size determination and Sampling procedure

The sample size was estimated using a single population proportion formula based on the following assumptions: 95% confidence level, 41.9% estimated prevalence (finding from a previous study (9), a 5% margin of error and; the sample was further increased by 10% to account for nonresponse or recording error. Therefore, the estimated total sample size was 411 respondents.

$$n = \frac{(Z_{\alpha/2})^2 p (1-p)}{d^2} = 374 + 37 (10\% \text{ non-response rate}) = 411.$$

Nifas Silk Lafto sub-city is one of the largest sub-cities randomly selected for the present study, among the ten sub-cities of the Addis Ababa city government. There are 12 districts in this sub-city of which four districts were randomly selected to be involved in the study namely: district two, district six, and district ten, and district eleven. Then, for each district, the calculated sample size of 411 was proportionately distributed based on the number of households. A systematic sampling technique with the starting point obtained using a table of random numbers was used to select the houses. Eligible men in the sampled household were approached to participate in the study.

Data Collection Method

A structured, interviewer-administered questionnaire encompassing open and close-ended questions was used to collect the data. The tool of data collection was adapted from previous works (9, 10). The

questionnaire has been divided into three parts. In the first section, information on household social-demographic variables was captured. The second section measured the degree of men's involvement in maternal care during prenatal, labor and delivery, and postnatal periods. The third section measured the men's attitudes towards maternal health care. The questionnaire was pre-tested before data collection in District Seven, which has similar characteristics to the districts selected for the study. Before being included in the study, the questionnaire was updated accordingly. It was administered by 4 trained health extension workers, and they were trained for 2 days before the start of data collection by the principal investigator. The interviews were carried out in the Amharic [local working language].

Measurement

In this analysis, a male partner refers to a man participating in and sharing responsibilities with his partner in the following areas of maternal care: ANC, Labor and Childbirth, and Postnatal Care. The male partner is defined in this research as the man who married a woman who was officially and biologically responsible for the pregnancy of a woman. Male involvement is a composite variable without a single standard measurement scale. Male involvement was assessed using a five-point index which included: 1. The man accompanies partner to health facility 2. The man discusses maternal issues with partner 3. The man discusses maternal issues with her health care providers 4. The man is involved in planning for an emergency, delivery, and postpartum care 5. The man provides financial and physical support (9). In this present study, the dependent variable (men's involvement in maternity care) was measured as a composite measure using 5 points, which was equally weighted (9). Each of these five points was allotted a score of (1) when the participant performed the activity and (0) when the activity was not performed.

A total score was computed for each participant and the level of involvement was categorized as good involvement for a score of 3 – 5 and a score of 0 – 2 was considered poor involvement.

Overall involvement in maternal health care: Respondents who participated in all the three aspects of maternal health care are said to have good involvement and those who did not participate in one of the three aspects of maternal health care are said to have poor involvement.

Men's Attitude: The attitude of the respondents was evaluated by putting 11 questions from the previous study on a Likert scale with 5 answer alternatives (10); answers were ranging from strongly agree, agree, indifferent, disagree, and strongly disagree. The overall score was measured and, respondents who scored below the mean score were considered to have a negative attitude towards maternal health care services, whereas those with scores up to or above the mean score were classified as having a positive attitude towards maternal health care.

Data analysis

Data were entered using Epi-data version 4.6. Software and then exported to SPSS version 25 for data analysis. To define the relationship between the independent and the dependent variables, the bivariate

analysis was carried out (Male involvement in maternal health care). In bivariate analysis, those variables with a p-value<0.25 were candidates for multivariate logistic regression, and then, in multivariate analysis, those variables with a p-value<0.05 were considered to have a statistically significant correlation with male participation at a 95 percent confidence interval (CI).

Ethical approval and consent to participate

Ethical clearance to conduct this research was sought from the Research and Ethical Review Committee of the School of Nursing and Midwifery, College of Health Sciences, Addis Ababa University. Permission to conduct the study was obtained from the concerned office. Participants of the study were informed about the objective of the study and asked to provide informed voluntary written consent. To keep the confidentiality of any information provided by study subjects, the data collection procedure was anonymous.

