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Omukule Emojong', Hellen Mberia, Ndeti Ndati

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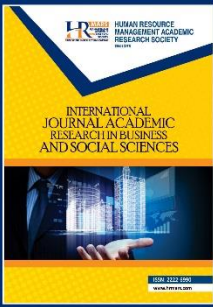
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An Analysis of Male Circumcision Interpersonal Communication Messages within Uptake of Voluntary Medical Male Circumcision (VMMC) Among Married Men in Busia County, Kenya: A Quantitative Study

Omukule Emojong'

PhD Mass Communication Candidate, Department of Applied Communication and Media Technology, Jomo Kenyatta University of Agriculture and Technology, Nairobi
Email: emojong1@gmail.com

Prof. Hellen Mberia

Dean, School of Communication and Development Studies, Jomo Kenyatta University of Agriculture and Technology, Nairobi
Email: hellenmberia@gmail.com

Dr. Ndeti Ndati

Director, School of Journalism and Mass Communication, University of Nairobi, Nairobi
Email: ndetindati@gmail.com

Abstract

Voluntary Medical Male circumcision (VMMC) reduces risk of heterosexually acquired HIV. Kenya adopted VMMC as an HIV intervention in 2008 and has been making remarkable progress towards achieving its male circumcision target. However, its uptake is lowest among older and married men. The main objective of this paper is to examine the nature interpersonal communication messages and their influence on uptake of VMMC among married men in Teso South Sub County in Western Kenya. Teso Sub County is among the sub counties with low male circumcision prevalence and high HIV/AIDS prevalence thus a target of the VMMC programme. The survey was carried out between June 15 and July 13, 2017 targeting married men aged between 20 and 49 years. Key constructs and thematic frameworks were developed using health belief model (HBM) and Extended Parallel Process Model (EPPM) and presented verbatim using the participants own words. Based on male circumcision interpersonal communication messages, the findings show that majority respondents including those circumcised perceived HIV/AIDS to

be severity and believed they were susceptible to it. Self-efficacy (confidence in performing a behavior), and especially response efficacy (the belief of efficacy of message) regarding acceptance of VMMC as a preventive measure were the most important correlates of perception. Low response efficacy was the critical problems in adoption of VMMC. Majority of those who had sought VMMC did it for other reasons such as peer pressure, penis appearance, sexual satisfaction and penile hygiene and not for HIV prevention. Among the uncircumcised respondents, majority of those who expressed willingness to adopt male circumcision said it will be for other reasons, not HIV prevention.

Keywords: Interpersonal Communication, Voluntary Medical Male Circumcision, HIV/AIDS, Married Men, Qualitative Data, Kenya.

Background to the Study

HIV/AIDS is a global epidemic, unprecedented in its scope and impact, has mobilized outrageous outpouring action worldwide. It is now more than three decades since the first case of AIDS were diagnosed. According to a joint report by AVAC, National Empowerment Network of People Living with HIV/AIDS in Kenya, Sonke gender Justice Network and Uganda Network of AIDS Service Organizations (2012) there has been a growing array of proven strategies and promising research on HIV prevention. However, some of these interventions have not realized their goals since HIV prevalence rates have remained high.

Data from a range of observational epidemiological studies, conducted since the mid-1980s indicated that circumcised men have a lower prevalence of HIV infection than uncircumcised men. Research has adduced evidence that male circumcision has an HIV prevention impact (Weiss, Qugley & Hayes, 2000; Darwish, 2016). In support of this are three randomized controlled trials that suggested that male circumcision reduces HIV acquisition from female partners by approximately 60 percent (Bailey et al., 2007; Gray et al., 2007, Auvert et al., 2005). Informed by these findings, World Health Organization (WHO) and the Joint United Nations Programme on HIV/AIDS (UNAIDS) recommended medical male circumcision as part of HIV prevention interventions. WHO and UNAIDS identified and prioritized fourteen countries in southern and Eastern Africa with low male circumcision and high HIV prevalence rates for scale-up of voluntary medical male circumcision (VMMC) (WHO and UNAIDS, 2007).

Male circumcision is a one-time procedure with lifelong protective advantages and therefore potentially cost effective in the long run. Once a man has undergone the procedure, he will benefit from the preventive effect for the rest of his life (Njeuhmeli et al., 2011). This intervention targets only HIV uninfected men (Hallett et al, 2011). A study in Uganda found that “circumcision of HIV infected men did not reduce transmission of the virus to uninfected female partners. Furthermore, we cannot exclude the possibility of higher HIV transmission in couples who resumed intercourse before complete healing of the surgical wound... The findings suggest that strict adherence to sexual abstinence during wound healing and consistent condom use thereafter must be strongly promoted when men living HIV receive circumcision” (Wawer et al, 2009:235).

Male circumcision is just one of the measures that can be taken to reduce the vulnerability of married men and also women to HIV infection. This is because as many men are circumcised, women are less likely to encounter sexual partners who are living with HIV (Njeuhmeli et al.,

2011; Hallett et al, 2011). Hankins et al (2011) add their voice to this argument by stating that “early on, most HIV infections averted occur among men, but the proportion among women would steadily increase over time until almost half of all HIV infections averted in year 2025 are those that would have occurred among women.” Mathematical modeling from Tanzania found out that in the absence of male circumcision, the annual number of new HIV infections was expected to rise from 84,000 in 2010 to 86,000 in 2025. However, with VMMC, a commendable decline of 64,000 additional HIV infection will be expected (Ally et al, 2012).

Despite the overwhelming scientific evidence and formal recommendation by WHO/UNAIDS, efforts to scale up medical male circumcision in the targeted priority countries in sub Saharan Africa have yielded mixed results (Hankins, Forsythe & Njeuhmeli, 2011) which can partially be attributed to inadequate supply of health care resources required for VMMC (Justman et al., 2013). In view of this noted shortage, new male circumcision devices such as the Shang Ring and PrePex which need minimal or no surgery have been invented. With these inventions however, the demand for circumcision by sexually active men in the priority countries has been low, and it appears the devices alone will unlikely solve all demand creation challenges. A joint report of AVAC, National Empowerment Network of People Living with HIV/AIDS in Kenya, Sonke Gender Justice Network and Uganda Network of AIDS Service Organization on VMMC recommends the need to investigate reasons why men do or do not access VMMC services, optimal messages and communication channels, and key message carriers to motivate VMMC services.

