Married Men and Vasectomy: A Focused Group Study in an Urban Community in Ghana

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Abstract

An effective method of birth control in men yet least accepted and patronized is vasectomy. Vasectomy provides health benefits to the user, his direct family, and the entire population as it helps to control population growth. This article explored the beliefs and attitudes of commercial drivers on vasectomy in an urban community in Ghana. The study employed qualitative exploratory design using focus group discussion. Data were collected from 12 married men between the ages of 45 to 60 years who were selected through purposive sampling method. The focus group discussions were audiotaped, handwritten, and recorded. Recorded data were then transcribed verbatim, and the current version of the NVivo software for analyzing qualitative data was used to manage the data. Three major themes emerged from the study: knowledge of respondents on vasectomy, beliefs, and attitudes of married men toward vasectomy. Each of the themes had three subthemes. The study revealed that vasectomy was perceived by some of the respondents to be synonymous to castration which comes with negative effects. Inadequate knowledge, negative perceptions, future uncertainty, and the irreversible nature of vasectomy emerged as contributing to the low patronage and some of the reasons why most of the respondents had no intentions of opting for vasectomy. In view of these findings, it is imperative for all stakeholders to give urgent attention to behavior change strategies that can be put in action to ameliorate the effects of these negative attitudes and misbeliefs. Ultimately, the tide can be turned around and vasectomy will be a preferred alternative when it comes to family planning in Ghana.

Keywords

attitude, men, beliefs, qualitative research < research, vasectomy

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Background

The world's population has risen from 2.5 to 7.4 billion; this alarming rate has contributed in part to resource depletion, environmental degradation, and social issues (Onasoga, Edoni, & Ekanem, 2013; World Population Data Sheet, 2016). Of all the world continents, Africa's population is expanding enormously and is said to contribute to almost half of this figure (United Nations Economic Commission for Africa, 2016). Overpopulation has been the trend in Africa and this is not expected to decline even in the next 30 years (World Population Review, 2018). Currently, the population growth rate exceeds by almost 3% per annum in most African countries including Ghana (Ghana National Population Council, 2017; United Nations Economic Commission for Africa, 2016; World Bank, 2018).

Family planning has been deliberated upon and accepted as a means of reducing rapid world population

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There are a wide variety of family planning methods which include short-term, long-term, permanent, and emergency methods (Alireza, Shahriar, & Abdolah, 2017; Ghana Demographic and Health Survey, 2014; Kenya National Bureau of Statistics & ORC Macro, 2010; WHO, 2018). Some short-term methods include condoms, spermicides, oral contraceptive pills, and natural approaches, while long-term methods include intrauterine device (IUD), implants, and progestin-only injectable. Voluntary surgical contraception, tubal ligation, and vasectomy are some of the permanent forms of family planning, while emergency contraceptives also include oral pill and IUD. These methods are more inclined toward women than men (Hardee, Croce-Galis, & Gay, 2017). The male condom and vasectomy are the only methods available for men who wish to practice family planning (Kols & Lande, 2008; Nordqvist, 2016; Shih, Turok, & Parker, 2014). As noted by the Ghana Demographic and Health Survey (2015), currently more than one fourth of married women (27%) are using some method of contraception. Twenty-two percent use a modern form of contraception with the remaining 5% using traditional methods of contraception. Furthermore, it was recorded that 45% of unmarried women are currently using some form of contraception (Ghana Demographic and Health Survey, 2015).

Literature Review

Vasectomy is a form of contraception that involves surgically cutting or blocking the tubes that transport sperm from the testis to the penis (Nordqvist, 2016). It is considered as safe and very effective in preventing pregnancy yet its patronage as a family planning method is not encouraging compared with the other methods (Shih, Turok, & Parker, 2014). Vasectomy is an important alternative to female sterilization for couples who want a permanent method of contraception; barriers to its wider use exist in many places (Brechin & Bigrigg, 2006). Among the barriers worth mentioning are limited information on vasectomy, lack of access as a principal constraint, negative attitudes, and misinformation (Bunce et al., 2007).