Results

Socio-demographic characteristics of respondents

A sample of 411 respondents participated in the study. Around 44.5 percent of respondents with a mean age of 37.20 (SD: \pm 7.637) were within the 30-39-year age range. The average number of children was 2.24 (SD: \pm 1.161) per participant [Table 1].

Male partners' involvement in antenatal care (ANC)

In this study, there is a shared pregnancy emergency plan for about 43.3 percent of respondents. About 38.2 percent of the participants accompanied their partners at least once to the antenatal clinic. It was 34.5 percent for respondents who had high ANC involvement, using the five-point male participation metric [Table 2].

Seventy-three percent of the reasons provided by participants who did not accompany their partners to the antenatal clinic were due to inconvenience with work [Figure 1].

Male partners' involvement during Labour and delivery

Over $\frac{3}{4}$ [81.0 %] of the participants accompanied their spouses to the health facility for labor and delivery. Out of those who did not accompany their partners, about 60.3% of participants assigned someone to take her to the health facility. Using the five-point male participation measure, 66.7% of the participants had reportedly good involvement in labor and delivery care of their partners [Table 3].

Male partners' involvement in postnatal care (PNC)

More than half [54.7%] of the respondents reported that went to a health facility with their spouses for postnatal care. Using the five-point male involvement measure, about $\frac{2}{3}$ [62.8%] had good participation, while more than $\frac{1}{4}$ [37.25%] had poor participation [Table 4].

The attitude of male partner towards maternal health care

The mean attitude of male partners towards maternal health care was 40.16 (SD \pm 5.063). Almost half [48.7%] of the respondents were greater and equal to the mean defined as a positive attitude [Table 8].

Factors associated with the male involvement in maternal health care

In multivariate analysis, men whose spouse had unplanned pregnancy (AOR = 0.46, 95% CI: 0.222 - 0.956), who did not reside with their partner (AOR = 0.09, 95 % CI: 0.011- 0.804), who did not obtain information in prenatal and postnatal clinics (AOR = 0.101, 95% CI: 0.056-0.181) were variables significantly correlated with male participation compared to their counterparts [Table 9].

Discussion

The current study assessed the attitude and involvement of the male partner in maternal health care. This study showed that the man accompanying his wife to the health facility for the ANC service is low. The findings are consistent with the results of studies conducted in Ghana (35%) (8) But the results are higher than a study conducted in Nigeria (24%) (10); and lower than studies conducted in Eastern Ethiopia (45.2%), Tanzania (63.4%) and Myanmar (82%) (11-13), respectively. This may be due to differences in socio-cultural and health care environments.

In this study, the results of male involvement in various MCH facilities show that 34.5 percent of respondents accompanied their partners to antenatal care during pregnancy, while 66.7 percent accompanied their partners to delivery. Over half (62.8%) of the respondents accompanied their partners for postnatal care services.

This finding is higher than the studies conducted in Ghana (44% and 20%); and (39.5% and 19%)(8, 9). This may be due to disparities in living environments and health care settings.

Although most participants accompany their partners to health care facilities at the time of labor and childbirth, none of them were permitted to be with their spouses in the delivery room.

When asked about their opinion, most of the respondents thought that women's mothers should be present in the delivery room if one person should be able to go to the delivery room while around a quarter of the respondents wanted to be present in the delivery room. This is different from a study conducted in Ghana that reported 48.8 % of respondents thought that if one person should be allowed to be present in the delivery room, the husband should be present in the delivery room(9).

The men involved in joint preparation for antenatal, labor and delivery emergencies in this study are low. This result was lower than the studies (9, 10) conducted in Tanzania (89 percent, 88 percent, and 90.2 percent) and Ghana (63.1 percent, 76.9 percent, and 71.4 percent), which may be attributed to respondents' educational level and socio-cultural differences. In this study, the majority of respondents offered some form of financial or/and physical support at the time of labor and childbirth and the

postnatal period. This result is close to the study of Central Tanzania (82.2 percent and 82.2 percent), respectively(11).

