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Engaging Men in Maternal Health: Strategies and Outcomes from Fort Portal Regional Referral Hospital, Uganda

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ABSTRACT

Women's ability to make decisions about their health is still hampered by socioeconomic, cultural, religious, and ethnic inequities resulting from men's control over the family's finances, time allocation, and access to medical care. Despite playing vital roles in providing women with material, emotional, and physical support, male involvement in maternal health services continues to challenge safe parenthood. Male partners should participate in maternity care to facilitate adequate treatment at appropriately equipped health facilities and reduce delays in receiving appropriate care. This study assessed the level of male involvement in antenatal care and associated factors among women attending Antenatal care (ANC) at Fort Portal Regional Referral Hospital in Fort Portal City, Western Uganda. The study employed a descriptive and analytic design, utilizing cross-sectional quantitative methods of data collection. Data were entered using Microsoft Excel Version 13 and analyzed using STATA 14.0. Prior to data entry, the data was coded and cleaned to identify inconsistencies and missing values. Bivariate and multivariate analyses were conducted to examine the relationship between dependent and independent variables. Descriptive statistics were presented in the form of frequency tables, pie charts, and graphs. In the present study, 224 (59.4%) participants were aged 21–30, and 310 (82.2%) were married. The majority had attained secondary education (203, 53.8%), were Catholic (155, 41.1%), and had 3–4 children (189, 50.1%). Findings revealed that 263 (69.8%) had a low level of involvement, while 114 (30.2%) had a high level of involvement. Additionally, 54.6% of participants demonstrated poor knowledge, while 45.4% exhibited good knowledge about antenatal care. An observed association was found between age, marital status, level of education, employment status, decision-making capacity, monthly income, perceived attitude of health workers, privacy at antenatal clinics, and waiting time. The level of male involvement and knowledge about ANC remains suboptimal. Factors associated with male involvement include age, marital status, level of education, employment status, decision-making capacity, monthly income, attitude of healthcare providers, privacy at the antenatal clinic, and waiting time.

Keywords: Antenatal care, Birth preparedness, Marital status, Maternal death.

INTRODUCTION

Becoming pregnant is a natural process and often comes with excitement. However, this excitement could end up threatening the lives of women because of obstetric-related complications [1]. One of the essential components of antenatal care (ANC) is birth preparedness and complication readiness (BP/CR) [2]. Birth preparedness and complication readiness (BP/CR) include the detection of danger signs, a plan for a birth attendant, a plan for the place of delivery, preparing potential blood donors, and saving money for transport or other expenses [3]. The behavior of men, their beliefs, and their attitudes affect the maternal health outcomes of women and their babies [4]. The exclusion of men from maternal health care services could lead to few women seeking maternal health services, worsening the negative maternal health outcomes for women and children [5]. Increasingly, recognition is growing on a global scale that the involvement of men in reproductive health policy and service delivery offers both men and women important benefits [6]. The World Health Organization (WHO) recommends that interventions to promote male involvement in maternal and child health should be implemented, provided that they respect, promote, and facilitate women's choices and their autonomy in decision-making [7]. The 2015 World Health Organization (WHO) recommendation on maternal and newborn health promotion interventions

