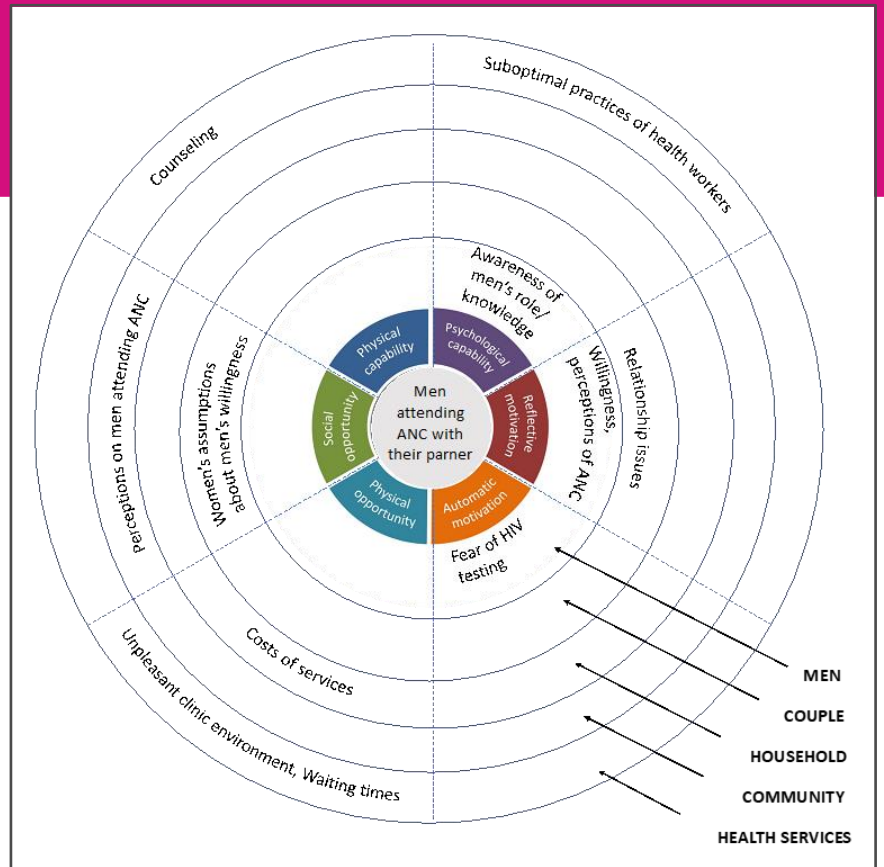


Appendix 2: Factors Related to Male Involvement in ANC Services

January 2022



Author:

Moses Tetui

Advisory committee:

Isabelle Michaud-Létourneau, Marion Gayard, Gretel Pelto, Alison Tumilowicz, David Pelletier

Collaborators:

Laura McGough, Caroline N Agabiirwe, Carolyn Huang

Acknowledgements:

We are grateful to all who participated in the Implementation Science Initiative in Kenya and Uganda. This initiative could not have been possible without the engagement of many stakeholders in Uganda including an implementing agency, University Research Co., LLC (URC). We also want to thank the International Initiative for Impact Evaluation (3ie) for their partnership in this initiative and the generous support from the Bill & Melinda Gates Foundation.



TABLE OF CONTENTS

SUMMARY	4
MALE INVOLVEMENT IN ANC SERVICES	5
Factors influencing male ANC attendance	5
<i>Socio-demographic characteristics</i>	6
Level 1: Men	6
<i>Awareness of men's roles in ANC</i>	6
<i>Perceptions of ANC</i>	7
<i>Fear of HIV testing</i>	7
Level 2: Couple	7
<i>Women's preferences and assumptions</i>	7
<i>Relationship issues</i>	7
Level 3: Household	8
<i>Costs of services</i>	8
Level 4: Community	8
<i>Gender role hindrances</i>	8
<i>Suboptimal practices by health workers</i>	8
<i>Unpleasant clinic environment</i>	8
<i>Waiting time</i>	8
Definition of positive male involvement in ANC	9
Benefits of positive male involvement	9
<i>Improved collaboration between partners</i>	10
<i>Improved birth preparedness</i>	10
<i>Increased ANC attendance</i>	10
Illustrative considerations for actions	11
Process of strengthening the interview guide based on the literature reviews	12
REFERENCES	15

SUMMARY

Limited male involvement in ANC was one of the barriers to IFAS that was identified in the BNA workshop in Uganda. A set of 19 papers on male involvement in ANC were identified and the findings were categorized into themes.

