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### RESEARCH ARTICLE

#### FACTORS INFLUENCING MALE INVOLVEMENT IN ANTENATAL CARE AMONG CLIENTS ATTENDING ANTENATAL CLINIC: A CASE OF KENYATTA NATIONAL HOSPITAL, KENYA.

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#### Abstract

**Background:** Male participation is a crucial component in the optimization of antenatal care services. Level of male participation has been found to be low. This study aimed to identify determinants of male partners' involvement in antenatal care services.

**Methods:** A descriptive cross-sectional study was used. The study population included expectant women and available male partners at the antenatal clinic at Kenyatta National Hospital. A sample of 79 respondents was recruited into the study. Consecutive sampling was used to select the study participants. Data was collected using a semi-structured questionnaire, analyzed using SPSS computer package version 20 and thereafter presented using descriptive methods.

**Findings:** Majority of participants (90%) were aged above 25 years, were more educated and had non-formal sources of employment. They knew at least 50% of the services offered and had a positive attitude towards ANC. Majority of participants (54%) stated that ANC is traditionally for women. Majority (77%) stated that the members of staff at ANC clinic are friendly and approachable.

**Conclusions:** Cultural beliefs and practices still hinder men's participation as communities continue to uphold patriarchal tendencies that disregard women. Men's attitude also determined their participation.

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#### Introduction:-

##### Study Background

Antenatal care (ANC) refers to the regular medical and nursing care recommended for women during pregnancy. According to 2016 ANC model, the World Health Organization (WHO) recommends a minimum of eight contacts during the antenatal period with key health systems interventions intended to enhance the utilization and quality of antenatal care for the women. Successful implementation of the antenatal care program requires involvement of male partners in addition to the females. As head of most family structures, men play a proactive role in ensuring wellbeing of expectant women during antenatal period. They provide technical and psychological support that is usually necessary at this stage (Lindsey, 2015).

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Male involvement is aimed at encouraging men in general to support women's care from pregnancy to childbirth, and throughout the postnatal period. The likelihood of women utilizing maternal care services is higher when they are accompanied for the visits by their husbands. (Wai, Shibanuma, Fillman, Saw, & Jimba, 2015).

World over, there has been a steady move to more male involvement in pregnancy and childbirth especially in western countries (Lamb, 2013). In Sweden, the value of fathers' involvement in pregnancy, parent education and childbirth has been emphasized in the rule of law. Fathers participate in the design of the acceptable and convenient care package for their spouses based on the legally existing health framework (Lamb, 2013).

In Sub-Saharan Africa, male involvement in ANC clearly goes against prevailing gender norms. Traditional approaches to maternal healthcare taken by health systems in most countries portray the gendered belief systems, whereby most healthcare services are fundamentally female leaning (Onyango, Owoko, & Oguttu, 2010). However, it has been argued that certain behavior and personality traits are not inborn among individuals, but rather are passed down through generations. 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 learnt and equally unlearned (Fiol, & O'Connor, 2017).

Most communities in Kenya are culturally dynamic and patriarchal (Kariuki, 2013). In the Luhya community, it's a taboo for men to participate in antenatal programmes leading to the low turnout of men accompanying spouses to hospital visits (Nanjala and Wamalwa, 2012).

Information from the Kenya Demographic and Health Survey 2014 reveals a trend of decreasing uptake of antenatal health care services. At Kenyatta National Hospital, unpublished data regarding number of clients attending antenatal check-ups with their male spouses is less than 30%. The failure to incorporate men in maternal health promotion, prevention and care programs by policy makers, program planners and implementers of maternal health services has had a serious impact on the health of women, and thus limited the success of programs, for instance the sub-optimal advancement towards reduction of maternal mortality (Stuckler, Basu, & McKee, 2010). However, some studies have identified a number of factors such as culture, socio-economic and health care setting as the barriers to male involvement in the ANC (Byamugisha, Tumwine, Semiyaga, & Tylleskär, 2010).

