

mothers said this: *“Here, much information about pregnancy and child health, health education from community health workers and health center staff, they sensitize us in village and cell meetings, on radio, and sometimes health care providers visit on the field”*. (FGDs5, participant5).

This group did not go far from other FGDs, where they declared that going to health facility while the pregnancy is not visible is shameful. *One mentioned that: “How can I go to health center while the pregnancy is at visible? I cannot go there people can rough at me when nurse tells me that I am not pregnant”*.

This statement was highly appreciated by her fellow group members while craping their hands, they also said that husbands are not willing to accompany their wives because they are most of the time away from home, they also commented that the charges for laboratory tests is expensive and not feasible to all pregnant mothers, here one woman said that: *“Money we pay for laboratory tests is much and not easy to get it and food at time, better to buy food instead of paying it to antenatal care”*. (FGDs7, participant4).

This FGD also declared that the information related to pregnancy and antenatal care services is got from community health workers in their villages; here the commenter said this: *“CHWs care for us, they visit us many times to mobilize pregnant mothers to go to health centers, the problem is that they know our pregnancy when is visible, but we hide it until visible because we fear bad wishers in our community”* (FGDs7, participant4).

In general, the findings from all seven FGDs of pregnant mothers, all in common showed the absence of their husbands, fear to go for ANC while pregnancy not visible, payment for laboratory tests, long distances to go to health facility, waiting time at health facility while waiting for ANC services, all of these were declared as the factors limiting the pregnant mothers to attend in time, while for the sources of information on antenatal care services, all groups pinpointed the community health workers.

The specific focus group discussion was composed by CHWs. CHWs when asked on issues behind women’s gestational timing of attendance to ANC services in Mugonero District Hospital catchment area, most of the respondents mentioned issues like; fear of women to declare their pregnancy in early stage, absence of their husbands, lack of medical insurance, Waiting time at health center, teenagers and single ladies who hide the pregnancy and denial to leave their jobs yet they do not have any pain, here one community health work said that *“pregnant women who do not have husbands feel ashamed of pregnancy without a husband”*(FGDs8, participant1).

Another CHW said that: *“Young girls hide their pregnancies fearing their parents, friends and relatives who may accuse them to be pregnant by unknown men as terming their babies/Ibinyandaro”* (FGDs8, participant3).

Here another CHW added that: *“She can commit induced abortion instead of going for ANC”* (Yayikuramo aho kujya kwipimisha) (FGDs8, participant2).

Another CHW mentioned that: *“Most of the women and their husbands are discouraged by*

waiting time they take at health center waiting for the service, where they go early in the morning and return home at late evening, there is even when pregnant mothers return home un tasted saying that laboratory test are over” (FGD8, participan1).

When asked how is the financing/payment of ANC services among women in Mugonero District Hospital catchment area, they declared that payment to the service is a challenge to families without medical insurance, here they proposed to make antenatal care service to let it free of charge, here one respondent said this: *“Laboratory tests cost a woman one thousand when you have Mutuelle de santé, and not all pregnant women can have this money, when you do not have Mutuelle de santé you pay more, this makes women not to go to health center when they have no pain” (FGDs8, participant3).*

When CHWs asked on the cultural practices (rituals, traditions, beliefs and customs in their community in relation to pregnancy, most of them said that cultural beliefs are there and pregnant women practice them before going for antenatal care and even before going to health facility for delivery, For instance, one community health worker said this: *“ Most of the women in our cell believe in witchcrafts, most of them go for traditional healers to give them protection of their pregnancies not to abort, they also go there before going for maternity in order to protect them from giving birth of dead baby” (FGDs8, participant2)* another added that, many go for traditional healers to give them the protecting medicines.

The most of the participant when asked on how they get information about the government policies related to ANC utilization. Most FGDs mentioned this, for instance one participant said this:

“The information related to antennal care reach to mothers from health education by CHWs, Radios and by health care workers at health facilities during service delivery sessions and at village levels during community works day” (FGDs6, participant 7).

In addition to that, the above statement is not contrary to what was mentioned by specific FGD

8 composed of CHWs in charge of maternal and child health, where they declared enthusiastically that: *“We are the ones who health educates pregnant women and all people who are in gestational age on policies and procedures for antenatal care services, the health staff also tells at health facilities and even health talks at villages during community meeting and community works day” (FGDs8, participant4).*

The findings from key informants indicate that ANC 1 in the catchment area is (35.2%) and ANC4 standard is (28.1%). It has been found that the Hospital catchment area has seven health centers in total and all health services including antenatal care services.

Regarding to human resource capacity of Hospital catchment area in handling of ANC services, it was found that there is 10 medical Doctors at Hospital level, 7 midwives at every health center, 8 midwives at hospital, at least 4 nurses at each health center, at least 1 laboratory technician at each health center and at least 5 at Hospital.