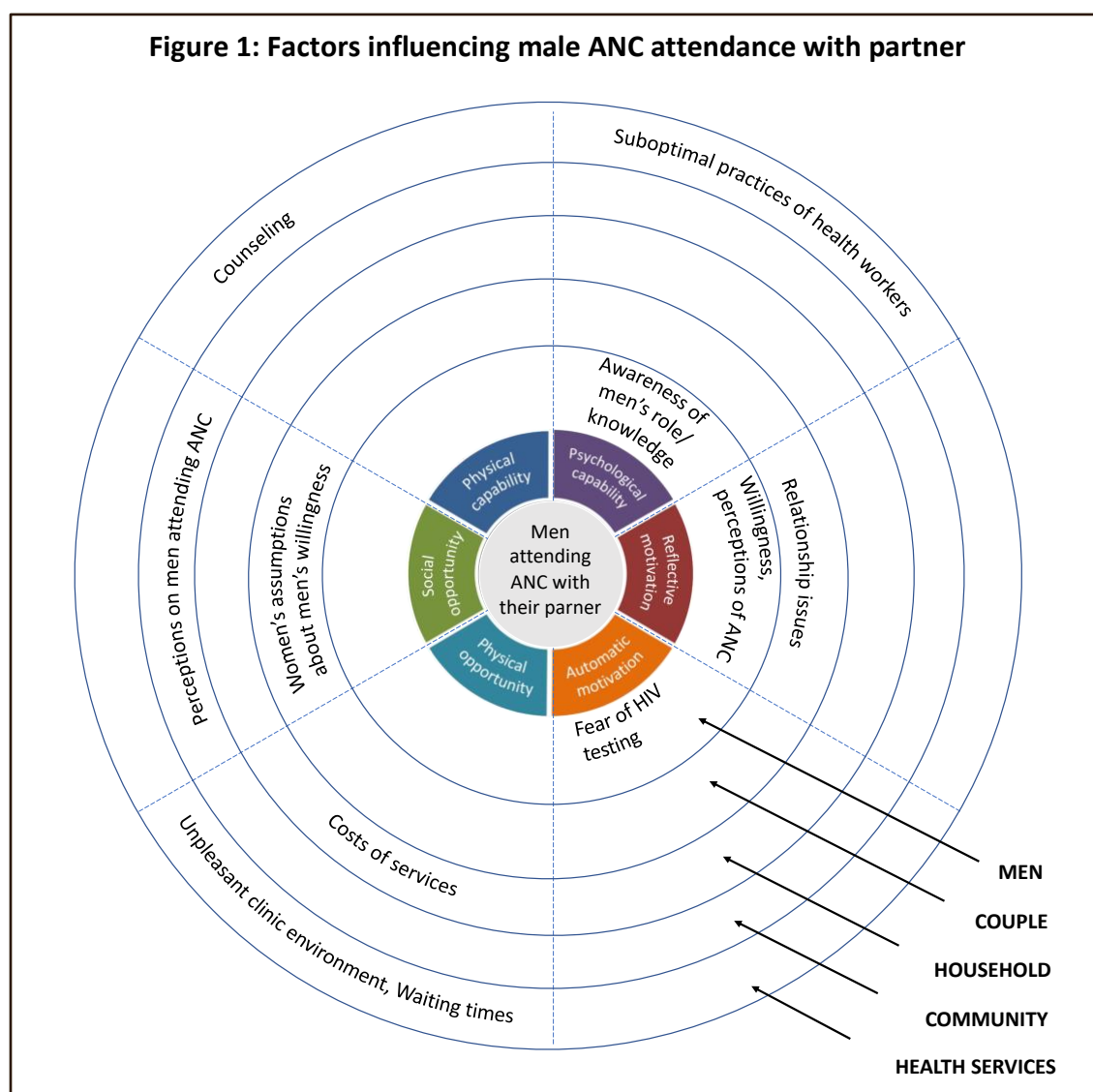
1. **Demographic factors:** Younger men and women had an increased chance of attending ANC and having their partners attend ANC; Men with fewer children and men in new and formal relationships were more likely to attend ANC; More educated men were more likely to attend the ANC and more educated women found it easier to ask their partners to attend ANC, which increased the chance of their partners attending ANC.
2. **Men's positive cultural values:** Some studies identified a growing sense of men's shared responsibility over pregnancy, and, the reverse, males' lack of awareness about their potential role, was identified as an important barrier to male ANC attendance. Being able to identify pregnancy danger signs was found to facilitate men's attendance of ANC. Being able to identify danger signs enables men to have a better appreciation of the need to support women during pregnancy and to not regard it as a normal life event without risks.
3. **Men's negative cultural values and fears:** Many men tended to view attending ANC as a waste of time and shameful. Fears in relation to HIV also played a role. Men's attendance at ANC was constrained by the fear of HIV testing; they perceived ANC clinic attendance as primarily for HIV couple testing.
4. **Men's negative perceptions about ANC clinics and their costs:** Men described the ANC clinic as unpleasant and characterized by long lines, and long waiting times were identified as an important barrier to male ANC attendance. Transport costs and long distances to facilities also made it more attractive from a cost perspective to have only one family member traveling.
5. **Women's negative views of partner interest:** A common finding was that women did not think their partners would be interested in attending ANC clinics, and therefore did not bother to invite them to the clinics. Additionally, women preferred attending the clinics by themselves, and thought that perhaps men should attend only one ANC visit, leaving them to attend the routine visits on their own.
6. **Benefits of male attendance:** Collaboration between spouses during pregnancy was improved if men attended ANC. Women reported that since both men and women received the same information regarding pregnancy during ANC, it made it easier for them to collaborate in the entire process and it also supported bonding between partners. For example, men noting that women need rest during pregnancy was highlighted as a benefit of attending ANC, otherwise they would interpret it as laziness. In addition, women noted that increased men's knowledge arising from attending ANC improved the kind of emotional and physical support they received from their partners. Also, women whose partners attended ANC with them were reported to be more likely to attend more ANC visits.