#### **Research Objectives:-**

1. To determine demographic factors influencing male involvement in antenatal care among clients attending ANC at KNH.
2. To establish socio-cultural factors influencing male involvement in antenatal care among clients attending ANC at KNH.
3. To determine facility-based factors influencing male involvement in antenatal care among clients attending ANC at KNH.

#### **Literature Review:-**

##### **Demographic factors influencing male participation in antenatal care services:-**

##### **Age:-**

A study done in Kathmandu, Nepal (Bhatta, 2013) on involvement of men in antenatal care, birth preparedness, exclusive breastfeeding and immunizations found that majority of respondents who accompany their partners during antenatal visits are older. Those younger (less than 25 years) are less likely to do so. This is because middle aged and older male partners understand the dynamics associated with pregnancy and child birth better than their younger counterparts, hence the need to accompany their partners for the visits.

Findings from another study conducted in selected countries of Sub Saharan Africa on determinants of male involvement in maternal and child health services show that male involvement is 1.2 times higher among men whose partners are 25 years or older (Dietekemena et al, 2012).

##### **Level of education:-**

Men who are educated are able to understand the necessity of partner attendance and participation in ANC as compared to those who are not educated or those with little education. A study done in a Nigerian community on attitudes and practices of men towards antenatal care show that their level of education influences their participation in ANC. The higher the level of education the greater the participation. Out of 112 participants who reported to

practice ANC, 67 had tertiary education, 37 had secondary education, and 13 had primary level education while only 1 had no formal education (Olugbenga-Bello et al, 2013).

Another study done in Eastern Uganda on determinants of male involvement in prevention of MTCT also supports this association. According to the findings, men who have beyond primary level of education are likely to get involved twice than those who have less level of education (Byamugisha et al, 2010).

#### **Occupation and profession:-**

Most men are the breadwinners in their families hence they must search for livelihood. According to a comparative cross sectional study in rural Nepal on men's knowledge and awareness of maternal, neonatal and child health, employment is a structural determinant of male involvement in antenatal services and childbirth. Women interviewed reported that their husbands have to go for work and in some cases travel abroad to in order to earn and make ends meet. This therefore limited their availability during the services (Lewis et al, 2015).

In a study in the Mbeya region of Tanzania on increasing partner attendance on ANC and HTC services, 37% of respondents claimed to be too busy to attend ANC with their partners (Theuring et al, 2016). However, according another study, men's profession has no influence on their antenatal visits. 64% of 286 manual workers frequently attended antenatal visits with their spouses. This percentage was found to be similar to that of professional participants who frequently attended the antenatal care visits with their spouses (Tweheyo et al, 2010).

#### **Financial constraints:-**

Financial constraints of clients and health facilities have been identified as impacting health services uptake and male participation. A qualitative study conducted in Western Kenya (Reece et al, 2010) found that the distance that the male partners have to travel to the clinics for participating in the education, blood tests and counselling, the costs of the transport to the clinics and the amount of time per appointment at the clinic were identified as barriers to male involvement. Access or logistical challenges on the part of men prevented them from participating in ANC. Men talked about their perceived principal responsibilities as providers. Thus, time spent at clinics and away from work or other income generating activities was clearly perceived as a barrier to their participation in ANC program. Distance, the cost of transport and the clinic operation hours were also mentioned with some frequency.

A Ugandan study reported that some health providers charged extra beyond the official ANC fees to bridge their own financial gaps while other authors have identified low health providers' salaries as limiting factors for male involvement. Data from the study in Uganda showed that majority of participants said that the health facilities were few and located far from the people, making the health services such as counseling and testing inaccessible. Most of the male partners and men in general preferred the health services to be implemented and extended to their villages or close to their homes in order to save them the costs of time and travel fee.