included the active involvement of men during pregnancy, childbirth, and the postpartum period as an effective intervention to improve maternal as well as newborn health outcomes [8]. However, male involvement is recommended, provided only that women's autonomy in making their own decisions is respected [9]. Men have an important role in ANC as partners and parents and can influence behaviors related to ANC within their households and communities. Since the mid-1990s, there has been increased recognition of the importance of including men in ANC programs [10]. Globally, an estimated 303,000 maternal deaths occur annually from causes related to pregnancy and childbirth. Around 99% of these deaths occur in developing countries, and sub-Saharan Africa accounts for almost half of the maternal deaths (44%) [2]. In most developing countries, men play the role of gatekeepers to health care. They are the primary decision-makers who directly affect their partners and children's health [11]. Their decisions affect the utilization of resources and access to health care services, the use of contraceptives and child spacing, the availability of nutritious food, and women's workload [12]. Apart from the role of decision-makers in the family, their actions in terms of abuse or neglect have a direct impact on the health of their partners and children [11]. In Sub-Saharan Africa, male involvement in the ANC clearly goes against prevailing gender norms. Traditional approaches to maternal healthcare taken by health systems in most countries portray gendered belief systems, whereby most healthcare services are fundamentally female-leaning [13]. However, it has been argued that certain behaviors and personality traits are not inborn among individuals but rather are passed down through generations [14]. These include, among others, gender roles imposed by a particular society through processes such as modeling, imitation, and application of rewards and punishments, thus implying that behavior can be learned and equally unlearned [14]. In East Africa, reproductive health seeking was seen by men as "women's work." Men saw the antenatal clinic as a women's space, and the definition and organization of the program as fundamentally female-oriented [6]. Predictably, men thought that antenatal clinic activities fell outside their area of responsibility. Consequently, men perceived that attending the antenatal clinic would be "unmanly" [15]. In Tanzania, maternal and child health policies, guidelines, and strategies recognize the importance of engaging men in reproductive and child health. For example, focused antenatal care (FANC) guidelines encourage couples to attend ANC clinics together [7]. In Northern Uganda, male involvement was registered as high during antenatal visits, but it was noted that only men with reproductive health (RH) knowledge were willing to attend skilled antenatal care (ANC) [16]. In many low- and middle-income countries (LMICs), men are the primary providers and key decision-makers in the family, often determining women's access to economic resources and restricting women's ability to make choices about their health and their children's health [17]. Since many health systems require out-of-pocket payments, this practice can limit women's access to maternal health services and obstetric care, which are essential to overall maternal, newborn, and child health [18]. Sub-Saharan Africa has the highest maternal mortality ratio, with about 510 maternal deaths per 100,000 live births [19]. In Uganda, around 2% of women die from maternal causes. With the current maternal mortality ratio of 368 maternal deaths per 100,000 live births, many women die from pregnancy- and childbirth-related complications [20]. This is far above the global average, which was 152 deaths per 100,000 live births in 2020 [21]. Men's involvement can potentially impact delays in maternal care [22]. First, the delay in deciding to seek health care, which may be caused by an underestimation of the severity of the problem and the need for male partners' approval to seek care, is commonly reported among women in developing countries. The government of Uganda established strategies and policies focusing on reducing maternal and infant mortality. The most common strategies that have been promoted to invite the support and involvement of men in pregnancy and childbirth include mass media campaigns, workplace and community outreach and health education for men and women, and facility-based counseling for couples [7]. Despite this initiative, the country's maternal and infant mortality rates are still unacceptably high [20]. Understanding the level of male involvement in ANC and associated factors will attract the attention of the government when planning strategies to increase male involvement in ANC services within the country. To the best of my knowledge, no study has measured the level of male involvement in ANC among women attending ANC in Fort Portal Regional Referral Hospital. Thus, this study determined the level of male involvement in antenatal care and associated factors among women attending Fort Portal Regional Referral Hospital.

METHODOLOGY

Study Design

The study was a descriptive and analytic study using a cross-sectional survey research design utilizing quantitative methods of data collection.

Area of Study

The study was conducted in Fort Portal Regional Referral Hospital situated in the western Ugandan district of Fort Portal. It is roughly 294 kilometres and 148 kilometres, respectively, by road, west of Kampala, the capital of Uganda, and Mubende Regional Referral Hospital.

Study Population

The study population were males with women attending postnatal care at Fort Portal Regional Referral Hospital.

Inclusion criteria

Males who had partners attending postnatal care at Fort Portal Regional Referral Hospital.

Exclusion

Males who were unwilling to participate in the study.

Sample size calculation

The sample size was determined using Fisher's method [23] in which the sample size is given by the expression

$$n = \frac{Z^2 pq}{d^2}$$

n= Desired sample size

Z Standard normal deviation is usually set as 1.96 for maximum sample size at a 95% confidence interval.

P=56.9%[24].