MALE INVOLVEMENT IN ANC SERVICES

Limited male involvement in ANC was one of the barriers to IFAS that was identified in the initial bottleneck assessment workshop that was undertaken to understand barriers to IFAS in Uganda. Men have been indicated as able to serve as gatekeepers for women’s utilization of health services including IFAS given that men are key decision makers especially in patriarchal societies like Uganda. A set of 19 papers on male involvement in ANC have been reviewed and allowed for the identification of a few important themes, which are described in this section. It is important to note that considering that most of the data were qualitative, we do not report on the frequency of the factor being cited in this section, we rather provide more information on the description of the factor.

Factors influencing male ANC attendance

The factors will be presented according to a multi-layer figure that includes various levels, illustrated in Figure 4: men, couple, household, community and health services. The factors are also organized by six categories that come from the COM-B model⁽¹⁾, a well-known model for behavior change that appears relevant for our endeavor considering that we would want to eventually foster increased positive male involvement to better support their partners for ANC attendance and IFAS adherence. The center represents the behavior aimed for: men attending ANC with partner.



Socio-demographic characteristics

This category was broad and could influence various layers of the model. It encompassed many factors for which not much influence can be achieved, thus, it does not appear in the figure. Nonetheless, those factors can influence the behaviors of men and women. These factors included: socio-demographic profiles of men and women, education levels, employment status, number of children, type of relationships, knowledge levels and culture and religion.

Younger men and women had an increased chance of attending ANC and having their partners attend ANC ⁽²⁻⁴⁾. This could be related to younger persons being less conservative regarding gender roles. Men with fewer children and men in new and formal relationships were more likely to attend ANC ^(2, 4-8). Larger families could place a higher financial stain on the men given they carry most of the family's financial burden. This could spill into strained relationships, thereby reducing men's incentives to attend ANC. New relationships could be viewed as having less strain, as families are probably still small and manageable. Formal relationships are more binding and could intuitively make the men exhibit more responsible behavior, given the cultural and religious context. Also, men whose wives delivered at a health facility were more likely to have attended ANC ⁽⁶⁾. This indicates that male involvement in ANC could consequently influence the choice of delivery, which in turn has an effect on birth outcomes.

More educated men were found to be more likely to attend the ANC. Education and employment status of women also had an effect on their partners attendance of ANC. More educated women found it easier to ask their partners to attend ANC, which increased the chance of their partners attending ANC ^(3, 7, 9, 10). With more education, women could become more assertive and probably gain more respect from their partners compared to their uneducated counterparts. Similarly, men whose wives were employed were more likely to attend ANC ^(3, 8). This could be an indication of financial burden sharing which could have a consequence on partner relations.

Positive cultural religious norms and practices sometimes helped for male involvement in ANC⁽²⁾. Cultural and religious leaders are known key influencers of people's behavior; therefore, their view of what role men play is important.

Level 1: Men

In figure 1, men are at the center because we are mostly interested in understanding what influences their getting involved with their partner for ANC attendance. A few factors were highlighted in the studies.

Awareness of men's roles in ANC

This factor was very important to explain men's behaviors regarding ANC attendance. Generally, men appear willing to attend ANC and appreciate the importance of ANC. Some studies emphasized a growing sense of men's shared responsibility over pregnancy ^(5, 11, 12). While some studies have identified that an important barrier to male ANC attendance was a lack of awareness of their role regarding ANC or a lack of the awareness of the importance of ANC, other studies found that the awareness of men's role and/or the importance of ANC were facilitators, which thereby emphasizes the importance of this factor to explain male behavior. Sometimes, men felt that they had nothing to do at the clinic; they often sat idle waiting outside while the women received services. Men viewed pregnancy as a usual life event that did not need any special attention; they therefore construed their attendance of ANC to be useless, which depicted a lack of knowledge of the roles they could play at ANC clinics. The men seemed to be more concerned with the delivery outcomes rather than the process itself. It was noted that this was usually so due to limited or no male-targeted services at ANC clinics ^(5, 12-14).

In the same line, more knowledgeable men attended ANC. Being able to identify pregnancy danger signs was found to facilitate men's attendance of ANC. Being able to identify danger signs enables men to have a better appreciation of the need to support women during pregnancy and to not regard it as a normal life event without risks (2, 6, 7, 9, 15-17). In the studies, it was noted that men tended to be more receptive to information received directly from health workers, thereby making health workers a more influential source of information (6).