#### **Socio-Cultural factors influencing male participation in antenatal care services:-**

##### **Culture:-**

Most communities around the world still rely on their culture to dictate their health choices, especially on pregnancy and child birth. In such settings, it is common to find segregated gender roles during a woman's pregnancy, childbirth and post-partum period. A study done in rural Nepal on the role of husbands on maternal health and safe childbirth reveals that cultural beliefs hinder male involvement. The roles of expectant women and husbands differ from each other's as a result of the cultural dictate. Men's roles are more peripheral, such as offering financial assistance while antenatal care and delivery are meant for the women and female relatives only (Lewis et al, 2015).

A number of societies in Africa are patriarchal and as such issues regarding antenatal health are considered feminine. In The Gambia, a predominantly Muslim country, role of a man during a wife's pregnancy is limited to decision making and financial support. In a qualitative study done on barriers of male involvement in ANC and PMTCT services in Zambia, it is culturally wrong for men to be seen accompanying their partners to antenatal clinics. From interviews and focused group discussions, most stated that their culture does not allow men to attend antenatal checkups with their spouses. This compelled health care workers to come up with strategies like denying antenatal care to expectant clients who present without their partners (Nguni, 2013).

According to findings from a qualitative study done among the Luo community in rural western Kenya on perceptions of men on antenatal and delivery care service utilization, culture is a barrier to male involvement. Men

abstain from pregnancy and childbirth issues as it is traditionally a responsibility of mothers-in-law and co-wives. Those who participate in pregnancy and child birth are regarded by their peers as weak (Kwambai et al, 2013).

**Attitude:-**

According to the Health Belief Model, perception towards a health concern influences an individual's health seeking behavior. According to a study done in selected countries across Europe, many men feel ignored and inadequately informed since most antenatal education focus on female partners thus leaving no room for their concerns as men (Plantin et al, 2011). In a quantitative survey among 600 Danish fathers, 40 percent of the fathers felt that the care providers did not involve them adequately during consultations (Madsen et al., 2002).

In a study done in rural Tanzania on exploring opportunities on male involvement in pregnancy, participants reported unwillingness on attendance and participation in antenatal care services as a result of the uncomfortable feeling of being indulged in the 'women-only' affair. However, they were generally positive about their wives' attendance and considered it safe due to the benefits they would get, such as preventing complications (Vermeulen et al, 2016).

A study done in Machakos County in Kenya reveal that men do not see any benefits from participating in antenatal care programs with their spouses as long as they are in good health. They therefore prioritize the need for participation with their health, rather than that of the mother and the unborn baby (Kidero, 2014).

**Knowledge and awareness on antenatal services:-**

Globally, men's level of knowledge on antenatal issues has been universal. The study in rural Bangladesh on men's knowledge and awareness of maternal, neonatal and child health found their level of knowledge on basic antenatal services to be relatively high. More than 50% of men across the study areas could state the care given to expectant women. These include administration of IFAS, tetanus toxoid injection, in addition to various antenatal clinical procedures such as test for anemia, screening and abdominal examination (Nasreen et al, 2012).

In a study conducted in Nigeria by to determine level of knowledge of men on antenatal services, it was observed that a significant proportion of men have insufficient knowledge on the scope of antenatal care despite majority having come across the term. Out of 340 participants, 78% stated that it involves care for pregnant woman and the unborn child in addition to HIV counseling and testing, 12% stated administration of medications while only 9% stated prevention of potential risks or complications (Olugbengo-Bella et al, 2013).

Findings from a study done on male attendance of skilled antenatal care in a peri-urban district in Northern Uganda reveal that only 47% of men are aware of at least three services offered at antenatal clinic. However, they cannot elaborate satisfactorily what these services entail. This seems to play a role on the level of attendance of antenatal visits since those who knew about most of the services offered are the ones who frequently attended the visits with their spouses (Tweheyo et al, 2010).

According to a qualitative study done in rural western Kenya on men's perspective on antenatal and delivery care service, most men are aware of the services offered during antenatal care. These include confirmation of pregnancy, HIV testing and counseling and testing of malaria. Irrespective of their knowledge on the services, the participants reported that hospital based pregnancy care and delivery was preferred as it had some benefits such as vaccination. Despite of this however, most of the respondents still do not accompany their wives, except when informed to do so (Kwambai et al, 2013).