Vasectomy is an uncommon method in Ghana as in many developing countries such as Mexico, Botswana, Nepal, Nigeria, Pakistan, and Brazil among others (Asare, Otupiri, Apenkwa, & Odotei-Adjei, 2017; Ghana Statistical Service, 2008; Van Lith, Yahner, & Bakamijan, 2013). The prevalence of vasectomy is less than 0.1% and has been more difficult to obtain in Ghana than other family planning methods (Asare al., 2017; Owusu-Asubonteng, Dassah, Odoi, et Frimpong, & Ankobea, 2012). Meanwhile, vasectomy is unique among the array of modern methods of contraception as it enables the male partner to take primary responsibility for fertility control. Furthermore, vasectomy is highly effective in preventing pregnancy whether or not there is subsequent behavior modification by the vasectomized man (Asare et al., 2017).

Knowledge and attitudes of men toward vasectomy are known to have significant influence on its uptake (Ezegwui & Enwereji, 2009). Nishtar, Faruqi, Khowoja, and Ul-Hasnain (2012) highlighted the need to improve upon the knowledge and attitudes of men because there are widespread misconceptions that vasectomy could cause impotence and is exclusively meant for prisoners. Ignorance leading to widespread misconceptions among males has been reported to be a major reason for low acceptance of vasectomy (Ebeigbe, Igberase, & Eigbefoh, 2011). In addition, the belief systems of men have also been implicated as de-motivators to vasectomy. Findings show that majority of men believe that sterilization is the sole prerogative of women (Onasoga et al., 2013).

This study sought to provide data on the utilization of vasectomy by men in the Greater Accra Region of Ghana. Previously, Ghanaian studies done have been quantitative in nature and have largely focused on women (Asare et al., 2017; Owusu-Asubonteng et al., 2012). Thus, this article contributes to empirical evidence on the acceptance of vasectomy as a measure of family planning in Ghana.

Methodology

A qualitative research design was employed with focused group discussion (FGD) as an approach to solicit information from participants. Participants were gathered for discussion to obtain their perceptions on the defined area of interest. A nonthreatening permissive environment was created to allow freedom of expression among the group members. The study was conducted in the central business district of the Greater Accra Region in Ghana. The Tema station is the largest and busiest transport terminal located in the heart of the district. It is the hub of all commercial transportation in the capital. The accessible population were all the drivers who worked on the day of the study.

The study population included all male drivers who have ever been married and were between the ages of 45 and 65 years. Male passengers and bus conductors who did not meet the inclusion criteria were excluded from the study. Purposive sampling was utilized to recruit married men in their sexual reproductive age groups from 45 years and above. These men might have already attained a desirable family size thus were likely to contribute meaningfully to the study. The purpose of the study was fully explained to the participants and they willingly participated without being compensated. Informed consent was obtained and confidentiality was assured before commencement of the study. To maintain confidentiality, participants were assigned alphabets (V) and digits in place of their names. At any point during the study, there was an opportunity for participants to opt out. The study was ethically cleared by the Research and Innovation Center of the Valley View University, Ghana, under exempted review.

With the use of FGDs, the number to be involved in the group was determined by the researchers; therefore, two FGDs were predetermined and constituted with 12 men. Focus Group 1 was made up of five men above 60 years, whereas Focus Group 2 comprised seven men between ages of 45 and 60 years. FGD guide developed by the researchers based on available literature was used as a tool to collect data. The focus group guide was developed based on the themes that emerged from literature reviewed. Subsequently, it was given to field experts for validation. This helped to contextualize the use of vasectomy as a fertility control method. The input from the validation helped to fine-tune the FGD guide. Questions were asked in a clear and nondirective manner in order not to predetermine or lead the answers. The FGD guide had main question areas in line with the objectives of the study. See Appendix A for the FGD guide.

Interviews were conducted by all authors on weekdays in March 2017. They typically lasted 2 hours and were held at the convenience of the drivers in the office of the station master. This was made possible because the public transport system in Ghana is such that drivers queue awaiting turns for passengers to board their vehicles. Thus, interviews did not affect their productive work time. In addition, during the afternoons, there are fewer passengers as this is not a peak period or rush hour. In all, there were five sessions. Interviews were conducted in three Ghanaian languages specifically Ga, Twi, and Ewe. The researchers were Ghanaians and could fluently speak these languages; therefore, translators were not required. During the interview session, when a question was asked, participants were allowed time to provide responses and follow-up questions were asked to clarify statements made. According to Lincoln and Guba's (1985) recommendations on trustworthiness, the researchers held regular debriefing sessions, kept extensive field notes, and maintained a reflexive journal.