Q= 1-p =1-0.569= 0.431 and,

d=degree of accuracy desired 0.05 or 0.05 probability level (at 95% confidence level)

Therefore, by substitution in the formula,

$$n = \frac{1.96^2 \, x0.569x0.431}{0.05^2}$$

n= 377

Therefore, data was collected from 377 study participants

Sampling procedures

Males with female partners attending postnatal care in Fort Portal Regional Referral Hospital were assessed for eligibility. Eligible participants were listed and given written consent. According to the number of eligible participants in the antenatal unit, a simple random sampling procedure (lottery) was used by asking eligible individuals to randomly select a piece of paper from an envelope filled with similarly folded and mixed-up pieces of paper. Each piece of paper was either written YES or NO. Participants who picked papers that were written "YES" were included in the study and subsequently filled out the questionnaires. Those who picked papers written "NO" were excluded from the study. The same procedure was instituted each field day until the minimum sample size participants was reached.

Data collection tools

The researcher collected data from study participants using structured interviewer-administered questionnaire. It consisted of four parts: (1) socio-demographic characteristics (2) Level of male involvement in ANC (3) Level of knowledge on ANC, and (4) Health services related factors.

Data analysis plan

Data was entered using Microsoft Excel Version 13 and analyzed using STATA 14.0, Prior to data entry, the data was coded and cleaned to get for inconsistencies and missing values. Cross checking was done where necessary.

Objectives one, and two

The level of male involvement and knowledge of ANC among study participants was analysed in terms of frequency and percentage with a 95% confidence interval and information was summarised in tables, pie charts and narrations. A scoring system was used to define poor knowledge & good knowledge and low male involvement and high male involvement.

Objective Three

Continuous variables were described in median (inter-quartile range, IQR) and categorical variables were described in percentages. Continuous variables were compared using the Mann-Whitney test and categorical variables were compared using Chi-square test or Fischer's exact test as appropriate. A logistic regression model was used to determine independent factors associated with high male involvement. A P value < 0.05 was considered significant.

Measurement

Using four dichotomized (yes/no) variables, namely: 1) accompanying partner to antenatal care services, 2) providing physical support during the antenatal period, 3) joint planning of when and where to seek antenatal

care, and 4) discussing maternal health issues with health care providers during the antenatal period, the dependent variable (men's involvement in ANC) was constructed as a single variable to obtain the involvement index. By asking the respondents how they divided up household chores with their partner in comparison to times when she wasn't pregnant, the variable physical support was assessed. The responses were: (1) doing the same thing; (2) doing more than usual; and (3) not doing anything. Those who chose options 1 and 2 were taken to have given their partners physical support, whereas those who chose option 3 were taken to have given their partners no physical support. "Yes" responses indicated physical support, whereas "no" responses indicated no physical support.To obtain the level of men's involvement in ANC by using the above mentioned four variables, each variable was scored one if performed and zero if not performed. A total score was calculated by adding the score of each activity reported to be performed by a respondent. The level of involvement was classified as follows: a score of zero to two was regarded as a low level of involvement, a score of three to four as high level of involvement.

Ethical considerations

The principal investigator sought approval from the dean faculty of clinical medicine and dentistry, who provided an introductory letter addressed to the hospital director of Fort Portal Regional Referral Hospital and the study was conducted upon approval by the hospital administration. All participants were informed about the purpose of the study and written informed consent was obtained before enrolment. A verbal consent was obtained for illiterate participants and they were asked to provide a fingerprint on the consent form. Respondents' names were not included anywhere in the Data that was collected. To maintain privacy, the study participants were interviewed separately from each other so that they felt free to give responses without feeling uncomfortable that other people would hear them.

RESULTS

Socio-demographic characteristics of the respondents

Socio-demographic characteristics are presented in Table 1 below. 224(59.4%) were aged 21-30 and 310(82.2%) were married. Majority attained secondary education 203(53.8%), were catholic 155(41.1%) and had 3-4 children 189(50.1%). A total of 223(59.2%) males said they have shared decision-making with their women and 258(68.4%) were unemployed. The majority 205(54.4%) of the study participants were earning 100,000-200,000/= per month.