This study found that most respondents discussed maternal health problems with their partner at the time of pregnancy, labor and childbirth, and postnatal period, but there were very few discussions with the health care providers of their spouses. These results are in line with a study done in central Tanzania (23.5 percent, 19.7 percent, and 21.7 percent), Ghana (22.4 percent, 36.7 percent, and 11.2 percent), and Myanmar (27 percent) (9, 11, 12). The current study found that more than half of respondents had low participation in all three aspects of maternal health care, higher than a study conducted in Tanzania (20.3%) (11). The outcome of this study, however, is lower than that of studies conducted in Nigeria (53.6%) and Myanmar (53.6%). (12, 13)

This research found that the participants (48.7 percent) had a good attitude towards maternal health care. The result is smaller than research carried out in Nigeria (56.6 percent)(13). This may be attributed to socio-cultural differences and variations in educational status.

In this study, access to information on men's involvement in maternity care, education, and living conditions were the determinants of men's participation in maternity care. This study stated that male partners who did not live together with their partner involved less in maternal health care. This finding is in line with the findings of studies done in Ghana(9, 10). For men who did not get information at antenatal and postnatal clinics, there was low participation in maternal health care in this sample. This finding is in line with the findings of a Central Tanzania study (11). Men who reported having access to information about men's involvement in maternity care were more likely to have a high level of maternity care participation relative to their peers. The outcome shows that access to a credible source of information can lead men to make educated decisions and thereby lead to a change in positive actions. Access to and use of the information collected during ANC visits will influence men to use their partners' maternity health services and to be able to handle risks of pregnancy as early as possible.

This community-based research was the first to examine the attitude and participation of male partners in maternal health care in Addis Ababa, Ethiopia. However, the results of this study could only be generalized to married men in the study setting. We can assume correlation but not causation, as in all cross-sectional studies, and the information collected from research participants may be subject to recall bias.

Conclusion

The level of men's involvement in maternity care was poor. Access to information on men's involvement in maternity care, education, unplanned pregnancy, and living conditions were the determinants of men's participation in maternity care. These findings provide a useful guide for targeting future strategies for potential male participation.

Abbreviations

ANC Ante-Natal Care

PNC Post – Natal Care

MHC Maternal Health Care

MCH Maternal and Child Health

WHO World Health Organization

AOR Adjusted Odds Ratio

COR Crudes Odds Ratio

HHs Households

CI Confidence Interval

Declarations

Acknowledgments

The authors thank Addis Ababa University for their financial support and Addis Ababa Health Bureau for providing permission to conduct the study. We would also like to thank all study participants, data collectors, and supervisors.

Authors' contributions

Umer, ZM & Sendo, EG conceptualized the study, searched the literature, and trained the research assistants for data collection. Sendo EG also contributed to the design of the study, advised on methods and data interpretation. He also critically revised and edited the manuscript. Both authors read and approved the final manuscript.

Funding

The study was funded by the Addis Ababa University postgraduate office. However, the funding organization had no role in the design of the study and collection, analysis, and interpretation of data and in writing the manuscript.

Availability of data and materials

The data sets used and analyzed during the current study available from the corresponding author on reasonable request.

Ethical approval and consent to participate

Ethical clearance to conduct this research was sought from the Research and Ethical Review Committee of the School of Nursing and Midwifery, College of Health Sciences, Addis Ababa University. Permission to conduct the study was obtained from the concerned office. Participants of the study were informed about the objective of the study and asked to provide informed voluntary written consent. To keep the confidentiality of any information provided by study subjects, the data collection procedure was anonymous.

Consent form

I, the under signed, recognize the essence of the study, benefits, my right to voluntary participation, confidentiality and withdrawal from the study without any discrimination. I had the ability to ask questions and was replied to my satisfaction.

I hereby freely consent to take part in this study.

Name & Signature _____

Date _____

Your participation will be greatly appreciated.

Respectfully,

Competing interests

The authors declare that they have no competing interests in this work.