Data analysis was concurrent with data collection. Tape-recorded information was transcribed verbatim, and content analysis was done. Transcripts were read, reread, and line-by-line coding was done. During this process, words and phrases that captured the participants understanding of the issues were noted. Codes that had similar meanings were identified and put together to constitute refined themes. NVivo (version: 10.0.641.0) was used to manage the data and three themes were generated. Findings have been presented with verbatim quotes from participants.

Results

Demographic Characteristics

The target population of participants in the study were men aged 45 years and above categorized into two FGDs. Focus Group 1 was made up of five men who were above 60 years and Focus Group 2 comprised seven men between the ages of 45 and 60 years. Participants were of diversified ethnicity; however, they were predominantly Ga, Ewe, and Akan. These ethnic groups are the commonest in the Greater Accra region of Ghana. Majority of the participants had received education up to the basic level with just three of the participants with education up to tertiary level. In terms of occupation, all participants were drivers. Majority of the participants were Christians with only two of them being Muslims, which is consistent with Ghana's demographics. The participants had ever been married with one wife except one respondent who was married to five wives as his religious affiliation permitted so. Two of the participants were also widowed. All the participants were middle-income earners as they earned between \$1 and \$16 equivalent to 70 Ghana Cedis per day. In relation to the number of children, the maximum number of children was seven with a minimum of three per participant.

Three main themes emerged from the FGDs conducted were as follows:

- Knowledge assessment
- Beliefs on vasectomy
- Attitudes toward vasectomy

Participants Knowledge on Family Planning

The data revealed three main subthemes for understanding vasectomy. These were description of family planning, importance of vasectomy, and side effects of vasectomy.

Description of Family Planning

Majority of the participants identified family planning as a good means to decide the number of children one wants to have and as an economic survival technique based on one's economic standing. This can be seen in the following statements by some of the participants:

It is good, because it helps you to decide on the number of children you can actually cater for. With family planning, you give birth to the number of children depending on your financial strength. (V3, FG 2)

When a man gets married to a woman, they give birth. After that, they think of how to cater for their children and their spacing so that they will not be burdened with the problem of taking care of them. You should as well consider your work to plan for your family. In situations where both partners earn enough from their businesses, no problems are experienced in providing for the family. But in situations where they do not earn so much, taking care of the family becomes a problem. (V3, FG 1)

Concerning the family planning methods that were common to participants, different types were mentioned including the short-term methods such as the withdrawal method, pills, injectable, and condom. Others indicated the long-acting contraceptive methods like the implants. This is what some participants had to say:

One they call "pull out" which I know is against the teachings of the bible. I also know of the calendar method, condoms as well as the foam method. (V1, FG 1)

Another member in the group described the methods like this:

I know of the chart method, condoms, and injectable for 3 months, 6 months and 1 year. I also know of the implants. (V3, FG 2)

It can be seen that participants were familiar with the different types of family planning methods that are used.

Importance of Family Planning

In assessing the knowledge of participants on family planning, a subtheme that emerged was on the importance. Participants understood family planning as a technique that would help one achieve the aim of raising good children as well as providing good education. Again, family planning is helpful in terms of financing a home and maintaining maternal health. This is evident in the following statement made by a respondent In the first place, it helps to keep both partners' strong and healthy at all times. This is because, the woman loses a lot of blood during labor. It therefore helps the woman to fully recover before the next pregnancy. It also helps the husband and wife to work and save money. This puts them in the position to cater for their family properly. (V1, FG 1)

Another participant had this to say:

When you give birth to so many children, (say 10,12), and you are not able to provide for them, you end up producing armed robbers and pick—pockets and others who will not work but will always come to you every day asking for money. It is therefore a bad practice to give birth to so many children when you cannot provide for them. (V5, FG 1)

Side Effects of Family Planning

An important subtheme that emerged out of the knowledge on family planning was the side effects one experiences. The men believed some of the side effects of family planning on its users included acute abdominal pain, dizziness, nausea, painful labor, and infertility. Others also claimed it makes women fat and unattractive. This is what one respondent said to buttress the point.