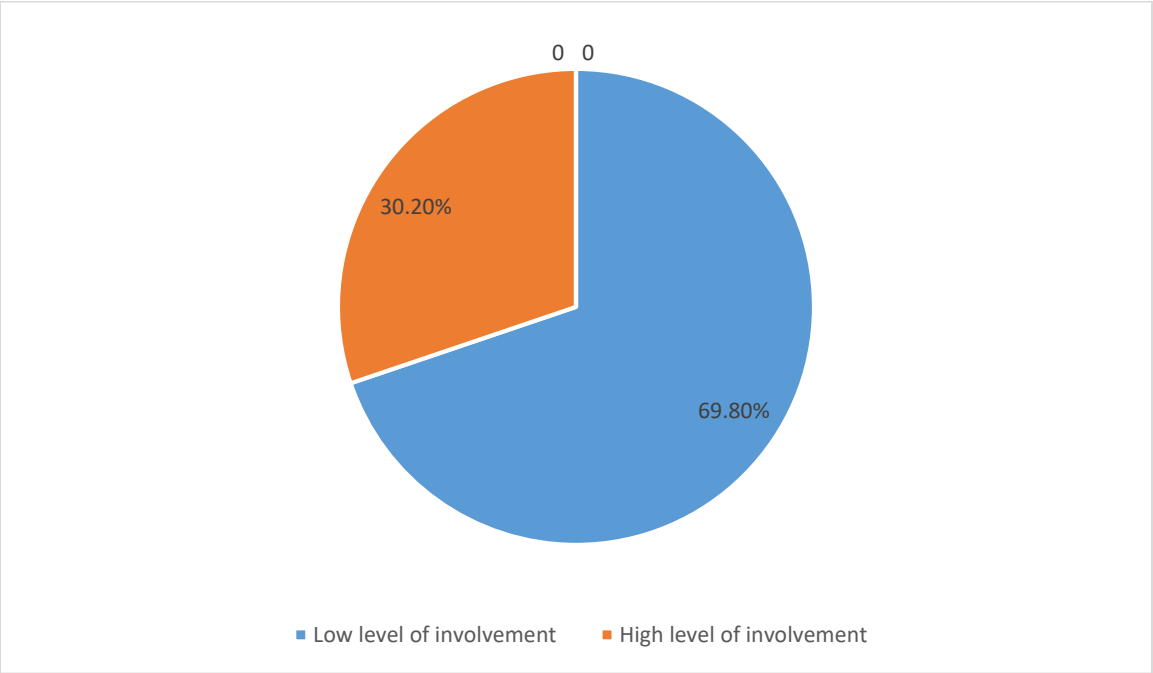
Table 1: Socio-demographic characteristics

Variable	Frequency(n=377)	Percentage (%)
Age(Years)		
≤20	45	11.9
21-30	224	59.4
≥31	108	28.6
Marital status		
Married	310	82.2
Co-habiting	67	17.8
Highest level of education		
No formal education	21	5.6
Primary	88	23.3
Secondary	203	53.8
Tertiary	65	17.2
Religion		
Catholic	155	41.1
Anglican	135	35.8
Muslim	67	17.8
Others	20	5.3
Number of children		
1-2	91	24.1
3-4	189	50.1
≥5	97	25.7
Decision maker		
Myself	127	33.7
My wife	27	7.2
Both of us	223	59.2
Employment status		
Employed	119	31.6
Unemployed	258	68.4
Average monthly income		
≤100,000/=	28	7.4
100,000-200,000/=	205	54.4
≥200,000/=	144	38.2

Level of male involvement in antenatal care

Findings show that 263(69.8%) had low level of involvement and 114(30.2%) had a high level of involvement as shown in the figure below.

Figure 1: Level of male involvement in ANC



Male involvement in antenatal care

The majority (71.1%) of the study participants do not accompany their partners for antenatal services. More than half (52.3%) share workload like before their partner became pregnant and only 32.1% provide physical support to their partners during antenatal care. The majority (65.3%) do not plan jointly with their partners about when and where to seek antenatal care and only 16.2% discuss maternal health issues with healthcare providers as shown in Table 2 below.