However, there has been limited progress in bringing this prevention intervention to scale. As of March 2012, the world was only about 8 percent of the way to reaching the target of circumcising at least 80 percent of adult males between ages 15 and 49 in these priority countries by 2015 (AVAC, National Empowerment Network of People Living with HIV/AIDS in Kenya, Sonke Gender Justice Network and Uganda Network of AIDS Service Organizations Joint Report). It is imperative to recognize the challenges associated with scaling up VMMC. Unlike other prevention strategies, such as delaying sex or using condoms, VMMC is a relatively new prevention tool and as it is at present entails a surgical procedure that many men may understandably be uncomfortable with as well as a departure from cultural norms in some communities in Kenya.

The government of Kenya developed VMMC strategy that provided a framework and guiding principles to make male circumcision services safe, accessible and sustainable. It aimed at meeting 80 percent of the estimated need for male circumcision within five years. This was expected to increase the proportion of Kenyan men between ages 15 and 49 who will be circumcised from 84 percent to 94 percent as captured by the Kenya’s VMMC progress report (2011). These goals were based on mathematical modeling studies that revealed that the impact of male circumcision on Kenya’s epidemic would be greatest if most of the eligible men could be reached within the five years (Nagelkerke, et al., 2007; UNAIDS/WHO/SAGEMA, 2009; White et al., 2008).

Kenya has a relatively high prevalence of male circumcision. According to the Kenya AIDS Indicator Survey (KAIS) of 2007, 85 percent of men reported that they were circumcised. But male circumcision rates vary by region, ranging from 48 percent in Nyanza to 97 percent in Coast and North Eastern. However, many African cultures have no tradition of male circumcision, and some are strongly opposed to it. According to the Kenya Demographic and Health Survey (KDHS, 2008-09), there is a strong correlation between HIV prevalence and male circumcision status with HIV prevalence being four times higher among uncircumcised men than among circumcised men

aged 15-49 years that is 13 percent and 3 percent respectively. KAIS (2007) found that HIV prevalence was 13.2 percent among uncircumcised men and 3.9 percent among circumcised men.

Kenya launched the national VMMC programme in November 2008. This service began earlier in Nyanza province than elsewhere. The programme was expanded to include Nairobi and Teso regions in June 2010. Overall, 82.3 percent of 340,958 VMMCs had been conducted in Nyanza province, as of December 2011, whereas 8.3 percent and 6.6 percent were conducted in Nairobi and Teso district (Western Kenya) respectively. Rift Valley province accounted for less than 7 percent of total VMMCs according to Kenya's VMMC 2008-2011 progress report.

Unlike other areas of public health, in VMMC individual decision-making prevails. Since being circumcised entails deep-seated values, beliefs and motivational factors that vary with ethnic, religious and cultural identities therefore sensitive approaches are required to ethically and responsibly aid men in their consideration of circumcision (Sgaier et al., 2014). Communication is the key process underlying changes in knowledge of VMMC and in openness of local cultures in embracing new ideas and new health behavior. This communication can take place both spontaneously, within and between social groups of a society, and deliberately, by ways of planned intervention by government or non-governmental organizations. These planned communications are able to initiate change, accelerate changes already under way or simply reinforce change that has already occurred (Pietrow et al, 1997).

Statement of the Problem

Despite the many interventions to arrest the spread of HIV, new infections remain unacceptably high. One of the strategies to address this epidemic is adoption of VMMC targeting males in communities that do not traditionally practice male circumcision. Kenya implemented the VMMC programme in 2008 and by 2012 it had recorded notable progress towards the 80% target by circumcising 52.2% of uncircumcised males in the targeted regions though with alarming variation in coverage by age according to Sgaier et al, (2015) and Westcamp et al, (2012). For example, coverage among males aged 15-19 years in some districts had reached 70% by 2011. Overall median age was 17 years, suggesting older males (aged 25-49 years) are largely still not accessing VMMC. Similarly, other studies such as Mwandu et al (2011) have revealed that men in the age bracket of 20 to 49 record the lowest uptake of VMMC though they remain sexually active resulting in the high HIV/AIDS prevalence and therefore this generation is a special target for the "cut."

Despite many interventions to promote adoption of VMMC, Sgaier et al(2015) and Westcamp et al (2012) have noted low uptake among married men in the targeted regions partly because of low interpersonal communication. Mass media channels in health communication interventions are relatively more important at knowledge function but interpersonal channels are more important at the persuasion function in the innovation-decision process as observed by Rogers (1973). Because married men face social, cultural and medical barriers to accessing VMMC services (Sgaier, et al, 2014), interpersonal communication interventions play an important role in overcoming these obstacles, including as part of broad educational and behavioral change efforts. Interpersonal communication among peers, professional groups, within the family and other closely linked groups are critical in aiding the initial stages of awareness creation, and the following stage of stimulating interest in the individual to want to try male circumcision as a new

innovation to prevent HIV infection. Duggan (2006) argues that silence or avoidance reduces the ability of people to receive the necessary social support that would enable them cope with health problems, access appropriate care, and make health related decisions. In day-to-day life people get involved in discussions about health topics or even the specific content of health campaigns with one another, and such discussions remarkably do influence the impact of health campaigns (Real & Rimal, 2007; Southwell & Yzer, 2007; Van den Putte et al, 2011; Korhonen, et al., 1998). While there is a great deal of evidence about how interpersonal communication interventions have successfully been used in many different areas of public health with varied population especially with sensitive health issues, it remains an area to be investigated in voluntary medical male circumcision – a culturally and sexually sensitive area (Progress Report on Kenya’s Voluntary Medical Male Circumcision 2008-2010, 2011; Plotkins et al, 2013). This study builds on and contributes to work in interpersonal communication and behavior change aimed at promoting healthy practices. As such, a greater understanding of the influence of interpersonal communication in the uptake of male circumcision for HIV intervention is necessary to create demand for the ‘cut’ especially among married men in Kenya. This study analyzes interpersonal male circumcision messages in the context of uptake of VMMC.