It makes the woman grow fat and she becomes unattractive. This sometimes leads to divorce. She is also not able to perform her sexual responsibilities as she is always complaining of being tired. Apart from that, some of them are rendered infertile making them barren for the rest of their lives. (V1, FG 1)

In the quest to promoting family planning, participants believed public education is the most potent means to make people appreciate family planning, as illustrated in the following statement:

...I think nurses and doctors can also promote it by talking to their patients about it. Teachers should also educate their students on the benefits of family planning so that it becomes part of them even before they start their own families. (V1, FG 1)

Beliefs on Vasectomy Among Men

Making decisions concerning vasectomy depends largely on the individual's belief. The subthemes emerged under this include family planning control method, reversible family planning method, and vasectomy adverse health effects.

Family Planning Control Method

Participants indicated that vasectomy is a type of family planning control method and described in different terms what it is and how it is known in the community. The men expressed different beliefs on vasectomy but referred to it as "castration." A participant typically referred to vasectomy as "belt method" as this is how it is known and called in most Ghanaian cultures. This is evident in the following statements:

I know of some men [who] use the "belt method"... (V7, FG2)

A participant did not actually understand the mechanism behind vasectomy so expressed himself as follows:

I heard that after the procedure, when you have sex with a woman, she will never take seed. (V3, FG 2)

Reversible Family Planning Method

This theme was about the nature of vasectomy. All the participants were misinformed that vasectomy was a reversible family planning method, which involved tying and blocking sperm flow. A participant describes this in the following statement:

I know they tie the veins so that you are no longer able to release sperms. When you decide to give birth, you go back to untie it. (V3, FG1)

Another participant had this to say,

I also heard they tie something but don't really know what it is they tie. (V3, FG2)

Vasectomy Has Adverse Health Effects

Another major belief was the health effects of vasectomy on men. It could lead to prostate cancer and inability to ejaculate. This has been expressed in the following statements:

... if these veins have been cut and tied, and it's these same veins that causes erection, it no longer becomes functional and blood no longer runs through them. They have been destroyed and can lead to such problems as prostate cancer. (V1, FG1) ... I suppose you cannot ejaculate when you have sex after the procedure. How then will you be satisfied? Why would you do something like this to yourself? (V5, FG2)

Attitude of Men Toward Vasectomy

Attitude was also seen as an important factor to one's choice where vasectomy is concerned. Whether one would choose vasectomy or advice someone else to do so depends on the person's attitude. The subthemes emerged under this were strong dislike of vasectomy and discourage other men.

Strong Dislike for Vasectomy

The analysis showed that participants had negative attitude toward vasectomy by showing strong dislike for it. They also expressed their dislike by saying that in as much as they would not do vasectomy, they would advise other men not to go for it. However, in the Ghanaian context this is not entirely surprising, as most Ghanaian men fear losing their erection. More so, the word for the procedure is synonymous to castration of animals in which case the animals are unable to develop functioning adult sex organs.

In eagerness to express his dislike for vasectomy, one participant said this:

I will rather give birth to vagabonds than go for vasectomy as a method of family planning. I will also not encourage any man to go in for vasectomy. (V1, FG1)

The others expressed their dislike in the following statements:

No, I don't need it and I will never go for it. (V3, FG2) I don't like it and will never consider it. (V3, FG1)

Discourage Other Men

The men in this study showed strong dislike for vasectomy. The focus group with men aged between 45 and 60 years vehemently detested to anyone willing to undergo vasectomy. The following statement by a respondent emphasizes this point

If a friend wants to go for vasectomy, I will only ask him if he is crazy. (V2, FG1) I will discourage him by telling him that it will have adverse effects such as hernia and prostate cancer. (V1, FG1)

However, the focus group with older men aged over 60 years had no much problem with opting for vasectomy.

They only had issues with its side effects. This is evident as follows:

No, I won't stop him. I will not discourage him but will advise him to consider the implication of his actions. I mean he can get impotent in future (V3, FG2)

Upon further probing, the participants had no wish of undergoing vasectomy, not even under the influence of a friend, as stated in the following statement:

Personally, I prefer not to go through any surgical procedure and therefore will never be influenced by a friend who has undergone vasectomy. (V6, FG2)

Discussion

The study revealed that some participants were aware of vasectomy but were not able to give detailed information about vasectomy which have been consistently reported in previous studies by Pile (2008), Onasoga et al. (2013), Babalola and John (2012) in which majority of the participants had limited knowledge. Participants had misconceptions and lacked correct information on vasectomy as this was clear in their responses. The low patronage of vasectomy is not completely due to the resistance from men to the method, but also the inability of health workers to make information available, attractive, and accessible to the public (Ebeigbe et al., 2011). If health worker attitudes remain unchanged, vasectomy will be totally relegated to the background despite its high graded effectiveness.