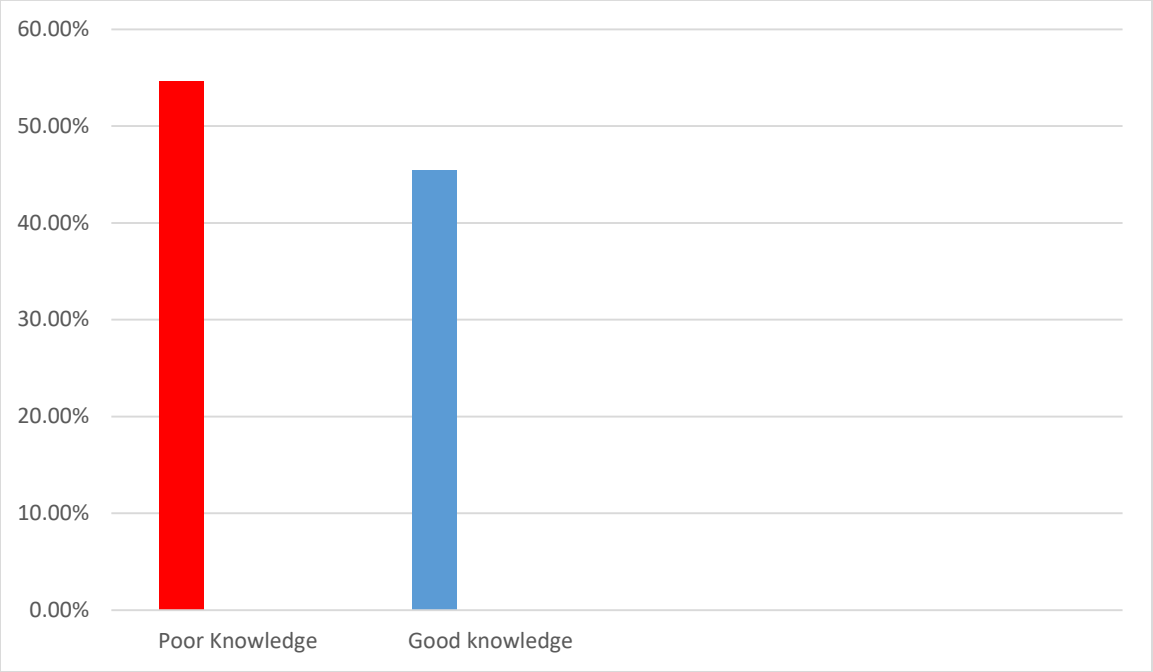
Table 2: Male involvement in antenatal care

Variable	Frequency (n=377)	Percentage (%)
Do you accompany your partner for antenatal services?		
Yes	109	28.9
No	268	71.1
How did you share household work with your partner compared to the times when she was not pregnant?		
The same work	197	52.3
More than usual	113	30.0
Not at all	67	17.8
Do you provide physical support during antenatal period?		
Yes	121	32.1
No	256	67.9
Do you plan jointly of when and where to seek antenatal care?		
Yes	131	34.7
No	246	65.3
Do you discuss maternal health issues with healthcare providers during the antenatal period?		
Yes	61	16.2
No	316	83.8

Level of male knowledge of antenatal care

54.6% of the participants had poor knowledge while 45.4% had good knowledge about antenatal care as shown in the figure below.

Figure 2: Level of male knowledge of ANC



Male knowledge of ANC

The majority (74.4%) knew that antenatal care is valuable and it is necessary to go for ANC even if there is no complication (56.5%). More than half (63.1%) replied that a minimum of 4 antenatal visits is required and less than half (49.1%) knew that TT injection should be given during pregnancy. 35.8% knew that a pregnant woman needs vitamin supplements and the majority (67.9%) knew that a pregnant woman needs iron/folic acid supplements. 78.8% reported that alcohol consumption/smoking by a pregnant woman is harmful to the fetus and only 28.9% reported that weight measurement is required during every antenatal visit. 32.6% knew that BP should be measured during every ANC visit,27.9% knew that haemoglobin measurement is required during pregnancy, the majority (76.9%) reported that blood screening for HIV is required,17.8% knew danger signs of pregnancy and only 19.9% knew that blood sugar testing is required during pregnancy as shown in the table below.