Literature Review

Male Circumcision Messages

The most important elements of a successful behavior change communication campaign are well-designed messages that are administered frequently enough to be remembered (Abrams & Maibach, 2008). Studies in multiple sites have noted evidence of a dose-response relationship between exposure to behavior change communication messages and changes in knowledge, attitudes and practices (Babalola, Ouedraogo, & Vondrasek, 2007). A study in Tanzania found that women who reported exposure to six media sources of family planning messages had odds of using family planning that were 11 times those of women who were not exposed, while women who were exposed to one source only were twice as likely to use family planning as women who were not exposed (Jato et al., 1999). A similar study in Zimbabwe found that youth who had been exposed to 5–8 components of an HIV and AIDS campaign were more likely to discuss AIDS with others or to seek care at a health center than youth who had been exposed to only 1–2 or 3–4 components of the campaign, after social and demographic factors and access to media were accounted for (Kim et al. 2001 cited by Banerjee et al, 2013).

In view of this study, Peltzer & Mlambo (2012) have noted that despite a high level of exposure to VMMC messaging, this does not necessarily translate into acceptability or uptake of VMMC. Recent studies in Zimbabwe have explained the drivers that influence men to seek VMMC once they are interested in the procedure and understand its benefits (Montaño et al 2014; Hatzold et al. 2014). These studies have highlighted a dominant pattern in which behavior change takes place along a continuum of 3 fluid stages—pre-intention, intention, and action. This idea is strongly fortified by the Institute of Medicine Committee on Communication for Behavior Change in the 21st Century (2002) that the more an individual believes that performing a given behavior will offer positive consequences (e.g., “My performing this behavior will make me feel better”; “will show my partner that I care”; “is the responsible thing to do”) and/or prevent negative consequences (e.g., “will protect me from HIV”), the more favorable the individual's attitude is toward performing that behavior. Likewise, the more an individual believes that performing the

behavior will offer negative consequences (e.g., “My performing this behavior will be painful”; “will make my partner angry”) or prevent positive consequences (e.g., “will not make me feel better”; “will not make me toil for my family”), the more unfavorable the attitude. It is assumed that an individual person will not form an intention (or perform a behavior) if the costs of performing that behavior outweigh the benefits.

In yet another study (Price et al, 2014) conducted in Zimbabwe examining adoption of VMMC several interventions were identified that are likely to move men more quickly through this process of change. It emphasized the value of tailoring messages to the men’s stage-specific needs and concerns. For instance, while at the pre-intention stage, the aim of behavior change interventions should be to increase men’s exposure to VMMC messages through targeted messaging. Social pressure and encouragement to ascribe positive values to VMMC help move men further toward the decision to act, and addressing men’s fears about the procedure may remove the final barrier.

On their part Nieuwoudt (2012) and Wouabe (2013) have pointed out two common problems inherent in HIV/AIDS health campaigns as inadequate messaging tailored to specific contexts and a lack of systematic integration of VMMC into HIV prevention messages. Sgaier et al (2015) acknowledge these issues when they asserted that given heterogeneity of VMMC’s target population and the people that may influence these populations, generalized studies on acceptability of male circumcision have fallen short of facilitating the crafting of messages designed to reach a specific sub – population “where they are.” They observe that it is this failure to acknowledge the precise needs and concerns of segmented sub-populations of men and to design messages accordingly, that likely accounts for the significant gap between interest in VMMC and actual uptake of the procedure. In short, they recommend the finding of the most appropriate message for the demographic—and for the individual’s place on the continuum of pre-intention, intention, and action male circumcision behavior change stages. According to Family Health International (2002) fear campaigns and campaigns blaming particular groups are ineffective. To Mattson (1999) most experts agree that fear tends to focus an audience’s attention on what not to do, or what to avoid. Similarly, abstract health messages are often perceived as less personally relevant, allowing for the minimizing of personal risk. This is often why campaign efforts bring about awareness instead of behavioral changes. Approaches are more effective when they promote positive messages that state clearly what audiences can and should do.

According to Sgier et al. (2014) messaging often emphasizes HIV prevention as the primary benefit of VMMC, while at the same time communicating that the procedure provides only partial protection against HIV. Successful advertising positions the product or service in a way that resonates with the prospective customer rather than communicating only the most obvious features. For example, research found that anti-smoking campaigns targeting youth were most effective if the messages did not emphasize the negative long-term effects of smoking, but rather the deceptive promotional practices of cigarette manufacturers and the effects of secondhand smoke on others (Pechmann & Reibling, 2000 cited by Sgaier et al. 2014). Given that HIV prevention—the public health goal of VMMC—may not be the highest priority or most attractive benefit of the procedure for most males, it is important to consider positioning and messaging VMMC in ways that move beyond HIV.

To Witte, Meyer and Martell (2001), threat and recommended response are the two components in health risk messages. They suggest that under threat, the severity and susceptibility of an individual to threat are factors in driving behavior change. In the recommended response they propose that it should address efficacy issues. Bandura (1994:79) argues that the “development of self-efficacy related to a single task is cyclical; as one masters a particular skill, this reinforces or increases the belief one can perform that skill and believing that one can perform the skill improves the actual performance of the skill.”

One of the theoretical approaches which largely rely on efficacy messages in order to have desired effects is fear appeal. Several scholars have argued that fear appeal messages must possess efficacy components, including both self-efficacy (the belief that one can do an action) and response efficacy/outcome expectancy (the belief that a recommended action will have a desired outcome) (Perloff, 2008; Stephenson & Witte, 2001; Witte, Meyer, & Martell, 2001). To change a health behavior after exposure to a fear appeal, people must believe there is a corresponding action they are capable of doing and that the action will successfully alleviate the threat (Beck & Lund, 1981; Stephenson & Witte, 2001; Witte, Meyer, & Martell, 2001).

Borrowing from Extended Parallel Process Model (EPPM), threat motivates action while efficacy determines nature of action. When the threat is low, there will be no response to the message where it will not even be processed in the first place as a result efficacy cannot be considered. When the threat is high, and efficacy high, then men will control the danger and protect themselves thus seek male circumcision. On the other hand, when the threat is high and efficacy is low, then men no longer think that they can do something to effectively avert the threat then they begin to control their fear instead of the danger and simply ignore the message (Witte, Meyer & Martell, 2001).