References

1. Yafeh MA, Suiye LC, Eunice OO, Janet ZH. Male involvement in maternal health care in Jimeta metropolis, Adamawa state, Nigeria. *Greener Journal of Epidemiology and Public Health*. 2016;4(2):027-39.
2. Rahman AE, Perkins J, Islam S, Siddique AB, Moinuddin M, Anwar MR, et al. Knowledge and involvement of husbands in maternal and newborn health in rural Bangladesh. *BMC pregnancy and childbirth*. 2018;18(1):247.
3. Firouzan V, Noroozi M, Farajzadegan Z, Mirghafourvand M. Barriers to men's participation in perinatal care: a qualitative study in Iran. *BMC pregnancy and childbirth*. 2019;19(1):45.
4. Mangeni JN, Nwangi A, Mbugua S, Mukthar V. Male involvement in maternal healthcare as a determinant of the utilization of skilled birth attendants in Kenya. *East African medical journal*. 2012;89(11):372-83.

5. Davis J, Vyankandondera J, Luchters S, Simon D, Holmes W. Male involvement in reproductive, maternal and child health: a qualitative study of policymaker and practitioner perspectives in the Pacific. *Reproductive health*. 2016;13(1):1-11.
6. Mkandawire E, Hendriks SL. A qualitative analysis of men's involvement in maternal and child health as a policy intervention in rural Central Malawi. *BMC pregnancy and childbirth*. 2018;18(1):37.
7. Chattopadhyay A. Men in maternal care: evidence from India. *Journal of biosocial science*. 2012;44(2):129-53.
8. Craymah JP, Oppong RK, Tuoyire DA. Male involvement in maternal health care at Anomabo, central region, Ghana. *International Journal of reproductive medicine*. 2017;2017.
9. Doe RD. Male partner involvement in maternity care in Ablekuma South District, Accra, Ghana: University of Ghana; 2013.
10. Gibore NS, Bali TA, Kibusi SM. Factors influencing men's involvement in antenatal care services: a cross-sectional study in a low resource setting, Central Tanzania. *Reproductive health*. 2019;16(1):52.
11. Gibore NS, Ezekiel MJ, Meremo A, Munyogwa MJ, Kibusi SM. Determinants of men's involvement in maternity care in Dodoma Region, Central Tanzania. *Journal of pregnancy*. 2019;2019.
12. Ampt F, Mon MM, Than KK, Khin MM, Agius PA, Morgan C, et al. Correlates of male involvement in maternal and newborn health: a cross-sectional study of men in a peri-urban region of Myanmar. *BMC pregnancy and childbirth*. 2015;15(1):1-11.
13. Olugbenga-Bello Adenike I, Asekun-Olarinmoye Esther O, Adewole Adefisoye O, Adeomi Adeleye A, Olarewaju Sunday O. Perception, attitude and involvement of men in maternal health care in a Nigerian community. *Journal of Public Health*. 2013;5(6):262-70.

Tables

Table 1
Socio-demographic characteristics of participants in Nifas Silk Lafto sub-city, Addis Ababa, Ethiopia 2020

Variable	Category	Frequency(n = 411)	Percentage (%)
Age (years)	20–29	71	17.3
	30–39	183	44.5
	40–49	138	33.6
	≥ 50	19	4.6
Educational level	No formal education	17	4.1
	Primary	65	15.8
	Junior secondary	66	16.1
	Senior secondary	114	27.7
	Tertiary	149	36.3
Occupation	Unemployed	10	2.4
	Private employee	174	42.3
	Public servant	105	25.5
	Private job	87	21.2
	Daily laborer	35	8.5
Number of children	1	141	34.3
	2–4	263	64.0
	≥ 5	7	1.7

Table 2

Male partners' involvement in Antenatal care in Nifas Silk Lafto sub-city, Addis Ababa, Ethiopia, 2020

Variables		Frequency	Percent %
Living together at the time of pregnancy (n = 411)	Yes	372	90.5
	No	39	9.5
Other family living with you (n = 372)	Yes	112	30.1
	No	260	69.9
Which family member was living with you (n = 112)	Her mother	30	26.8
	My mother	27	24.1
	Siblings	51	45.5
	Others	4	3.6
Planned pregnancy (n = 411)	Yes	257	62.5
	No	154	37.5
Partner had antenatal follow up (n = 411)	Yes	390	94.9
	No	18	4.4
	Don't know	3	0.7
Place where your partner attended antenatal care (n = 390)	public hospital	72	18.5
	health center	256	65.6
	Private health sector	47	12.1
	Don't know	15	3.8
Involved in the decision on where she had antenatal care (n = 411)	Yes	208	50.6
	No	203	49.4
Joint plan for an emergency plan (n = 411)	Yes	178	43.3
	No	233	56.7
Put money aside for emergency (n = 178)	Yes	153	86.0
	No	25	14.0
Made transport arrangement (n = 178)	Yes	32	18.0
	No	146	82.0
Decided on where to go in case of emergency (n = 178)	Yes	70	39.3

Variables		Frequency	Percent %
	No	108	60.7

Table 2
Continued...