**Facility-Based factors influencing male participation in antenatal care services:-****Caregivers' attitude and approach:-**

The manner in which health care workers at antenatal care clinics handle or interact with male clients who accompany their expectant female counterparts to the clinic either limits or encourages men's participation in such services. For instance, some health facilities do not make provisions for men's presence in such services. Findings from the study in western Kenya reveal that men do not accompany their expectant partners since they are always ignored by the health care workers whenever they go. However, when given priority as a couple, they would be more enthusiastic with attendance and participation (Kwambai et al, 2013).

**Timing:-**

Across many health settings, it is usual to find those seeking health care going to clinic in the morning hours. Time of clinic appointments is likely to influence attendance level, especially by the accomplices. Some would prefer to have appointments made in the morning while others at a different time of the day. Findings from a study done in Machakos County in Kenya reveal that men do not attend antenatal visits with their partners due to what they refer to as poor scheduling, as the visits come at a time when they are busy with their personal activities (Kidero, 2014).

**Dominance by female staff:-**

Antenatal and maternity are always regarded by the general public to be a domain of female health workers since traditionally the nursing profession has been dominated by women. Majority of men therefore find it uncomfortable seeking services with their partners, unless a male health care worker is also present. According to findings from a study in ten sub-Saharan countries, more than half of study participants agreed that they no longer attend antenatal clinic since most of the times they went they would encounter female nurses at the clinic (Dietekemena et al, 2012).

**Methodology:-****Study setting:-**

This was a descriptive cross-sectional study of quantitative approach. The research was conducted at the antenatal clinic of Kenyatta National Hospital (KNH). The target population constituted pregnant women who attended the antenatal clinic and the available male partners.

Sample size was determined using the Cochran formula. Consecutive sampling was used to select a total of 79 study participants. The inclusion criteria were participants who had a valid ANC attendance card and understood the consent information while exclusion criteria were expectant women who had presented as emergency cases and those who had never attended ANC previously.

Pretesting was done with eight participants at the antenatal clinic. They were asked to fill the questionnaires separately, as average time to complete each was noted. Questions which were not clear were rephrased and some questions which seemed to be a repetition were removed. The questionnaire was then deemed valid and consistent with the conceptual framework and objectives.

Researcher administered semi structured questionnaires were employed for data collection and they contained both close ended and a few open ended questions. A total of 79 questionnaires were administered within a period of one month.

A database was created in Statistical Package for Social Sciences (SPSS) software program version 20, where data collected was entered. The data was checked for completeness on regular basis and back-up copies saved on an external hard disc for safe keeping. This was made accessible only to the researcher and assistants. This ensured confidentiality of information collected.

**Ethical Consideration:-**

Proposal approval was obtained from the KNH/University of Nairobi Ethics and Research Committee. The study was then registered at the Research and Programs office of Kenyatta National Hospital. Approval to conduct the study was obtained from the Department of Reproductive Health, KNH. Consent information was provided to eligible participants. This was clearly explained, with emphasis on the scope of the study, risks and benefits involved, after which participants were requested to sign the form as a binding agreement to participation in the study.

**Results:-****Demographic characteristics of respondents:-**

A total of 79 respondents were recruited in the study. 60 (75.9%) were male while the rest, 19 (24.1%) were female. Their demographic characteristics are displayed in the table 1 below;

Variable		Frequency	Percentage
Age (n=60)	<25 years	8	10
	26-30	28	47
	>36	24	43

Marital status (n=79)	Married	31	39
	Single	28	35
	Separated/divorced	20	26
Level of education (n=60)	University/ college	33	55
	Secondary	26	43
	Primary	1	2
Mode of transport (n=79)	Private car	8	11
	Public vehicle	40	50
	By foot	31	39
Affordability of transport (n=79)	Yes	67	84
	No	12	16
Employment status (n=60)	Employed	32	47
	Not employed	28	53
Nature of occupation (n=60)	Formal	15	25
	Non-formal	45	75
Average monthly income(n=60)	Less than 10,000	51	85
	>10,000	9	15