IAS (2013) conference heard that in Zambia, men going for circumcision or not was associated with traditional HIV risk factors such as men with two or more sexual partners in the last year were 40 percent more likely to get circumcised than monogamous men and community norms about being circumcised are changing markedly. It was also reported that the so-regarded as secondary benefits of social conformity, sexual attractiveness and feelings of being in control as a man were considerably more critical in making the decision to undergo the surgery than the expected perceived direct health benefits (International AIDS Society, 2013). Conversely, VMMC campaign message emphasize that male circumcision is an additional prevention method for men, but that it does not replace measures such as delay in the onset of sexual relations, avoidance of penetrative sex, reduction in the number of sexual partners, and correct and consistent use of male or female condoms (Doyle et al., 2010). This is enough evidence that communicating partial protection remains challenging (Dickson et al., 2011).

While many men seeking VMMC may understand the protective benefits of circumcision, they are more likely to consider VMMC for other reasons, including hygiene, pleasing a sexual partner, and conforming to peer norms (Lissouba et al, 2011). The Rakai Health Sciences Program in Uganda has been conducting safe male circumcision in since 2003 but experienced a demand plateau in 2013. Research that followed noted that the protective benefits were well understood by men and suggested that future campaigns could overcome that plateau by presenting VMMC as an aspirational procedure (Clearinghouse on Male Circumcision for HIV Prevention Website).

The key VMMC messages in all Sub Saharan countries include the fact that male circumcision provides only a partial protection. This message is consistent across all VMMC communication strategies. Moreover, identified barriers to VMMC include fear of HIV testing that precedes circumcision, concerns about adverse effects (e.g. lack of sexual pleasure), (Lagarde et al., 2003; Ngalande et al, 2006) transport costs (Nieuwoudt et al., 2012), time off from work (Nieuwoudt et al. 2012; Rain-Taljaard et al, 2003), temporary sexual abstinence and unsupportive cultural norms (Nnko et al., 2001).Herman-Ruloff et al. (2011) noted some of the barriers to male circumcision among older men as being hesitations about taking time off work after surgery and particular concerns regarding abstinence from sex for the recommended six weeks post-surgery especially among married men. To others it is the fear that it would be painful (International AIDS Society, 2013).

These barriers need to be adequately addressed in any communication strategy. However, it seems that most communication strategies do not address one of the main barriers for seeking male circumcision—fear. However, Kenya’s communication strategy does suggest that issues on how to reduce men’s fears about getting the procedure should be included in the design of key messages. Except for the lack messaging around pain during the procedure, the key messages of most communication strategies answer most of questions that uncircumcised men raise in acceptability studies of male circumcision (Wouabe, 2013).Some of the fear is caused by awareness of traditional male circumcision where pain is thought to be a pre-requisite for the procedure. Interventions to promote VMMC need to center on the fact that VMMC is a minor operation, which is not painful as it is performed under local anesthesia (Hatzold et al., 2014). Hatzold et al. (2014) suggest that there is need to position VMMC as a lifestyle choice rather than an HIV prevention method so as to increase acceptance of the service by both men and women, in addition to countering perceptions that the procedure only benefits “promiscuous” men. Thus, the VMMC campaign should portray male circumcision as a lifestyle choice for the “smart” man, one who is clean and elegant. The campaign should seek to portray circumcised men as confident, outgoing, sexually appealing, and set to succeed in life.

Wouabe (2013) analyzed various VMMC communication strategies in Africa and noted the strategies indicate that although the emphasis and focus of each message will change depending on the audience and intended communication outcome, the following key messages were common throughout:

First, male circumcision works: Scientific evidence clearly shows that male circumcision reduces the risk for HIV infection, providing partial protection against HIV for men. Studies show that male circumcision reduces the risk for HIV acquisition in men by about 60 per cent. Second, male circumcision does not replace other HIV prevention methods: Whether circumcised or not, men are at risk for HIV infection during sexual intercourse. It is important that they limit their number of sexual partners, use condoms consistently and correctly and seek prompt treatment for STIs to further reduce their risk for infection. Third, circumcised men can be infected with HIV and can infect others: Not all men who are circumcised are HIV negative. Some circumcised men are HIV positive. Circumcised men who are HIV positive may still transmit HIV to their sex partners. Using a condom reduces this risk. Fourth, the healing period is important: Newly circumcised males should abstain from sex for about 6 weeks to ensure that the penis is fully healed, as they could be at increased risk for infection during this time. Fifth, safety is paramount: Circumcision should be done at health facilities with appropriately trained providers and proper equipment, under

aseptic conditions. However, whether the procedure takes place in a clinical or traditional setting safety is of paramount importance. Finally, male circumcision is a matter of informed choice: Evidence-based information on male circumcision should be made available so that males and their parents can make an informed decision on whether or not to go ahead with the procedure.

In a health care encounter, the choice of words clients and providers use greatly influences how well they understand each other (de Negri, et al., n.d). Hendriks (n.d) asserts that studies show very little about the influence of message characteristics on conversational valence. Valence deals with how a message is conveyed in positive, negative or neutral terms. Though he is quick to add that some studies have focused on which types of messages predict whether people talk about the topic of a message. These studies reveal that emotions play a critical role herein. Messages that elicit feelings of fear, amusement, or disgust have been evidenced to prompt discussions, whereas message-induced feelings of sadness, guilt, or contentment reduce conversations (Berger, 2011; Brennan et al., 2010). Whether emotions of fear, disgust, and humor, which are often used in health campaigns (Cohen et al., 2007), also influence the valence of discussions is not yet known. However, it is possible that, for example, fear increases the accessibility of fear-related concepts in working memory (Goldstein et al., 2013), and these accessible concepts can subsequently serve as a relevant conversational anchor (Strack & Mussweiler, 1997) resulting in a more negative conversational valence.

Therefore, it is very important to consider the emotional characteristics of health messages and the role of conversational valence when investigating health campaign effects. According to Hendriks (n.d) conversational valence influences determinants of health behaviors. For instance, studies have shown that better parent-adolescent communication has been associated with fewer incidences of risky sexual behaviour, while negative communication has been related to risky adolescent sexual behavior (Boone & Lefkowitz 2007). Hendriks acknowledges the dearth of studies on the predictors and consequences of conversational valence hence little is known about the process through which conversational valence influences health determinants. He adds that self-perception plays a role in the process through which conversational valence influences the predictors of health behaviors.