In addition, strategies by which awareness was increased were shared to improve male involvement in ANC, for example, increasing access to information. Disclosure of HIV status by women and having knowledge on the risks of mother-to-child transmission of HIV increased the chance of male ANC attendance. Women who were HIV positive and those who disclosed their status had an increased chance of their partners attending ANC (3, 4, 7, 12, 13, 17, 18).

Perceptions of ANC

The ANC clinic was viewed as a women's place or space (13, 18). This perception was built over a long tradition of nurturing men and women into different roles as determined by tradition (5, 7). Men often described the tradeoff they had made in the place of attending ANC, and the act of avoiding ANC associated costs. Men felt that they had competing priorities for the time reserved for ANC. The men prioritized women attending the ANC clinics while they engaged in other income-generating activities (5, 6, 13, 14, 18). Men therefore viewed attending ANC as a waste of time and shameful.

Fear of HIV testing

Men's attendance of ANC was constrained by the fear of HIV testing. In several ANC clinics, HIV testing for couples was encouraged and sometimes demanded of the couples. This created fear among men, especially those who were uncertain of their HIV status. Couple testing was mentioned as discouraging men from attending ANC; they perceived ANC clinic attendance as primarily for HIV couple testing. This view clouded any other benefits, since the men were not ready to receive HIV status results together with their spouses (5-7, 12, 16, 19, 20). The challenge of HIV disclosure negatively affects the delivery of other ANC services, including IFAS.

Level 2: Couple

Many factors influencing male ANC attendance were related to the relationship between men and women.

Women's preferences and assumptions

Similarly, women made assumptions about men's willingness to attend ANC, but also had their own preferences. The women thought that men were unwilling to attend ANC clinics, and they therefore did not bother to invite them to the clinics. Additionally, women preferred attending the clinics by themselves, and thought that perhaps men could attend only one ANC visit, leaving them to attend the routine visits on their own (6, 12, 19, 20).

Relationship issues

Another factor was related to strained partner relations, which was illustrated by both men and women's perceptions of how pregnancy affects partner relationships. On the one hand, men accused women of denying them sex and being hostile and aggressive towards them. On the other hand, women perceived men as preferring to engage in extra-marital affairs when they are pregnant (5, 12). These accusations often lead to broken communication between the partners and negatively affect men's interest in

attending ANC. Cases of domestic violence arising out of strained relations were also reported (5). Men's perception of pregnancy as a state of mood swings and aggression from women contributed to strained relationships during pregnancy, which in as much as 28% of pregnancies leads to intimate partner violence ⁽¹⁶⁾.

Level 3: Household

Costs of services

In some studies, it was mentioned that men explained that if they attended ANC, health workers often took advantage of their presence to ask for under-the-table payments. They noted that they are asked to purchase medical supplies such as gloves, which should be provided free of charge. Transport costs and long distances to facilities also made it easier for one partner to travel in order to save money, and in that case, the men argued that it would be better for the women to attend ANC ^(2, 5, 6, 12, 13, 15, 16).

Level 4: Community

Gender role hindrances

The ANC clinic was viewed as the women's place or space ^(13, 18). This was built over a long tradition of nurturing men and women into different roles as determined by tradition ^(5, 7). Men therefore viewed attending ANC as a waste of time and shameful, they categorized it as a woman's activity and regarded men who engaged in it as weak. They noted that they had nothing to do at the clinics, they therefore felt they were in the wrong place and branded ANC as a women's clinic ^(8, 12, 14).

Level 5: Health services

Suboptimal practices by health workers

A frequently cited barrier to men's attendance of ANC was related to the suboptimal practices of health workers at ANC clinics. Some health workers were described as rude, abusive to women and keeping clients waiting for longer times than acceptable. They also said that health workers asked them uncomfortable and embarrassing questions about their sexuality in front of their spouses. For example, they did not like being asked if they use condoms or not and when they last had sex. This raises issues of confidentiality in service provision ^(2, 5, 6, 12, 13, 16). Abusive health workers hindered men from attending ANC. Similarly, leaving men to idle outside as women were being checked was also a hindrance ^(2, 5, 12, 13).

Unpleasant clinic environment

Men described the ANC clinic as unpleasant. They did not like witnessing the birth process, which sometimes happens while they have gone for ANC. For example, they noted that women sometimes soiled themselves in the birth process, which was unpleasant to watch, the clinics were noted to lack privacy ^(5, 8, 13). In addition to this being unpleasant to men, the general public's ability to observe women giving birth is a violation of privacy and respectful maternity care. Such instances are common in places where infrastructure is limited to ensure adequate privacy at the health facilities and also in instances where health care providers are not sensitive to these issues.

Waiting time

Long waiting times were identified as an important barrier to male ANC attendance. Given that men generally bare the greatest financial burden of the family, they felt they had to make a tradeoff; they were more likely to attend ANC if the service was provided in a timely manner ^(5, 18). The clinics were noted as being understaffed, which exacerbated the pressure of long waiting times. This turned men away

from the clinics, especially those that previously had bad experiences at ANC clinics. Men thought that if waiting times were lower this would be indicative of the value health workers place on men's time and would make them feel valued.