Table 3: Male knowledge of antenatal care

Variable	Category	Frequency	Percentage (%)
Do you think antenatal care is valuable?	Yes	281	74.5
	No	96	25.5
Is it necessary to go for ANC even if there is no complication?	Yes	213	56.5
	No	164	43.5
Are minimum of 4 antenatal visits required?	Yes	238	63.1
	No	139	36.9
Is TT injection required to be given during pregnancy?	Yes	185	49.1
	No	192	50.9
Does a pregnant woman need vitamin supplements?	Yes	135	35.8
	No	242	64.2
Does a pregnant woman need Iron/folic acid supplements?	Yes	256	67.9
	No	121	32.1
Is alcohol consumption/smoking by pregnant woman harmful to the fetus?	Yes	297	78.8
	No	80	21.2
Is weight measurement required during every antenatal visit?	Yes	109	28.9
	No	268	71.1
Is BP measurement necessary during every ANC visit?	Yes	123	32.6
	No	254	67.4
Is hemoglobin measurement during pregnancy required?	Yes	105	27.9
	No	272	72.1
Is blood screening for HIV required?	Yes	290	76.9
	No	87	23.1
Are you aware of danger signs of pregnancy?	Yes	67	17.8
	No	310	82.2
Is blood sugar testing required during pregnancy?	Yes	75	19.9
	No	302	80.1

Health service-related characteristics

The majority (79.3%) had a good perception of health worker's attitude, did not believe that health workers are overworked (50.9%), reported that there is no privacy at the antenatal clinic (56.2%), had a waiting time of 3-4hours(62.3%),did not feel that distance from their home to health facility was far(76.4%) and their main source of health information the health worker at the facility(80.4%) as shown in the table below.

Table 4: Health care related characteristics

Variable	Frequency(N)	Percentage (%)
How do you perceive health worker's attitudes?		
Good	299	79.3
Bad	78	20.7
Do you believe that health workers are overworked?		
Yes	185	49.1
No	192	50.9
Is there privacy at the antenatal clinics?		
Yes	165	43.8
No	212	56.2
How long do you have to wait before being attended to?		
1-2hours	95	25.2
3-4hours	235	62.3
≥5hours	47	12.5
Do you feel that the distance from your home to the health facility is far?		
Yes	89	23.6
No	288	76.4
What is your main source of health information?		
VHT	31	8.2
Health worker at the facility	303	80.4
Community campaign	43	11.4

Bivariate analysis of socio-demographic factors associated with male involvement in antenatal care.

At bivariate analysis, variables with p-values of ≤0.2 were considered significant and fitted in multivariate analysis. Age, marital status, level of education, number of children, decision making capacity, employment status and average monthly income were significant (Table 5)

Table 5: Bivariate analysis of socio-demographic factors associated with male involvement in antenatal care

Variable	N=377	Male involvement		P-Value
		Low involvement n(%)	High involvement n(%)	
Age(Years)				
≤20	**45**	36(80.0)	09(20.0)	
21-30	**224**	170(75.9)	54(24.1)	0.031
≥31	**108**	57(52.8)	51(47.2)	
Marital status				
Married	**310**	211(68.1)	99(31.9)	0.045
Co-habiting	**67**	52(77.6)	15(22.4)	
Highest level of education				
No formal education	**21**	17(81.0)	04(19.0)	
Primary	**88**	69(78.4)	19(21.6)	0.001
Secondary	**203**	155(76.4)	48(23.6)	
Tertiary	**65**	22(33.8)	43(66.2)	
Religion				
Catholic	**155**	103(66.5)	52(33.5)	
Anglican	**135**	89(65.9)	46(34.1)	0.643
Muslim	**67**	58(86.6)	09(13.4)	
Others	**20**	13(65.0)	07(35.0)	
Number of children				
1-2	**91**	35(38.5)	56(61.5)	
3-4	**189**	145(76.7)	44(23.3)	0.066
≥5	**97**	83(85.6)	14(14.4)	
Decision maker				
Myself	**127**	114(89.8)	13(10.2)	
My wife	**27**	18(66.7)	09(33.3)	0.080
Both of us	**223**	131(58.7)	92(41.3)	
Employment status				
Employed	**119**	98(82.4)	21(17.6)	0.154
Unemployed	**258**	165(64.0)	93(36.0)	
Average monthly income				
≤100,000/=	**28**	10(35.7)	18(64.3)	
100,000-200,000/=	**205**	132(64.4)	73(35.6)	0.028
≥200,000/=	**144**	121(84.0)	23(16.0)	

Bivariate analysis of healthcare-related factors associated with male involvement in antenatal care

Perceptions about health worker's attitudes, privacy at the antenatal clinics, waiting time and distance to the health facility were significant in bivariate analysis (Table 6).