Conversational valence has a substantial influence on health-related attitudes, subjective norms, perceived behavioral control, intentions, and behaviors, suggesting that conversational valence, in addition to conversational occurrence, should be considered more often (Hendriks, n.d).

Additionally, health campaign exposure may influence conversational valence. However, given the limited research on the potential predictors of conversational valence, this possibility has not yet been tested. The consequences of conversational valence, however, have been addressed by a few studies. These studies have shown that conversational valence influences predictors of health behaviors (Hendriks et al., 2014). Discussions that is positive toward healthy behaviors or negative toward unhealthy behaviors result in desirable and healthy attitudes, intentions, and behaviors. However, when people speak negatively about healthy behaviors (being circumcised) or positively about unhealthy conduct (being uncircumcised), this results in unhealthier determinants of health behaviors. Despite these studies demonstrating the important

consequences of conversational valence, it is not yet known whether conversational valence can be predicted by health campaign exposure. However, health campaigns can prompt a more negative conversational valence about unhealthy behaviors because many health messages aim to reduce unhealthy conduct by stressing the negative consequences of unhealthy behavior (Hendriks, n.d). Therefore, exposure to a health message versus no health message elicits a more negative conversational valence toward unhealthy behavior. This result raises the question of which types of health messages are especially likely to elicit a desired conversational valence because health messages may differ in the persuasive strategy employed.

However, Sgaier et al. (2015) recommend innovative solutions to create demand for male circumcision that do not only focus simply on the public health benefits of VMMC but crafting coordinated messages that address the cognitive, emotional, cultural, and structural barriers that can hinder a man's decision to be cut – and the corresponding drivers that can ably enable that decision. Coordination minimizes confusion by ensuring that messaging is accurate, culturally appropriate, and not in contradiction with other VMMC messages likely to be encountered by the target population. The message targeting men for VMMC need to consider that man's motivations to get circumcised may be other than protection for HIV; more near-term benefits such as protection from STIs might be more relevant, and VMMC may be seen as “modern” or inspirational. The appeal of belonging to a group can also be persuasive message. PATH (2008) adds that as more is learned about effective responses to the HIV epidemic, behaviour change interventions have moved from giving messages that focus on individual sexual behaviour to processes involving dialogue and discussion about local contexts and barriers to risk reduction, care, and treatment.

Kaler (2003) and Kaler (2004) observe that in Malawi many Malawians obtain sexual health information, including information on HIV/AIDS, through interpersonal communication with members of their communities however Conroy (2006) cautioned that sexual health information obtained from these discussions may not be accurate. As a way forward, Gostin and Hankins (2008) have suggested that health professionals should responsible for providing full and accurate information necessary to secure informed consent for male circumcision, including risks, benefits, and the right to refuse the procedure without risk of reprisal or other adverse consequence. Clinical information should be communicated in a culturally appropriate manner, with due regard for the person's literacy, linguistic, and educational level. Boys and men, moreover, should have the right to make decisions about circumcision without undue influence from peers, sexual partners, or health professionals.

Given the influence of interpersonal communication in propagating norms, the accuracy of information disseminated in a community must be of particular concern to public health professionals. Inaccurate information, in this case, discouraging uptake of VMMC, can be perpetuated in a community and this can take on a life of its own. This social amplification of risk through communication networks, for example, is a subject that scholars have long recognized (Pidgeon, Kasperson & Slovic, 2003). This is a call to public health professionals to be cognizant about dominant narratives that exist in a community that may facilitate or hinder male circumcision intervention goals.

While many health communicators have spent both money and time crafting messages to encourage adoption of male circumcision to curb the spread of HIV, very few campaigns have

been effective to encourage adult men seek the “cut” (Sgaier et al, 2015; Westcamp et al, 2012). What can be gleaned from the discussion so far is that a greater understanding of the influence of interpersonal communication messages in the uptake of VMMC is necessary in order to create demand for HIV prevention especially among older and married men. As seen above the messages can be more persuasive if message self-efficacy, responsive efficacy, severity and susceptibility are considered given that the decision to undergo circumcision involves a change in one’s beliefs and the procedure is seen as painful. Also, interpersonal communication messages may be reinforcing instead of addressing the already existing fears men have towards adopting circumcision as was observed by Hendriks (n.d) and Hendriks et al. (2014).

Uptake of Male Circumcision

A major determinant of male circumcision especially among English speaking developed world has been the awareness of improved penile hygiene and the reduction in the risk of STIs. In North America, Europe, Australia and New Zealand, circumcision was mainly sought for health and hygienic reasons. Circumcision was believed to prevent a variety of diseases and behaviour such as masturbation, syphilis and nocturnal incontinence (Clifford, 1893 as cited by WHO, 2009). Likewise, in Sub-Saharan Africa, circumcision determinants were found to include penile hygiene and reduced risk of STIs, especially in non-circumcising communities (Westercamp & Bailey, 2007). In a Teaching University Hospital in Lusaka, Zambia, 91% of the clients undergoing circumcision cited a lowered risk of STIs, including HIV infection as a major determinant (Bowa & Lukobo, 2006 as cited by WHO, 2009). Similarly, 96% of the uncircumcised men and 97% of the women in Nyanza Province in Kenya revealed that circumcised men can easily maintain penile hygiene (Mattson, et al., 2005). Likewise, in the United States of America (Dave et al., 2003 as cited by WHO, 2009) and Ghana (Niang, 2006 as cited by WHO, 2009) circumcision was mainly carried out on the perception of improved hygiene. Men attending focus groups in Botswana (Kebaabetswe et al., 2003), Kenya (Mattson et al., 2005) Malawi, the United Republic of Tanzania (Nnko et al., 2001), Zambia and Zimbabwe (Westercamp & Bailey, 2007) believed that male circumcision enhanced penile hygiene.

Additionally, sexual attraction and improved sexual pleasure have been identified as determinants of male circumcision. Studies carried out in the Philippines (Lee, 2005 as cited by WHO, 2009) and in the Republic of Korea (Ku et al., 2003 as cited by WHO, 2009) showed that women preferred circumcised men due to the perception that circumcision enhanced sexual pleasure. In Nyanza Province, 55% of uncircumcised male respondents were of the view that women enjoyed sex more with circumcised men and this was a strong predictor of circumcision. Moreover, the majority of women in the study were of the opinion that circumcision enhanced sexual pleasure (Mattson et al., 2005). Countries in Africa such as the United Republic of Tanzania (Nnko et al., 2001), South Africa (Lagarde et al, 2003) and Nigeria (Myers et al., 1985 as cited by WHO, 2009) revealed that both men and women perceived that circumcision enhances sexual pleasure.