**Table 1:**-showing Demographic characteristics of the respondents

#### Men's Level of knowledge regarding ANC services at KNH:-

A checklist was used to determine the level of knowledge among men regarding services offered at the ANC clinic. Majority 47 (78.5%) of the respondents knew of HIV Counseling and Testing while minority 34 (57.0%) knew about birth plan. This is shown in the table 2 below;

Variable	Frequency	Percentage
HIV Counseling and Testing	47	78.5%
Birth Plan	34	57.0%
Delivery or Birth	44	73.4%
Health education on pregnancy	45	75.0%
Tetanus Injection	41	68.4%
Physical Examination	35	58.2%
Family Planning	36	59.5%

**Table 2:**-Showing men's level of knowledge regarding services offered to their spouses (n=60)

#### Cultural Beliefs and Practices among men accompanying their spouses in KNH:-

Clients were asked to state their opinion with regards to certain cultural beliefs and practices in their traditional communities. Majority 43 (54.4%) of the respondents agreed that ANC is for women only. Other views are also shown in the table 3 below.

Variable	Frequency	Percentage
ANC is for women only	43	54.4%
It is a taboo for a man to accompany his wife to the clinic.	40	50.6%
A man who takes his partner to the clinic is considered weak.	22	27.8%
Decision to visit ANC is made by the husband.	20	25.3%
Men have specific roles to play during pregnancy.	60	75.9%
It is the duty of in-laws (sisters, mothers, step-mothers) to take care of the expectant woman.	22	27.8%

**Table 3:**-Showing cultural beliefs among men accompanying their spouses (n=79)

#### Men's Attitude towards ANC:-

To assess their attitude, clients were asked to state their opinions with regards to a list of statements about ANC. Majority 53 (88.6%) of participants disagreed that a healthy woman should not attend ANC while minority 14 (24.1%) disagreed that ANC services are not beneficial to men as shown in the table 4 below;

Variable	Frequency			
	Strongly	Agree	Disagree	Strongly

	Agree			Disagree
A healthy woman should not attend ANC	5	2	47	6
ANC services are not beneficial to men	40	6	11	3
There is no need for men to go to ANC	22	13	7	18
Men only go to ANC clinic if requested by health care provider.	24	20	5	11
Many men do not attend ANC with their partners due to little knowledge about the services.	41	8	2	9

**Table 4 Showing men's attitude towards ANC (n=60)**

#### Facility Based Factors:-

##### Attitude of the Health Care Workers:-

Majority of respondents 61 (77.7%) agreed that the clinic staff are approachable and friendly while minority 26 (32.9%) agreed that they give men opportunity to participate and express their concerns as shown in the table 5 below;

Variable	Frequency	Percentage
They are friendly, approachable and so concerned	61	77.7%
They use abusive and harsh language	29	35.7%
They ignore men who accompany their partners	32	41.0%
They give partners preference	27	34.2%
They give men opportunity to participate and express their concerns/feelings	26	32.9%
They encourage men to attend every visit to ANC.	37	42.0%

**Table 5 Health service providers attitude towards men accompanying spouses to ANC (n=79)**

#### Discussion of findings:-

##### Demographic factors:-

###### Age:-

Majority of men were aged above 25 years. These findings agree with that of another study conducted in Nepal by Bhatta (2013) which found that most respondents who accompany their partners during antenatal visits were older than 25 years. A similar study conducted in Ethiopia also reported an association between male involvement and age. Men aged between 36 to 55 years were two times likely involved in pMTCT program than those less than 25 years (Abuhay et al., 2014). This might be due to a better understanding and more experience by older men on antenatal care programs as compared to their younger counterparts who have little or no understanding. The findings are also concurrent with another study done by Nanjala & Wamalwa (2012) in Busia, Kenya which found that older men are more likely to know the pregnancy related danger signs than the younger and inexperienced men and therefore are able to assist their partners in developing a birth plan. However, another study conducted by Shinagaya (2016) in the Oshana region of Namibia did not establish any association between the age of male partners and involvement in antenatal care.