Variables		Frequency	Percent %
Ever followed partner to the antenatal clinic (n = 411)	Yes	157	38.2
	No	254	61.8
How many times did you accompany your partner (n = 157)	1	67	42.7
	2-3	57	36.3
	≥ 4	33	21.0
The attitude of the staff (n = 157)	Friendly	82	52.2
	Unfriendly	36	22.9
	Indifferent	39	24.9
Time spent at the health facility (n = 157)	Reasonable	73	46.5
	Too long	84	53.5
Financial and physical Support at the time of pregnancy (n = 411)	Provide funds	243	59.1
	Remind her of ANC visits	103	25.1
	Helped with household chores	175	42.6

Table 3

Male partners' involvement in Labour and delivery in Nifas Silk Lafto Sub-city, Addis Ababa, Ethiopia, 2020

Variables		Frequency	Percent (%)
Living together at the time of her labor and delivery(n = 411)	Yes	357	86.9
	No	54	13.1
Accompany your partner to the facility at the time of labor and delivery(n = 411)	Yes	333	81.0
	No	73	17.8
	Did not deliver in the health facility	5	1.2
If no, how did she get to the health facility that day(n = 73)	Delegate somebody to take her	44	60.3
	She went alone	4	5.5
	Don't know	4	5.5
	Others	21	28.7
Make joint prior plans for labor and delivery during pregnancy(n = 411)	Yes	219	53.3
	No	192	46.7
Types of supports provided during labor and delivery? (n = 411)	Provided funds	312	75.9
	Helped with household chores	228	55.5
Male partners allowed to be present during labor and delivery in the facility she attended? (n = 411)	Yes	0	0
	No	304	74.0
	Don't know	107	26.0
Do you wish if you were present in the delivery room? (n = 411)	Yes	105	25.5
	No	306	74.5
If one person should be allowed in the labor room with the laboring woman, who should it be? (n = 411)	Husband	135	32.8
	Her mother	142	34.5
	Mother in law	16	3.9
	No one	109	26.5
	Others	9	2.2

Table 5

Male partners' involvement in postnatal care (PNC) in Nifas Silk Lafto sub-city, Addis Ababa, Ethiopia, 2020

Variables		Frequency	Percent (%)
Living together after delivery? (n = 411)	Yes	386	93.9
	No	25	6.1
If no, who did she live with? (n = 25)	Her mother	18	72.0
	My mother	4	16.0
	Others	3	12.0
Ever accompany partner for postnatal visits to the health facility (n = 411)	Yes	225	54.7
	No	186	45.3
Involved in making prior plans for her postnatal care (n = 411)	Yes	150	36.5
	No	261	63.5
What support did you provide your partner during the postnatal period? (n = 411)	Provide funds	304	74.0
	Helped with household chores	228	55.5

Table 6

The proportion of participants who performed each of the five key activities used in the measurement of male involvement in Nifas Silk Lafto sub-city, Addis Ababa, Ethiopia, 2020

Activity	Maternity care n (%)		
	Antenatal	Labour and Delivery	Postnatal
The man makes the joint plan	178(43.3)	219 (53.3)	150 (36.5)
The man accompanies his partner to the health facility	157 (38.2)	333 (81.0)	225 (54.7)
The man provides financial and physical support	127 (30.9)	390 (94.9)	398 (96.8)
The man discusses maternal health issues with his partner	344 (83.7)	245 (59.6)	347 (84.4)
The man discusses maternal health issues with her health care providers	79 (19.2)	75 (18.2)	104 (25.3)