In relation to infrastructure, it was also found that, all health centers have at least one ANC consultation room with coaches, one delivery room, pharmaceuticals well managed, even give mosquito net as incentive to all pregnant mothers on their first visit, while on Hospital there is theater, one delivery room and three consultation rooms.

When key informants asked their opinion on clear Hospital policy on ANC service delivery and kits effectiveness, all mentioned that the policy is clear and would be effective when stake holders complies with it. The key informants also when asked on main challenges facing health facilities in implementation of ANC policy, all of them mentioned; shortage of nurses and midwives at Hospital and health centers where shortfalls continue to exist, they also mentioned women's ignorance on ANC services, lack of medical insurance, long distance to and from health facility, unwanted pregnancies/unplanned.

When key informants asked about the gestational age do women should seek ANC services, they all mentioned with in twelve weeks of gestation, which is in line with the current policy. When asked on the roles of community leaders in implementing ANC service utilization policy, most of the respondents mentioned that the role of local leaders is not clearly seen only that the visible role is that of community health workers.

The key informants when asked on how they are conversant with community health strategy, and how is its implementation especially concerning maternal and neonatal health in Mugonero Hospital Catchment area, they appreciated the role being played by community health worker. Here one said that *"In general community health workers play a big role, to mobilize community to attend ANC, this leads to good results, they care for antenatal and postnatal consultation mother and identifying dangerous signs"* (Key informant no 4).

Discussion

This study mainly examined factors influencing late utilization of first ANC services among pregnant women in Rwanda. Different studies reported different risk factors for late initiation of ANC; our study assessed socio-demographic, economic and health facility related factors associated with late ANC use were found be significantly associated with late ANC utilization.

The findings of the study revealed that unmarried pregnant women also started ANC attendance late due to various factors. This finding is consistent with the literature. For example, a comparative study conducted in Kenya, Ghana and Malawi reported that adolescent and unmarried young women hid their pregnancies and delayed ANC to avoid the potential social implications of pregnancy, exclusion from school, expulsion from their home, partner abandonment, stigmatization, and gossip (Tekelab & Berhanu, 2014).

On the other hand, our finding was lower than the result of other studies done in Ambo, Ethiopia (86.8%) (Damme, 2015), Kembata Tembaro zone, Ethiopia (68.6%) (Tekelab & Berhanu, 2014), Gondar, Ethiopia (65%) (Gudayu, 2015), Southern Ethiopia (78.3%) (Geta & Yallew, 2017), Tanzania (70.4%) (Njiku, Wella, Sariah, & Protas, 2017), Zambia (72%) (Banda, et al., 2012), Nigeria (82.6%) (Adekanle & Isawumi, 2018), East Wollega, Ethiopia (81.5%) (Ejeta, et al., 2017), Gedio Zone, Ethiopia (64.6%) (Abuka, et al., 2016), and meta-analysis that used a polled data from studies done in Ethiopia (64%) (Tesfaye, et al., 2017).

This could be explained by the socio-cultural differences among the study populations. Another reason could be time differences between the studies because currently there is a better improvement in awareness about ANC and there is also good access to the health facilities than the past times by comparison study done by (Njiku, Wella, Sariah, & Protas, 2017).

The possible reason for self-employed mothers to be late for ANC might be lack of time as found in Ethiopia (Haileab, et al., 2019). In addition, mothers might be busy making money for the basic needs of their families. In this study, pregnant women have been found to attend ANC services lately due to the fact that they wanted to come when the pregnancy become visible (54.3%), were limited by the fact that there were no staff to serve them (17.1%) while other mothers were limited by the fact that they felt shameful to attend ANC earlier (12.9%) and did not know their pregnancy status (12.9%). Therefore, even if more than a half (57.1%) were aware of the importance of attending ANC services and knew the appropriate time for the visit, they might be late because of their busy days by similar study done by Haileab, et al., (2019)..

Conclusion

The researcher concluded that that education level, occupational status, travel cost, previously attending ANC and failed to be served greatly influence pregnant women's attendance of ANC services timely. The district health offices should work closely with CHWs on creating awareness about the benefits of early attendance of ANC both for the mother and the fetus. It is also better to make the service closer to mothers who need to travel long distances. Moreover, the government also needs to meet the WHO-recommendation for the accessibility of health facilities to pregnant women.

Recommendations

The Hospital should recommend their nurses and midwives how to socialize better (empathy and customer care delivery) with mothers; Implement a lot of policies regarding to ANC services to enhancing and much with mother's perception on ANC service at Mugonero catchment area; Promote the engagement in care and compliance to ANC utilization. This is going to give positive impact on the compliance to ANC service utilization appropriately and timely. Improve pregnant mother's access to health education on ANC service; Strengthen health education on ANC among women to ensure that the late utilization of ANC service is eradicated.

Suggestions for further studies

Causes of late ANC services use among women should be assessed in order to identify more causes on lack of knowledge and associated factors towards ANC services in Rwanda.

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