There is a glaring degree of variation in the age at which circumcision maybe carried out. For effective protective effect against HIV acquisition, Van, Dam & Anastasi (2000) suggest that male circumcision should be conducted before sexual debut or soon after the onset of sexual activity.

A study by Bailey et al., (2002) revealed that half of the participants felt male circumcision should be performed during infancy or early childhood for various reasons such as pain, less time to heal and an inherent feel of assuming a circumcised penis is natural. Additionally, medical professionals advocated for neonatal or infant circumcision (Bailey et al., 2002). Likewise, among the Muslim and Jewish cultures, circumcision is mainly conducted at the neonate stage with the exception of male adults converting to either Judaism or Muslim faith (Doyle, 2005).

In many African countries, circumcision is mainly carried out at the teenage stage (Doyle, 2005) however; this is not completely universal as there are country variations. For instance, in Ghana, circumcision is mainly performed among neonates while in Burkina Faso the median age is 5-7 years (DHS, 2006 as cited by WHO, 2006), in Zambia, it is 7-10 years (Bowa, 2006 as cited by WHO, 2009) and 8-16 years in Kenya (Agot & Bailey, 2006 as cited by WHO, 2009) and the late teens or twenties in Tanzania (Nnko et al., 2001) and South Africa (Auvert et al., 2001). In the Middle East, Central Asia and in Muslim-leaning Asian countries such as Indonesia, Pakistan and Bangladesh, circumcision is conducted at infant stage (Drain, 2006 as cited by WHO, 2009). In the Republic of Korea, circumcision is routine and usually takes place at adolescence at ages 10-15 years (Kim, Lee, & Pang, 1999 as cited by WHO, 2009). In the Philippines, male circumcision is practiced at various stages, one study discovered that 42% of the boys had the cut at an age less than 10 years, 52% of the boys had the surgery at ages 10-14 years and 5% between 15-34 years (Lee, 2005 as cited by WHO, 2009). Neonatal and child circumcision has been widely adopted in North America, Europe Australia and New Zealand. However, in Central and South America circumcision is uncommon.

In the absence of pharmacological, immunological, and medical interventions, the change in behavior and attitude of the public may only be considered a possible way for the prevention and cure for HIV/AIDS. Recent scientific studies show that Voluntary medical male circumcision (VMMC) is capable of reducing the risk of sexual transmission of HIV from females to males by approximately 60%. In 2007, the WHO and the Joint United Nations Program on HIV/AIDS (UNAIDS) embraced and recommended VMMC part of a comprehensive HIV prevention package in countries with high HIV prevalence and low rates of male circumcision. The target in Eastern and Southern Africa is 80% coverage of adult male circumcision by 2016. While VMMC programs have grown dramatically since inception, they appear unlikely to reach this goal. Kenya has recorded good progress in meeting its target however; uptake among adult men is remarkably low while HIV infection on an increase among married people.

The thirteen Eastern and Southern African countries are struggling to scale-up voluntary medical male circumcision (VMMC) as part of a comprehensive HIV prevention strategy (WHO/UNAIDS, 2011; Hankins, Forsythe, & Njeuhmeli, 2011; Njeuhmeli et al., 2011). Mathematical modeling reveals that circumcising 80% of the male population aged 15–49 in these 13 countries by 2015 and sustaining this coverage level thereafter could avert 430,000 new HIV infections by 2015 and 3.36 million HIV infections by 2025 (Hankins, Forsythe, and Njeuhmeli, 2011; Njeuhmeli et al., 2011).

While redoubling efforts to implement this highly cost-effective HIV prevention strategy, it is equally important to recognize the challenges associated with scaling up VMMC. Unlike other HIV

prevention methods, such as delaying sex, being faithful or using a condom, VMMC at present involves a surgical procedure, which many men may understandably be resistant to. Moreover, reaching saturation coverage of VMMC will require far-reaching changes in social norms in many settings (VAC, National Empowerment Network of People Living with HIV/AIDS in Kenya (NEPHAK), Sonke Gender Justice and Uganda Network of AIDS Service Organizations (UNASO), 2012).

Understanding and addressing the barriers and motivators to VMMC uptake to inform effective demand-creation is an urgent priority in the targeted countries in Sub Saharan Africa (Herman-Roloff et al, 2011). Generating demand for VMMC represents a social marketing challenge par excellence (Bertrand, et al. 2012). It is likely to be particularly challenging to market VMMC in traditionally non-circumcising communities, where the connotations of having been circumcised were until recently, largely negative.

Studies utilizing either quantitative or qualitative or both methods have been carried out to establish the acceptability of male circumcision in a number of countries. To start, the Women's HIV prevention Track Project (WHiPT) was carried out in five African countries: Kenya, Namibia, South Africa, Swaziland and Uganda (AVAC, 2010). The aim of the project was to "document and analyze women's perspectives and levels of participation in discussions and decisions about Medical Male Circumcision for HIV prevention" (AVAC, 2010, p.5). The study employed both quantitative and qualitative research approaches with a sample of 494 women for the survey and 40 focus group discussions. The results highlighted that women would accept the implementation of medical male circumcision with 87% vouching for the introduction of the surgery. Additionally, another study carried out in Kenya, South Africa, Swaziland, Tanzania and Zimbabwe determined the acceptability of male circumcision revealed that 60% of the men interviewed mentioned the need to be circumcised (UNAIDS, 2006).

Westercamp and Bailey (2006) reviewed studies carried out in Sub-Saharan Africa to establish acceptability of male circumcision in traditionally non-circumcising communities. They reviewed thirteen studies from 9 countries. In Botswana, Kenya, South Africa and Swaziland results showed that women would prefer circumcision for their sexual partners or male children while men preferred circumcision for both self and son. The researchers revealed that 75% of the parents would consider circumcision for their sons citing that it was affordable and protective of STIs and HIV. Overall, the median proportion of uncircumcised men willing to undergo the procedure was 69% (range 29-87%). Similarly, 69% of the female participants favoured circumcision of their partners and 71% and 81% of men and women respectively were willing to circumcise their sons. There were however notable geographical variations, with 51% and 45% of the men in rural and urban settings respectively willing to be circumcised. Studies that were both urban and rural in nature showed an acceptability rate of 77%.