Definition of positive male involvement in ANC

The studies have discussed at length various types of factors influencing ANC male attendance. The studies also described the current roles that some men were playing regarding ANC services and we have delineated three different roles that are described below: decision-makers, providers and direct ANC supporters.

Decision-makers: This role illustrates the leadership role that men often occupy in households, a role which can be reinforced through traditional societal norms. It also implied that they made critical decisions regarding when and where to seek health care, including emergencies that may arise during pregnancy^(5, 6, 12, 15). In many families, men take on the financial responsibility for pregnancies and families.

Providers: Positive male involvement means the provision of both psychosocial and economic support to pregnant women and their families during pregnancy. Psychosocial support is about creating a supportive and loving environment for the pregnant woman within the family and community. This involved actions like ensuring reduced workload for women, providing emotional support or better nutrition, and providing a sense of belonging within the community and family^(5, 6, 12). The economic support depicted the financial roles that men often play during pregnancy. These included paying for ANC-associated costs such as transportation, medical bills, financial planning for delivery and unborn child and providing for the family^(11, 15, 18-20).

Direct ANC supporters: This role involved directly attending ANC clinics with the pregnant woman, undertaking HIV testing together in some cases, and ensuring adherence to any treatment given to the pregnant woman. This could be targeted for the safety of the mother and unborn child during pregnancy^(6, 11).

The three roles are inter-linked, could be performed concurrently, and are not mutually exclusive. For example, as decision makers, men can influence the use of resources for maternal health care, which sustains their decision-making responsibility. Therefore, they are in position to provide and support ANC attendance. This triple role makes a male partner an important player of the pregnancy journey, and therefore the consumption of IFAS. In sum, those roles provide what appears to be a definition of positive male involvement based on the series of papers reviewed.

In undertaking such responses, it is important to note that male involvement can be both positive and negative. Positive male involvement occurs when men utilize their resources, including time, money, and caregiving, to support women for a positive pregnancy experience as indicated in the roles described above. Negative involvement occurs when men hinder access to care, limit or deny resources needed for a successful pregnancy, or verbally or physically abuse pregnant women.

Benefits of positive male involvement

Some studies also talked about the benefits of male ANC attendance. Male involvement in ANC was viewed as beneficial in several ways to both women and men. These benefits were categorized into three: improved collaboration between partners, improved birth preparedness and increased ANC attendance.

Improved collaboration between partners

Collaboration between spouses during pregnancy were improved if men attended ANC ^(12, 18). Women reported that since both men and women received the same information regarding pregnancy during ANC, it made it easier for them to collaborate during implementation and improve the bond between partners ⁽⁵⁾. For example, men noting that women need rest during pregnancy was highlighted as a benefit of attending ANC, otherwise they would interpret it as laziness. In addition, women noted that increased men's knowledge arising from attending ANC improved the kind of emotional and physical support they received from their partners. Such collaboration between partners is essential for implementation of interventions such as IFAS as the male partner can act as an adherence partner.

Improved birth preparedness

Male involvement was noted as contributing to improved birth preparedness. Birth preparedness is the act of advance planning or readiness for a newborn. It was highlighted that attending ANC with male partners created a better appreciation of pregnancy danger signs, nutritional requirements, birth delivery items needed and men's acknowledgment of a need for reduced workload for women during pregnancy ^(6, 12, 18). These pieces of information are usually shared during ANC visits. Having men in attendance could potentially ease the implementation of ANC recommendations, as men will have received the information directly from a credible source. ANC is therefore an important opportunity to increase acceptance and adherence to IFAS. Creating an appreciation of improved IFAS adherence as an additional benefit of ANC attendance may contribute to increased acceptance of men attending ANC clinics.

Increased ANC attendance

Women whose partners attended ANC with them were reported to be more likely to attend more ANC visits ^(7, 15). Given that the World Health Organization (WHO) now recommends eight ANC visits, male involvement will become even more critical. Additionally, in terms of IFAS, most health facilities in Uganda provide IFAS during ANC visits, and usually are forced to ration dispensing due to shortages or supply chain delays. With measures targeted towards limiting shortages, ensuring that women attend all recommended ANC visits will increase chances of them receiving all the needed IFA tablets.

Illustrative considerations for actions

The insights generated by this review of the literature on male ANC attendance confirms that males can play a significant role in supporting women to attend ANC, which could increase the role they could play in strengthening IFAS adherence. The exercise of reviewing and coding a series of papers have allowed for the identification of key factors that should be considered when designing interventions to improve male ANC attendance.

A few strategies and key action points are detailed below as potential areas to consider for action. It should be noted that some factors may be more easily influenced than others. It is important and useful to understand the influence that the socio-demographic factors can have, however, most of them are difficult to change or influence. For example, knowledge levels, culture and religious beliefs and practices are characteristics that could be positively influenced through health education, community engagement and mobilization interventions, but obviously the age or size of the family cannot.