Table 7
 Level of male involvement in antenatal care, labor and delivery and
 postnatal care in Nifas Silk Lafto sub-city, Addis Ababa, Ethiopia
 2020

Period of care	Level of male involvement (N = 411), n (%)	
	Good involvement	Poor involvement
Antenatal	142 (34.5)	269 (65.5)
Labour and delivery	274 (66.7)	137 (33.3)
Postnatal care	258 (62.8)	153 (37.2)

Table 8

Proportion of participants for attitude questions in the measurement of the attitude of the male partner in maternal health care live in Nifas Silk Lafto Sub-city, Addis Ababa, Ethiopia 2020

Activity	Level of Attitude n (%)				
	Strongly agree	Agree	No opinion	Disagree	Strongly disagree
Men should encourage Antenatal care	123(29.9)	260(63.3)	16(3.9)	11(2.7)	1(0.2)
Men should encourage FP	86(20.9)	222(54.0)	61(14.8)	34(8.3)	8(1.9)
FP encourages promiscuity	1(0.2)	8(1.9)	34(8.3)	255(62.0)	113(27.5)
FP could lead to infertility	24(5.8)	83(20.2)	156(38.0)	99(24.1)	49(11.9)
Men should follow their wives for ANC	63(15.3)	170(41.4)	99(24.1)	73(17.8)	6(1.5)
ANC encourages gossip	4(1.0)	17(4.1)	59(14.4)	247(60.1)	84(20.4)
ANC encourages promiscuité	1(0.2)	3(0.7)	17(4.1)	231(56.2)	159(38.7)
Men should provide finances for ANC	75(18.2)	226(55.0)	96(23.4)	11(2.7)	3(0.7)
Men should decide the place of delivery	19(4.6)	109(26.5)	136(33.1)	121(29.4)	26(6.3)
Men should be present in the labor room	46(11.2)	67(16.3)	46(11.2)	161(39.2)	91(22.1)
Men should assist with house chores	64(15.6)	201(48.9)	104(25.3)	28(6.8)	14(3.4)
Positive attitude (greater than mean score)	200 (48.7%)				
Negative attitude (less than mean score)	211(51.3%)				
Mean score = 40.16(SD ± 5.063)					

Table 9

Factors associated with male partner involvement in maternal health care in Nifas Silk Lafto Sub-city, Addis Ababa, Ethiopia 2020

Variables	Involvement in maternal health care n (%)			COR(95% CI)	AOR (95% CI)	P-value
	Good	Poor	Total			
Educational status						
No formal education	6(35.3)	11(64.7)	17(4.1)	0.10(0.013–0.804)*	0.12(0.01–1.448)	0.095
Primary	27(41.5)	38(58.5)	65(15.8)	0.23(0.104–0.524)*	0.47(0.150–1.468)	0.194
Junior secondary	30(45.5)	36(54.5)	66(16.1)	0.197(0.084–0.46)*	0.28(0.099–0.787)*	0.016*
Senior secondary	65(57)	49(43)	114(27.7)	0.62(0.365–1.05)	1.096(0.539–2.23)	0.799
Tertiary and above	103(69)	46(31)	149(36.3)	1.0	1.0	
Occupation						
Unemployed	2(20)	8(80)	10(2.4)	0.86(0.085–8.71)	0.858(0.05–14.8)	0.916
Private employee	96(55.2)	78(44.8)	174(42.4)	2.09(0.695–6.3)	0.31(0.07–1.37)	0.122
Public servant	68(64.8)	37(35.2)	105(25.5)	3.71(1.21–11.359)*	0.34(0.072–1.63)	0.178
Private job	51(58.6)	36(41.4)	87(21.2)	3.49(1.12–10.861)*	0.44(0.097–2.04)	0.297
Daily laborer	14(40)	21(60)	35(8.5)	1.0	1.0	
Male Attitude						
Negative attitude	88(41.7)	123(58.3)	211(51.3)	0.25(0.156–0.42)*	0.55(0.285–1.052)	0.071
positive attitude	143(71.5)	57(28.5)	200(48.7)	1.0	1.0	
Planned pregnancy						
Yes	171(66.5)	86(33.5)	257(62.5)	1.0	1.0	