It is indeed true that knowledge played an important role in the uptake of vasectomy, but the study has revealed that the actual decision for acceptance of vasectomy was the sole responsibility of the man and not by the couple. This is largely attributable to cultural influences and also stems from the fact that in most African societies the man is regarded as the head of the family and usually dominates in decision-making (Onasoga et al., 2013). There is the need to change this mindset and to involve women in the final decision on vasectomy as a choice of family planning.

The study also revealed that participants had inadequate knowledge not only on vasectomy but also on other modern family planning methods. This was similar to the findings of studies conducted by Jangu (2013) on the attitude and willingness of men toward the use of modern family planning method and another by Akpamu, Nwoke, Osifo, Igbinovia, and Adisa (2010) on knowledge and acceptance on vasectomy as a method of contraception among literate men in Ekpoma, Nigeria.

Vasectomy seems to have gained acceptance and popularity in developed countries but certainly not in developing countries. This is because inadequate knowledge exists on vasectomy in Ghana. There is, therefore, the need to improve dissemination of accurate information on vasectomy to families and community members through the print and electronic media, churches, mosques, and other public meeting places, which can then

serve as a leading source of information for vasectomy. From our findings, it is evident that as reported elsewhere, men have inadequate knowledge, which subsequently leads to negative perceptions about vasectomy. Negatively, vasectomy was equated to castration with negative effects such as sexual weakness and impotence (Temach, Fekadu, & Achamyeleh, 2017). This term "castration" has many negative connotations in our Ghanaian community. Castration is a practice linked to the male animal; hence, a man who is vasectomized is likely to be seen as such. The findings described earlier were similar to the findings from Adongo et al. (2014) and the ACQUIRE Project (2008), which indicated that communities understood male sterilization to be castration of men. We discern that this false impression is a threat to the sustainability of vasectomy in Ghana. The participants also feared the future uncertainty of vasectomy. Some believed that vasectomy could have adverse effects on their health such as prostate cancer. Obviously, people will not embrace that which is synonymous with castration if they consider it a procedure that will put an end to their sexual life (Nishtar et al., 2012). Sexual prowess is highly valued in the Ghanaian community whereby men go to long lengths to purchase creams, powders, and concoctions that will make them perform better in bed (Danquah, Koffour, Anto, & Nimako, 2011). As such, many Ghanaian men might not even consider a procedure with 'future consequences'. Recently, a Ghanaian study examining vasectomy from a female perspective unearthed that in a religiosociocultural society like Ghana, childbirth is a prestigious enterprise and for this reason and more, women disapprove of vasectomy especially when they perceive the masculinity of their partners to be challenged (Asare et al., 2017). This translates to a myriad of misbeliefs working in tandem. Vasectomy has been rendered unattractive because of some of these negative perceptions and these eventually have cluttered the minds of men and the public in general. It is not surprising, therefore, that the uptake of vasectomy in a low resource setting like Ghana is poor.

We also found out that men displayed a strong dislike toward vasectomy. They expressed their dislike by saying that they would not go for vasectomy and would advise other men not to do so and this has been previously documented (Akpamu et al., 2010). According to Adongo et al. (2014), some participants felt that once they had vasectomy done they would lose their power and control over their wives. Participants feared that of losing their manhood particularly with the mentality of castration meant that their wives may find lovers to satisfy their sexual demands and thus may no longer be respected in their homes. Upon further probing, the participants had no wish of undergoing vasectomy not even under the influence of a friend.