Kebaabetswe et al., (2003) conducted a cross sectional survey in 9 geographically representative locations in Botswana to find out the acceptability of male circumcision, preferred age and setting for circumcision. Standardized questionnaires were utilized to collect data both pre and post informational session outline the risk of and benefits of male circumcision. A total of 605 people were surveyed and results highlighted that the median age was 29 years and 52% were male.

During pre-information sessions 68% of the respondents said that they would accept and circumcise a male child if the surgery was offered free of charge in a hospital setting. This number increased during post information session to close to 90%. Among 238 uncircumcised men, 61% opted for circumcision, this number increased during the post information debriefing to over 80%. The preferred age for circumcision was 6 years and 90% of the participants vouched for male circumcision to be carried out in the hospital.

Bailey et al. (2002) researched on the acceptability of male circumcision in Nyanza, among the Luo ethnic group, a traditionally non circumcising tribe. Focus group discussions (FGDs) and semi-structured interviews were employed to collect data. FGDs targeted adult men and women separately. Semi-structured interviews were conducted with 9 health professionals. FGDs highlighted that participants favoured circumcision majorly for STIs/HIV risk reduction and improved cleanliness (Bailey et al., 2002). Additionally, FGD showed that the male "cut" might make the Luo community more acceptable to Kenyans, as participants perceived that the Luo have been discriminated against several aspects of the socio-political platform. Moreover, the researchers highlighted that the acceptability of male circumcision among boys and young Luo men was associated with peer identification.

Halperin et al (2005) in their study to determine the acceptability of male circumcision among men at various beer halls in Harare revealed a lower stance on male circumcision than other similar studies carried out in African countries. The study was done in 2000 and data was collected from 200 men and FGDs conducted on 12 men. A rare revelation is that despite the absence of male circumcision information, education and communication then, close to half the men expressed willingness to undergo the surgery. Forty-five percent agreed to be circumcised; however, this proportion is lower than other studies carried out in Africa, for example, Kenya and Botswana that recorded acceptability rates of 60% and above 80% respectively.

The AIDS epidemic for many years has been shrouded in ignorance- and that ignorance does not help prevent the spread of the infection according to Middle East and North Africa and UNAIDS (2006). A review of the global literature found that "there is a significant unmet need for information, education, and services for sexual and reproductive health for married and unmarried young people" (Shaw, 2009: 135). In order to change behavior, people need to know what the risks are and how to protect themselves. And they need this information early enough to make a difference in outcomes.

Moses et al. (1998) have documented a positive biological correlation between male circumcision and STIs (chancroid and syphilis). Lack of circumcision was thought to enhance the risk of STIs and HIV infection due to the physiological nature of the prepuce (Fleming & Wasserhei, 1999 as cited by Weiss et al., 2000). Observational data have highlighted plausible biological reasons as to why the removal of the foreskin would reduce the risk of acquiring HIV in men (Justman et al., 2013). The foreskin is susceptible to epithelial disruptions, or tears, during intercourse, which may allow HIV a portal of entry and compared with the tissue of the outer foreskin, the foreskin's HIV target cells (Langerhans cells with CD4 receptors) are closer to the epithelial surface (Dinh & Fahrbach, 2011; Krieger & Heyns, 2009).

Knowledge of HIV and sexual behavior are important variables in the discourse of male circumcision as an additional prevention strategy. Mavhu et al. (2011) conducted a research to

find out male circumcision prevalence, knowledge, attitudes among rural Zimbabweans. A total of 2,746 individuals participated in the study in which 64% were women and only 20% of the men were circumcised. Knowledge of male circumcision and its health benefits was low. However, given the role of male circumcision on HIV infection, 52% of the men reported that they would undergo circumcision. In another study and still in Zimbabwe, few participants were found to be aware of the benefits of male circumcision. Sixty-nine percent of the respondents revealed that male circumcision reduces STIs (Halperin et al., 2005). However, only 39% of the men indicated the impact of male circumcision on HIV and only 12% mentioned that circumcision promotes hygiene and sexual cleanliness (Halperin et al., 2005).

On the contrary the results were not the same as a study conducted in Mazowe, Zimbabwe, a mining and farming community. People have “very good” knowledge of HIV in terms of how it is transmitted and how one can prevent possible infection. It was reported that 21 percent perceive that they had no risk of getting infected with HIV while another 32.6 percent said stated low risk. Here, the reasons attributed to for the low risk range from faithfulness (57 percent), abstaining (17 percent) and condom use (18 percent). It is imperative to note that in this study one person is reported to have cited circumcision as the reason for the perceived low risk and 7 percent questioned the efficacy of male circumcision for HIV prevention (Chikutsa, 2011).

According to Barden-O’Fallon and Degraft-Johnson (2004) men who are raised in urban environments are, on average, more equipped with HIV information than men who are raised in rural environments, perhaps because urban children typically have greater access to educational resources than rural children. They acknowledge that among both men and women, higher levels of education correspond to increased knowledge about HIV/AIDS and that people who have lost friends or family member to the fatal disease are likely to have greater knowledge about HIV/AIDS because of their personal and firsthand exposure to the problem.

Barden-O’Fallon and Degraft-Johnson (2004) make an unexpected revelation that greater HIV/AIDS awareness among men does not seem to correspond with increased perceived risk; on the other hand, ballooning levels of knowledge about HIV/AIDS do correlate positively to perceived risk among women. Since higher HIV knowledge has been shown to be significantly associated with safe sex behaviors (Meundi et al., 2008), educating the general population about HIV is an important strategy in the control of the HIV epidemic. However, Chikutsa (2011) adds that increased support and knowledge of male circumcision for HIV prevention is unlikely to translate to increased uptake by adult men. However, he reckons that improving people’s knowledge on the advantages of male circumcision will positively influence people’s attitudes towards male circumcision.