###### Level of Education:-

Majority of men who attended ANC clinic had more than primary level of education. This included college and university education and secondary school level. The findings match those of other studies conducted in a Nigerian community (Olugbenga-Bello, Asekun-Olarinmoye, Adewole, Adeomi, & Olarewaju, 2013) and in rural Tanzania by (Vermeulen et al., 2016) which found a significant association between the level of education and male involvement. This could be due to the fact that educated men have more access to information about the services, possess better understanding of ANC and are able to make positive decisions including seeking for these services as partners while uneducated men are perceived to hold on to traditional beliefs which negatively influence inter spousal communication. The findings above however are not confirmed in a study conducted in Kinshasa by Dietekemena et al., (2010) where the level of education of pregnant women or their male partner did not influence male participation.

###### Occupation/Profession:-

Majority of men who accompanied their spouses were not employed while most of those who were employed had non-formal jobs. The findings agree with those of Theuring, Jeffery's, Nchimbi, Mbezi & Sewangi, (2016) in a

study done in Mbeya region of Tanzania in which non-formal employees and men without employment were more likely to attend the clinic. This is due to availability of more time to spend with their partners and be closer to them while at home as opposed to those with formal forms of employment who rarely get adequate time away from their jobs. In addition, employers may not be willing to offer a paternity leave for those whose spouses are expectant. Similar findings were also reported in a systematic review by Morfaw et al. (2013) in sub Saharan Africa where lack of time and the non-invitations to the health facility were the main reasons for low male participation.

#### **Socio-Cultural factors:-**

##### **Men's Level of Knowledge and awareness on antenatal services:-**

Majority of participants were able to identify the services offered at the antenatal clinic. These included HIV Counseling and Testing, birth plan, health education on pregnancy and administration of tetanus injection. These findings show a good level of awareness and are in accordance with the study done by Nasreen et al., (2012) in rural Bangladesh in which participants mentioned administration of IFAS, tetanus toxoid injection among others as the services offered at the ANC clinic. Most respondents agreed that their level of knowledge was a determinant of their participation. They associated the fear of accompanying their partners to ANC clinic to little knowledge. Similar findings were reported by (Nyondo, Chimwaza, & Muula, 2014) in a study done in Blantyre, Malawi whereby men believed that they would be more involved if they were adequately informed about the existence of the service and had a clear definition of their role in the service. Having a good grasp of the scope of ANC makes enhances men's confidence and this enables them follow up on the level of care that their partners are accorded at the clinic.

##### **Culture:-**

More than half of the respondents agreed that traditionally ANC is a place for women only and that men have specific roles to play during pregnancy. This is in accordance with findings of other studies which have identified cultural standards as barriers to male involvement. In the study conducted by Lewis, Lee, & Simkhada, (2015) in rural Nepal, most participants stated that the roles of mothers and husbands differ significantly. Men's roles are limited to financial support and decision making while the women serve to provide care to the pregnant. Men who accompany the pregnant to hospitals are considered being dominated upon. Similar findings were reported in a study conducted in certain health facilities in Malindi, Coastal Kenya region, whereby participants stated that their culture permits only the husbands to make decisions, including where the expectant woman will attend prenatal care. Even in a case where a woman has a complication and requires urgent help, husbands have to be the one making that decision, irrespective of whether they are around or not (Nyandieka, Njeru, Ng'ang'a, Echoka, & Kombe, 2016). The study by Reece, Hollub, Nangami & Lane., (2010) conducted in western Kenya found that some men trust traditional interventions more than hospitals and therefore do not attend ANC clinics.