- The ability of cultural and religious leaders to have a positive influence on men was noted and as such this is an important factor to consider when creating strategies to increase male involvement. The engagement of other leaders such as local administrative leaders, community volunteers (community health workers for example), and other formal and informal groups can create buy-in from the men and community. Additionally, these leaders promote community-based strategies and be supportive of policies and programs ^(5, 6, 12, 15, 18, 19).
- Awareness of men's role in ANC, or importance of ANC, underscores the need to consider how men can become more aware of the role they can play. Using multimedia campaigns was found to be useful in reinforcing messages and were presented as a strategy that had been successfully applied. This allowed men to receive messages on male involvement through radio, mobile phone messages, television and posters displayed in strategic locations in the community ^(4, 5, 18, 19). The use of several channels to mobilize, sensitize and educate men on male involvement appear to create a resounding message that increases the chances of male ANC attendance.
- Gender-sensitive interventions such as community sensitization and policies were suggested as a means of improving gender relations in collaboration with other sector actors. Several strategies for undertaking outreaches to men in the community were described in the studies, such as: mobilizing men to increase involvement (through door-to-door outreach), community education and sensitization on male involvement, and health workers invited to villages to educate and sensitize men.
- Creating male-sensitive services at ANC clinics was indicated as having a significant influence on men to attend the clinics ⁽⁸⁾. Male-specific services that include particular messages designed for men at ANC clinics were also found to be useful ^(4-6, 8, 18, 19). Similarly, it was found that men would prefer more privacy at clinics and increased confidentiality ⁽¹⁸⁾. Additionally, inclusion of services such as screening for non-communicable diseases and undertaking measurements for vitals such as blood pressure could be included as some of the services that men can benefit from at ANC clinics. These two aspects of service delivery are critical in building trust and client satisfaction. These aspects of service delivery contribute to client satisfaction. In designing such services, men's input could be sought to ensure appropriateness of the services.
- Creating a favorable, welcoming and pleasant ANC experience was found to a means of sustaining continued ANC attendance, not just for the men but more so for the women. Increased ANC

attendance would also help drive demand for and thereby increase supply for IFAS supplies given that IFAS supplies are mainly obtained at ANC clinics.

- Designing appropriate male and couple-responsive ANC clinic services was found to be critical in attracting male partners. For example, allowing men to ask questions and answering them respectfully could be attractive to men. Some interventions such as denying women without partners services could however be problematic, women who did not come with their partners were denied services, which was found to be a negative or positive incentive for the men to attend ANC as they perceived it as a way of coercing them to test for HIV ^(5, 11, 19). Care should however be taken to ensure that women's rights to access health care are respected regardless of their marital status.
- Favorable policies create a base upon which strategies to increase male involvement in ANC can be built. This could be at central government or local levels such as districts or health facilities. The policies found included gender mainstreaming and reproductive health rights policies that aim to achieve equality between men and women ^(5, 12, 15, 19). For example, strategies such as those that require men to accompany women for ANC and couple testing for HIV (as discussed under barriers and facilitators). However, it is important to note that such policy could introduce bias towards single women. Broader frameworks that support women's rights and dignity, regardless of marital status, can be helpful such as the Respectful Maternity Care Charter:
<https://www.whiteribbonalliance.org/respectful-maternity-care-charter/>

Process of strengthening the interview guide based on the literature reviews

In light of the findings on male involvement, the interview guide developed for pregnant women previously for Uganda has been strengthened with new questions and better probes based on a better understanding of factors influencing male involvement. In addition, an interview guide has been developed for male partners.

In order to continue using the lens of the COM-B model to strengthen our analysis as well as the interview guides, we have developed a table (Table 1) that associated the components of the COM-B model and the constructs of the related Theoretical Domains Framework (TDF) domains, relying on the study that validate the TDF ⁽²¹⁾. We have then tried to classify most of the questions of the men and women interview guides in relation to those components and constructs. Comparing the results of this classification to the repartition of the various factors affecting male involvement and compiled in figure 1 helped to strengthen the interview guides by considering additional significant factors. In addition, a meeting with the Uganda team and SISN working group was planned but could not take place. Nonetheless, using external or key stakeholders to discuss such review can add tremendous value for strengthening data collection tools or designing actions that could be implemented to try address the identified bottlenecks.

Table 1: Main domains and constructs of COM-B model and TDF to strengthen interview guides