Interestingly enough, the findings of a study conducted by Dayanand et al. (2014) to assess the level of knowledge and attitude toward vasectomy in adult males from Pokhara, Western Nepal revealed that majority of the participants were in support and showed positive attitude toward vasectomy which was in absolute contrast to the findings of this study. Vasectomy, as mentioned earlier, seems to be very popular in developed nations but certainly not in Africa. It is evident that these men in developing countries have, over the years, showed negative attitude toward vasectomy because of the rather poor knowledge they have on vasectomy. Therefore, to improve on the uptake of vasectomy, the basic reason, which is inadequate knowledge, must be tackled and this will eventually reflect in its uptake.

From the study, it was appreciated that the participants had good knowledge on the short-term methods but knew only few long-term methods. The participants knew vasectomy as a reversible family planning method with adverse health effects such as prostate cancer and inability to ejaculate. The men in this study showed negative attitude and perceptions toward vasectomy.

Strengths and Limitations

The unique nature stems from the fact that it is the first of its kind examining vasectomy as a family planning option from a standpoint of married men in a developing country. The findings from this study will enable policy makers to have insight into factors that militate against vasectomy in order to design appropriate policies and strategies to reach out to men. In addition, the qualitative descriptive nature of the study allowed for in-depth exploration of information from participants. One limitation centers on the study findings which may not be applicable to all urban communities in Ghana. This is because there are varying characteristics of men in the urban communities. The researchers are cognizant of the cultural underpinnings of the Ghanaian society that might have inadvertently influenced participant responses. However, this limitation also illuminates the need for future studies examining the cultural influences on vasectomy.

Conclusion

Vasectomy is poorly patronized in Ghana. From the study findings, the researchers can conclude that this is in part due to several misbeliefs and negative attitudes concerning vasectomy. There is an urgent need for behavioral change strategies and programs to be implemented in order to change the mindset of men in Ghana toward vasectomy. Relevant information must be provided in order to remove the negative impression that has obscured the benefits of vasectomy.

Appendix A: FGD Guide

Background information of respondents

1. Tell me all about yourself

Probes:

- Age
- Marital status
- Years of marriage
- Educational background
- Occupation
- Religion
- Number of children

Knowledge assessment

1. Tell me all you know about family planning

Probes:

- Definition
- Types of family planning for both men and women
- Advantages of family planningFactors that promote usage of family planning
 - Side effects
- Side cheets
- 2. Emphasis on vasectomy

Probes:

- What is vasectomy? What are the advantages? What are some of the disadvantages?
- When will you decide to go for vasectomy?
- Where can one go for vasectomy?
- How much will it cost one to go for vasectomy?
- 3. Are you aware of anyone who has undergone vasectomy?

Beliefs

1. Can you tell me who makes decisions concerning the following in your family?

Probes:

-Yourself or Wife

-What about in-laws

- -Religious leaders
- Having children in the family (pregnancy and childbirth)
- Not having children
- Number of children
- Minimum duration between each successive child birth
- 2. Why do people give birth to children?

Probes: What are some of the reasons people give for having?

- More children
- Few children
- 3. In your opinion, which of the family planning methods are most effective for use?

Probe: those by females or males

- Female condoms, pills, injections, tubal ligation, IUD, norplant, calendar method, and so forth.
- Vasectomy, condoms
- 4. Do you think vasectomy could lead to any of the following:
- Inability to ejaculate?
- Halt in sperm production?
- Prostate cancer?
- 5. Do you think this procedure can be reversed?

Attitude

6. What will you do if you do not want to have any more children?

Probes:

- Will you opt for vasectomy?
- Will you ask asking your partner to take up any form of family planning method?
- 7. What will do if you decide to go for vasectomy as a family planning method?

Probe:

- Will you inform your partner?
- Will you refuse to inform your partner?
- What about your parents, religious leader, friends ...?

8. What will you do if your friend informs you that he is going for vasectomy?

Probe:

- Will you stop him?
- Will you encourage him?
- Will inform the wife?
- What will be your attitude towards one who has undergone vasectomy?
- 9. Tell me all about someone who has undergone vasectomy

Probe:

- The person's experiences
- Can the person motivate you to go for vasectomy?
- 10. What else would you like to be clarified?

Probe: allow respondents to ask questions and make other contributions

Authors' Contributions

S. A., A. M., J. K. A., and I. G. conceptualized the study; S. A., I. G., A. M., & J. K. A. collected the data. J. K. A. and S. A. analyzed the data. S. A., I. G., and A. M. drafted the manuscript and all authors edited and approved the content.

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