Table 6: Bivariate analysis of healthcare-related factors associated with male involvement in ANC

Variable	N=377	Male involvement		P-Value
		Low involvement n(%)	High involvement n(%)	
How do you perceive health worker's attitude?				
Good	299	199(66.6)	100(33.4)	0.034
Bad	78	64(82.1)	14(17.9)	
Do you believe that health workers are overworked?				
Yes	185	149(80.5)	36(19.5)	0.913
No	192	114(59.4)	78(40.6)	
Is there privacy at the antenatal clinics?				
Yes	165	94(57.0)	71(43.0)	0.079
No	212	169(79.7)	43(20.3)	
How long do you have to wait before being attended to?				
1-2hours	95	40(42.1)	55(57.9)	
3-4hours	235	184(78.3)	51(21.7)	0.016
≥5hours	47	39(83.0)	08(17.0)	
Do you feel that distance from your home to the health facility is far?				
Yes	89	61(68.5)	28(31.5)	0.115
No	288	202(70.1)	86(29.9)	
What is your main source of health information?				
VHT	31	23(74.2)	08(25.8)	
A health worker at the facility	303	206(68.0)	97(32.0)	0.823
Community Campaign	43	34(79.1)	09(20.9)	

Multivariate analysis of factors associated with male involvement in ANC

There was an observed association between age, marital status, level of education, employment status, decision making, monthly income, perception of health worker's attitude, waiting time, privacy at antenatal clinics and male involvement in antenatal care as shown in the table below.

Table 7: Multivariate analysis of factors affecting male involvement in antenatal care

Variable	N=377	Male involvement		P-Value
		Low involvement n(%)	High involvement n(%)	
Age(Years)				
≤20	45	36(80.0)	09(20.0)	
21-30	224	170(75.9)	54(24.1)	0.002
≥31	108	57(52.8)	51(47.2)	
Marital status				
Married	310	211(68.1)	99(31.9)	0.013
Co-habiting	67	52(77.6)	15(22.4)	
Highest level of education				
No formal education	21	17(81.0)	04(19.0)	
Primary	88	69(78.4)	19(21.6)	0.001
Secondary	203	155(76.4)	48(23.6)	
Tertiary	65	22(33.8)	43(66.2)	
Number of children				
1-2	91	35(38.5)	56(61.5)	
3-4	189	145(76.7)	44(23.3)	0.075
≥5	97	83(85.6)	14(14.4)	
Decision maker				
Myself	127	114(89.8)	13(10.2)	
My wife	27	18(66.7)	09(33.3)	0.032
Both of us	223	131(58.7)	92(41.3)	
Employment status				
Employed	119	98(82.4)	21(17.6)	0.004
Unemployed	258	165(64.0)	93(36.0)	
Average monthly income				
≤100,000/=	28	10(35.7)	18(64.3)	
100,000-200,000/=	205	132(64.4)	73(35.6)	0.017
≥200,000/=	144	121(84.0)	23(16.0)	
How do you perceive health worker's attitudes?				
Good	299	199(66.6)	100(33.4)	0.028
Bad	78	64(82.1)	14(17.9)	
Is there privacy at the antenatal clinics?				
Yes	165	94(57.0)	71(43.0)	0.016
No	212	169(79.7)	43(20.3)	
How long do you have to wait before being attended to?				
1-2hours	95	40(42.1)	55(57.9)	
3-4hours	235	184(78.3)	51(21.7)	0.003
≥5hours	47	39(83.0)	08(17.0)	
Do you feel that distance from your home to the health facility is far?				
Yes	89	61(68.5)	28(31.5)	0.452
No	288	202(70.1)	86(29.9)	