COM-B component	TDF domains	Constructs	Men's interview guide	Women's interview guide
Capability	Psychological	<p>Knowledge (including knowledge of condition /scientific rationale) Procedural knowledge Knowledge of task environment</p> <p>Memory Attention Attention control Decision making Cognitive overload / tiredness</p> <p>Self-monitoring Breaking habit Action planning</p>	<p>- When do you usually know that your wife is pregnant? (Pregnancy knowledge)</p> <p>- What are some of the changes that happen to your wife when she is pregnant? (Pregnancy knowledge)</p> <p>- What do you know about ANC? How did you hear about ANC? (ANC attendance)</p> <p>- Have you ever heard about anemia? In your own words, could you tell me what is anemia? (IFAS-knowledge on anemia)</p> <p>- Have you ever had of Iron and Folic acid supplementation for pregnant women? (IFAS-knowledge and perceptions on IFAS)</p> <p>- Tell me about the side effects pregnant women who take IFAS experience (IFAS-knowledge and perceptions on IFAS)</p>	<p>- How did you hear about ANC? (ANC attendance)</p> <p>- Have you ever heard about anemia? In your own words, could you tell me what is anemia? (IFAS-knowledge on anemia)</p> <p>- Have you ever had of iron and folic acid supplementation for pregnant women? (IFAS-knowledge and perceptions on IFAS)</p> <p>- Tell me about the side effects pregnant women who take IFAS experience (IFAS-knowledge and perceptions on IFAS)</p>
	Physical	<p>Skills Skills development Competence Ability Interpersonal skills Practice Skill assessment</p> <p>Abilities or Proficiencies acquired through practice</p>	<p>- What support did you actually give your partner in the last pregnancy that she had? (Pregnancy support)</p>	<p>- What do women usually do to prevent anemia during pregnancy? Can you explain more about that? (IFAS-knowledge on anemia)</p>
Opportunity	Social	<p>Social pressure Social norms Group conformity Social comparisons Group norms Social support Power Intergroup conflict Alienation Group identity Modelling</p>		
	Physical	<p>Environmental context and resources</p>	<p>- How many of the iron folate tablets were given to her? (IFAS-experience with IFAS)</p>	<p>- How many of the iron folate tablets were given to you? (IFAS-experience with IFAS)</p>

COM-B component		TDF Domains	Constructs	Men's interview guide	Women's interview guide
Motivation	Reflective	<p>Social/ Professional role & Identity</p> <p>Beliefs about capabilities</p> <p>Optimism</p> <p>Beliefs about consequences</p> <p>Intentions</p> <p>Goals</p>	<p>Professional identity</p> <p>Professional role</p> <p>Social identity</p> <p>Identity</p> <p>Professional boundaries</p> <p>Professional confidence</p> <p>Group identity</p> <p>Leadership</p> <p>Organizational commitment</p> <p>Self-confidence</p> <p>Perceived competence</p> <p>Self-efficacy</p> <p>Perceived behavioral control</p> <p>Beliefs</p> <p>Self-esteem</p> <p>Empowerment</p> <p>Professional confidence</p> <p>Optimism</p> <p>Pessimism</p> <p>Unrealistic optimism</p> <p>Identity</p> <p>Beliefs</p> <p>Outcome expectancies</p> <p>Characteristics of outcome expectancies</p> <p>Anticipated regret</p> <p>Consequents</p> <p>Stability of intentions</p> <p>Stages of change model</p> <p>Transtheoretical model and stages of change</p> <p>Goals (distal / proximal)</p> <p>Goal priority</p> <p>Goal / target setting</p> <p>Goals (autonomous / controlled)</p> <p>Action planning</p> <p>Implementation intention</p>	<p>- What kind of support do you feel you should provide to your partner when she is pregnant? (Pregnancy support)</p> <p>- If you were to determine the kind of support to give your partner during pregnancy, what you find most benefiting for you as a man? (Pregnancy support)</p> <p>- Do you think men should attend ANC with their partners? (ANC attendance)</p> <p>- Tell me some of the reason's men give for not attending ANC in this community (ANC attendance)</p> <p>- Do think women in this community would like their male partners to attend ANC with them? If yes, why? If not, why? (ANC attendance)</p> <p>- What do men usually do to prevent anemia among their women during pregnancy? Can you explain more about that? (IFAS-knowledge on anemia)</p> <p>- Are there any reasons that could make a woman to stop taking iron folate supplements? (IFAS-experience with IFAS)</p>	<p>- Did you receive support from your partner or family to take IFAS? (IFAS-experience with IFAS)</p> <p>- What would encourage women to continue taking IFAS? (IFAS-experience with IFAS)</p>
	Automatic	<p>Reinforcement</p> <p>Emotions</p>	<p>Rewards (proximal / distal, valued / not valued, probable / improbable) Incentives</p> <p>Punishment</p> <p>Consequents</p> <p>Reinforcement</p> <p>Contingencies</p> <p>Sanctions</p> <p>Fear</p> <p>Anxiety</p> <p>Affect</p> <p>Stress</p> <p>Depression</p> <p>Positive / negative affect</p> <p>Burn-out</p>	<p>- Could you tell me about your experience in ANC? (ANC experience)</p> <p>- Did you experience some difficulties or had bad experiences? (ANC experience)</p> <p>- Did you notice any changes since your partner started taking the iron folate tablets during her last pregnancy? If yes, could you please describe changes. (IFAS-experience with IFAS)</p>	<p>- Do you find ANC beneficial, (if yes, why is that? If not, why?) (ANC attendance)</p> <p>- Could you tell me about your experience in ANC? (ANC experience)</p> <p>- Did you experience some difficulties or had bad experiences? (ANC experience)</p> <p>- Did you notice any changes since you started taking the iron folate tablets during your last pregnancy? If yes, ask the woman to describe changes. (IFAS-experience with IFAS)</p>