*Significant at $p < 0.05$

Variables	Involvement in maternal health care n (%)			COR(95% CI)	AOR (95% CI)	P-value
	Good	Poor	Total			
No	60(39)	94(61)	154(37.5)	0.207(0.12–0.38)*	0.46(0.22–0.956)*	0.038*
Living together						
Yes	225(60)	150(40)	375(91.2)	1.0	1.0	
No	6(16.7)	30(83.3)	36(8.8)	0.076(0.01–0.56)*	0.093(0.011–0.80)*	0.03*
Information given						
Yes	127(88.8)	16(11.2)	143(34.8)	1.0	1.0	
No	104(38.8)	164(61.2)	268(65.2)	0.08(0.047–0.136)*	0.101(0.056–0.18)*	0.00*
*Significant at p < 0.05						

Table 4 not available with this version.

Figures

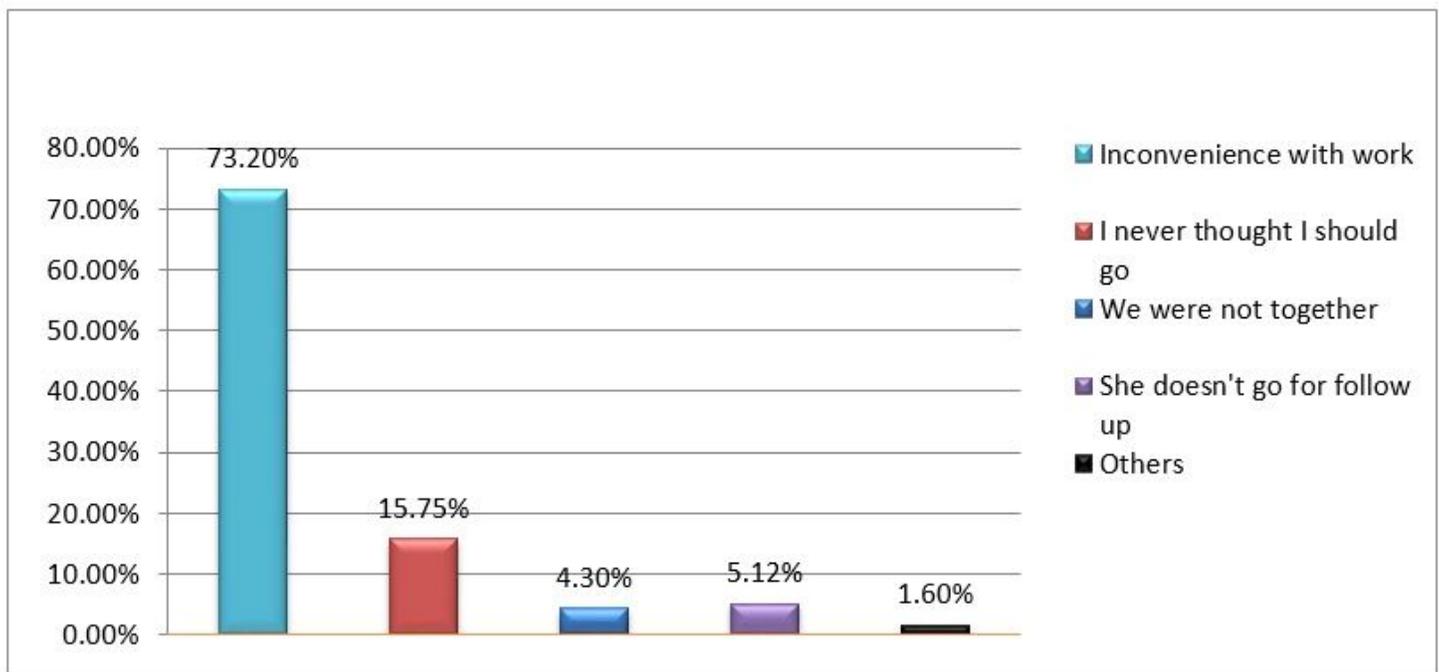


Figure 1

Men's reasons for not accompanying their partners to the Antenatal clinic in the sub-city of Nifas Silk Lafto. Addis Ababa, Ethiopia 2020,