DISCUSSION

Level of male involvement

Findings show that 263 (69.8%) had a low level of involvement and 114 (30.2%) had a high level of involvement. This is inconsistent with the findings of a study in Tanzania, which found the majority (53.9%) had a high level of involvement in ANC [25]. A study found more than half (55.6%) of men were involved in ANC [26]. However, the finding is supported by a study in Indonesia, which revealed a low level (41.2%) of male involvement in ANC [27]. This may be attributed to cultural discouragement, which views antenatal care as a woman's domain. The majority (71.1%) of the study participants did not accompany their partners for antenatal services. More than half (52.3%) share the workload like before their partner became pregnant, and only 32.1% provide physical support to their partners during antenatal care. The majority (65.3%) do not plan jointly with their partners about when and where to seek antenatal care, and only 16.2% discuss maternal health issues with healthcare providers. These findings are not in line with the findings of a study that revealed that the majority (63.4%) reported accompanying their women to ANC, and 89.0% reported making joint decisions with their partners regarding ANC [25]. The difference may be due to cultural variation and limited exposure to information about antenatal care.

Level of male knowledge of antenatal care

According to the study, 54.6% of the participants had poor knowledge, while 45.4% had good knowledge about antenatal care. This finding agrees with the findings of a study that revealed that more than half (58%) of men had poor knowledge about ANC [28]. Unlike this study, the findings of a study in Nigeria found that sixty-three percent of the participants had good knowledge about pregnancy-related care [28]. The low level of knowledge may be due to low male involvement by health workers in maternal and child health services. The majority (74.4%) knew that antenatal care is valuable and that it is necessary to go for ANC even if there is no complication (56.5%). More than half (63.1%) replied that a minimum of four antenatal visits is required, and less than half (49.1%) knew that TT injections should be given during pregnancy. 35.8% knew that a pregnant woman needs vitamin supplements, and the majority (67.9%) knew that a pregnant woman needs iron and folic acid supplements. 78.8% reported that alcohol consumption or smoking by a pregnant woman is harmful to the fetus, and only 28.9% reported that weight measurement is required during every antenatal visit. 32.6% knew that BP should be measured during every ANC visit, 27.9% knew that hemoglobin measurement is required during pregnancy, the majority (76.9%) reported that blood screening for HIV is required, 17.8% knew danger signs of pregnancy, and only 19.9% knew that blood sugar testing is required during pregnancy.

Factors associated with male involvement in antenatal care

There was an observed association between age, marital status, level of education, employment status, decision-making, monthly income, and male involvement in antenatal care. A low level of male involvement was observed to be highest among men ≤20 years, co-habiting, no formal education, employed, earning ≥200,000/= per month, and those who make decisions by themselves. This is in concordance with the findings of a study that found men with low income levels to be least likely to be involved in ANC care [27]. Accordingly, Fagbamigbe and colleagues [29] found that men with low income levels were more likely to leave their women to attend ANC alone. Participants who were cohabiting were reported to engage in low involvement in ANC, according to a study [28]. The differences may be due to methodological variation and differences in study characteristics. Additionally, this is inconsistent with a study that revealed low involvement with an increase in age among males and high involvement among those who make decisions solely [26]. This may be due to a decrease in the level of care with an increase in age among males. The current study further established that the perceived attitude of health workers, privacy at antenatal clinics, and waiting time were associated with male involvement in antenatal care. Participants who reported a bad attitude toward health workers, no privacy at the antenatal clinic, and long waiting hours (≥ 5 hours) had the highest rate of low level of involvement in antenatal care. A study in Kenya reported that men who reported a bad attitude toward healthcare providers were less likely to attend ANC [29]. Poor health staff attitude and delays during ANC visits encountered by men reduced the likelihood of male involvement [30]. This is because they get discouraged and never want to attend, therefore affecting their involvement in maternal health services.

CONCLUSION

The level of male involvement and knowledge about ANC are still suboptimal. Factors associated with male involvement include age, marital status, level of education, employment status, decision-making capacity, monthly income, attitude of health care providers, privacy at the antenatal clinic, and waiting time.

RECOMMENDATION

The health care delivery system is best suited to promote male participation in ANC. To encourage more male involvement, health worker attitudes need to be friendlier. To minimize client wait times, service delivery should also be carried out quickly.

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