REFERENCES

1. Michie S, van Stralen MM, West R. The behaviour change wheel: A new method for characterising and designing behaviour change interventions. *Implementation Science*. 2011;6(1):42.
2. Frumence G, Eriksson M, Nyström L, Killewo J, Emmelin M. Exploring the role of cognitive and enstructural forms of social capital in HIV/AIDS trends in the Kagera region of Tanzania - a grounded theory study. *Afr J AIDS Res*. 2011;10(1):1-13.
3. Bello FO, Musoke P, Kwena Z, Owino GO, Bukusi EA, Darbes L, et al. The role of women's empowerment and male engagement in pregnancy healthcare seeking behaviors in western Kenya. *Women Health*. 2019;59(8):892-906.
4. Jefferys LF, Nchimbi P, Mbezi P, Sewangi J, Theuring S. Official invitation letters to promote male partner attendance and couple voluntary HIV counselling and testing in antenatal care: an implementation study in Mbeya Region, Tanzania. *Reprod Health*. 2015;12:95.
5. Kayongo CX, Miller AN. Men's Response to Obulamu Campaign Messages about Male Involvement in Maternal Health: Mukono District, Uganda. *Health Communication*. 2019;34(13):1533-42.
6. Tweheyo R, Konde-Lule J, Tumwesigye NM, Sekandi JN. Male partner attendance of skilled antenatal care in peri-urban Gulu district, Northern Uganda. *BMC Pregnancy and Childbirth*. 2010;10(1):53.
7. Odeny B, McGrath CJ, Langat A, Pintye J, Singa B, Kinuthia J, et al. Male partner antenatal clinic attendance is associated with increased uptake of maternal health services and infant BCG immunization: a national survey in Kenya. *BMC Pregnancy Childbirth*. 2019;19(1):284.
8. Matiang'i M, Mojola A, Githae M. Male involvement in antenatal care redefined: A cross-sectional survey of married men in Lang'ata district, Kenya. *African Journal of Midwifery and Women's Health*. 2013;7(3):117-22.
9. Kakaire O, Kaye DK, Osinde MO. Male involvement in birth preparedness and complication readiness for emergency obstetric referrals in rural Uganda. *Reproductive Health*. 2011;8(1):12.
10. Oyugi E, Gura Z, Boru W, Githuku J, Onyango D, Otieno W, et al. Male partner involvement in efforts to eliminate mother-to-child transmission of HIV in Kisumu County, Western Kenya, 2015. *Pan Afr Med J*. 2017;28(Suppl 1):6-.
11. Muwanguzi PA, Nassuna LK, Voss JG, Kigozi J, Muganzi A, Ngabirano TD, et al. Towards a definition of male partner involvement in the prevention of mother-to-child transmission of HIV in Uganda: a pragmatic grounded theory approach. *BMC Health Services Research*. 2019;19(1):557.
12. Vermeulen E, Solnes Miltenburg A, Barras J, Maselle N, van Elteren M, van Roosmalen J. Opportunities for male involvement during pregnancy in Magu district, rural Tanzania. *BMC Pregnancy and Childbirth*. 2016;16(1):66.
13. Ongolly FK, Bukachi SA. Barriers to men's involvement in antenatal and postnatal care in Butula, western Kenya. *Afr J Prim Health Care Fam Med*. 2019;11(1):e1-e7.
14. Gibore NS, Bali TAL, 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.
15. Mwijje S. Men and maternal health: The dilemma of short-lived male involvement strategies in Uganda. *Health Care Women Int*. 2018;39(11):1221-33.
16. Nanjala M, Wamalwa D. Determinants of male partner involvement in promoting deliveries by skilled attendants in Busia, Kenya. *Glob J Health Sci*. 2012;4(2):60-7.
17. Aluisio AR, Bosire R, Bourke B, Gatuguta A, Kiarie JN, Nduati R, et al. Male Partner Participation in Antenatal Clinic Services is Associated With Improved HIV-Free Survival Among Infants in Nairobi, Kenya: A Prospective Cohort Study. *J Acquir Immune Defic Syndr*. 2016;73(2):169-76.
18. Sileo KM, Wanyenze RK, Lule H, Kiene SM. "That would be good but most men are afraid of coming to the clinic": Men and women's perspectives on strategies to increase male involvement in women's reproductive health services in rural Uganda. *J Health Psychol*. 2017;22(12):1552-62.
19. Peneza AK, Maluka SO. 'Unless you come with your partner you will be sent back home': strategies used to promote male involvement in antenatal care in Southern Tanzania. *Global health action*. 2018;11(1):1449724.
20. Maluka SO, Peneza AK. Perceptions on male involvement in pregnancy and childbirth in Masasi District, Tanzania: a qualitative study. *Reprod Health*. 2018;15(1):68.
21. Cane J, O'Connor D, Michie S. Validation of the theoretical domains framework for use in behaviour change and implementation research. *Implementation science*. 2012;7(1):37.