##### **Men's Attitude towards ANC:-**

Majority of men had a negative attitude towards ANC attendance. They did not feel that there are benefits associated with attending ANC as partners. In addition, men were of the opinion that they should accompany their spouses only when compelled by the health care provider or when an emergency arises. These findings are supported by Ongweny-Kidero, (2014) in a study in Machakos County in Kenya in which men's attitude was identified as a barrier to involvement. Men were reluctant to take part in antenatal care services including HIV counseling and testing, as they perceived little benefits. Majority of men however agree that women should always attend ANC clinic regardless of their health status. Similar findings are reported in the study conducted in rural Tanzania by (Vermeulen et al., 2016) in which participants were generally positive about their partners' attendance and were willing to encourage fellow men to accompany their partners to clinic. A positive attitude about ANC services may therefore be associated with a good attendance as it enhances men's enthusiasm about the services.

##### **Facility-Based factors influencing male participation in antenatal care services:-**

###### **Caregivers' attitude and approach:-**

Majority of respondents agreed that nurses and other staff at the clinic are friendly and approachable. This differs from findings of Kwambai et al (2013) in a study done in rural western Kenya in which use of harsh language was identified as a barrier to men's attendance. Participants reported that they had, or had heard anecdotally that other men had been ignored by the health care workers, subjected to unfriendly attitude and abusive language. Majority of the respondents agreed that men are given opportunity by the staff to express their feelings with regards to reproductive health and are encouraged to attend subsequent visits. The more they are involved by the caregivers, the more men get acquainted with the services at the clinic and consequently the more they are likely to attend subsequent visits. Similar findings were also reported by Wai et al., (2015).



**Timing:-**

Most participants felt that the clinic is opened too late and it is closed too early. This could provide a clue for the findings from a study done in Machakos County, Kenya by Ongweny-Kidero, (2014) which revealed that men do not attend antenatal visits with their partners due to what they refer to as poor scheduling. Similar findings were also reported by Makoni et al. (2015) in a study done in Zimbabwe where participants felt that weekends was more convenient for them to accompany their partners to clinic as opposed to weekdays since most of the time they were committed at work in search for a livelihood for their families. Men had more free time over the weekends.

**Suggestions to improve male involvement:-**

Participants' suggestions and views on how to increase men's participation in antenatal services were categorized broadly. Many stated the need for mass education of both men and women to create awareness on significance of antenatal care and demystify beliefs that some communities still hold in relation to seeking medical, rather than traditional help. According to (Zamawe, Banda, &Dube, 2015), use of mass media is effective in promoting the involvement of men in antenatal care. Other suggestions include giving priority to clients who come to the clinic as partners and improving on efficiency on how services are offered.

**Conclusion:-**

Male involvement was influenced by the level of education. The higher the level of education a man had the higher the likelihood of involvement in ANC. Educated men tended to be knowledgeable about the services as compared to the less educated. Older men were more involved in antenatal care of their partners as compared to their younger counterparts while men with formal employment are less likely to be involved.

Cultural beliefs and practices still hindered men's participation as communities continue to embrace the gendered belief system. Men's attitude also determined their participation. A wrong attitude towards the services and lack of knowledge was a barrier to male involvement. Majority of men who attended antenatal clinic were knowledgeable of the services offered at the clinic.

Good caregivers' attitude and approach built men's confidence and motivated them to accompany their partners for future visits. Facility based like poor client flow and crowding was likely to slow down service delivery and therefore was barriers to attendance.

**Recommendations:-**

Health education should be offered to young men who visit the clinic with their partners.

Campaigns on behaviour change with regards to reproductive health services to be conducted through the mass media to help demystify health beliefs that are still culturally anchored and thus enable men know the importance of antenatal care and attendance.

Health workers at ANC clinic should encourage women to discuss reproductive health services with their partners, including ANC attendance. KNH needs to consider extending operating hours of the ANC clinic to accommodate men with engagements at work.

ANC clinic needs to give priority to clients who attend the clinic as couples to motivate others to come as partners. ANC clinic staff need to improve on efficiency of service delivery.

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