Although male circumcision is not a panacea to spread of HIV, it is a necessary “tool” to combat that spread. Since there are effective alternatives, there is no basis for restricting access to information to prevent HIV transmission through sex. While abstinence, fidelity and condom use may work pretty well for some people in some cases, promoting these behaviours at the expense of [male circumcision] deprives people of complete information and services for HIV prevention (Human Rights Watch, 2004). Additionally, it is suggested that it is possible to improve individuals’ knowledge of medical male circumcision through interpersonal communication interventions as IPC interventions have previously been used in many different areas of public health with varied population (Piotrow et al, 1997).

Today male circumcision is executed for reasons beyond religion and ethnicity. These include social, health and hygienic purposes for example, in North Korea, circumcision is preferred by 61% of the boys and the reason attributed to this choice is to avoid being ridiculed by peers. A strong factor of male circumcision especially among Anglophone developed countries has been the knowledge of improved penile hygiene and the STI reduction risk. In North America, Europe, and Australia, male circumcision was majorly adopted for hygienic and health reasons. Male circumcision was believed to prevent a range of diseases and sexual behaviour such as masturbation, syphilis and nocturnal incontinence (Clifford, 1893 as cited by WHO, 2009). Westercamp & Bailey (2007) add that in Sub-Saharan Africa, male cut determinants especially among non-circumcising communities were found to entail penile hygiene and reduced risk of STIs.

In Zambia, a study was conducted targeting urban and rural married and unmarried men aged 18 to 39 (Lukobo & Bailey, 2007). Thirty-four focus group discussions were carried out; 17 with men and 17 with women in four districts. The study examined male circumcision practices, opinions, and acceptability as an intervention to improve male genital hygiene and reduce sexually transmitted infections, including HIV-1. Results showed diverse perceptions on male circumcision. Traditional groups practicing male circumcision revealed that uncircumcised men experienced premature ejaculation, decreased penile hygiene and were unfit for marriage. For men, circumcision was believed to be a developmental milestone. It was also perceived to protect one from sexually transmitted diseases. Opinions were expressed in respect to enhanced sexual pleasure; circumcised men were thought to “perform” longer, thereby increasing their female partner’s satisfaction (Lukobo & Bailey, 2007). However, men not practicing traditional male circumcision expressed limited interest in the practice although some expressed considering circumcision because of beliefs that women preferred circumcised men (Lukobo & Bailey, 2007). Likewise, non-circumcised participants revealed that they would adopt male circumcision for themselves or their sons if it was proven to reduce the risk for HIV and STIs and if it was offered free of charge or at minimal cost.

Additionally, sexual attraction and improved sexual pleasure have been mentioned as determinants of male circumcision. Studies carried out in the Philippines (Lee, 2005 as cited by WHO, 2009) and in the Republic of Korea (Ku et al., 2003 as cited by WHO, 2009) highlighted that women preferred circumcised men due to the perception that circumcision boosted sexual pleasure. In Nyanza Province, Kenya, 55% of uncircumcised male respondents carried the opinion that women enjoyed sex more with circumcised men and this was a strong predictor of circumcision. Similarly, the majority of women involved in the research were of the opinion that circumcision enhanced sexual pleasure (Mattson et al., 2005). Some African countries such as the Tanzania (Nnko et al., 2001), South Africa (Lagarde et al, 2003) and Nigeria (Myers et al., 1985 as cited by WHO, 2009) showed that both men and women perceived that circumcision enhances sexual pleasure.

According to Castellsague et al. (2002) improved uptake of male circumcision may be triggered by involving motivators for male circumcision beyond those associated with individual risk perception for instance improved hygiene, perception of responsible man choice, perception of

sexual partner preferences, and enhanced health benefits for their female partners, including a reduced risk of cervical cancer.

Several challenges stand in the way of rolling out a successful male cut programme. Studies have revealed pain, bleeding and cultural tradition as some of the obstacles to male circumcision acceptability. Wamai et al (2011) highlighted that there are potential health care system challenges that might make it unattainable to have a successful male circumcision intervention programme. Factors such as, the politics surrounding policy development, funding and changing socio-cultural perceptions and beliefs about male circumcision might be possible obstacles (Potts et al., 2008; Patrick et al., 2009 as cited by Wamai et al., 2011).

Bailey et al., (2002) noted that in Kenya being uncircumcised was regarded as an identity for the Luo culture, this was perceived as a cultural tradition that was regarded as an obstacle to adoption of circumcision. Participants in the study regarded the lack of male circumcision as a significant component of Luo identity aside from language. The introduction of circumcision was thought to erode their identity as tribes. The study revealed that pain during and immediately after the procedure and during the healing process was seen as a significant barrier to circumcision. Participants expressed concern over bleeding in medical, traditional or religious circumstances. Infections and poor healing process were also seen as possible barriers to circumcision. This was especially expressed in the context of traditional circumstances where non-sterile conditions abound.

In a study conducted using 12 focus group discussions on uncircumcised men in Nyanza Province to assess the non-hypothetical, facilitators and barriers to the uptake of male circumcision revealed that participants identified time away from work; culture and religion; possible adverse events; and the post-surgical abstinence period as the primary barriers to circumcision uptake. Other barriers documented included: long distance to the health facility, a decrease in male and female sexual satisfaction and peer influence against male circumcision (Herman-Roloff et al, 2011).

Social and cultural barriers to male circumcision go beyond lack of knowledge, however, and include lack of social support. In families and among married couples, many sexual and reproductive health topics are highly stigmatized and charged with emotion, shame and fear. Women for example are traditionally unable to discuss such issues with their husbands. Therefore, to promote male circumcision initiatives that continue to challenge the status quo and patriarchal traditions that keep sexual issues restricted and stigmatized are crucial (kumar, Hessini & Mitchell, 2009). Duggan (2006) observes that silence or avoidance of health issues reduces the ability of the people to receive the necessary social support that would enable them to cope with health problems, access health care, and make health-related decisions.

Plotkin et al. (2013) recommend that VMMC programme implementers need to address barriers to VMMC services especially among adult men such as shame associated with being circumcised at an older age by providing selected service delivery sites segregated by age to render services that are “friendly” to adult men. They add that these services ought to be complemented with behavior change communication initiatives to address concerns of older men, encourage women’s support for circumcision and adherence to post-surgical abstinence period and change social norms that impede older men from seeking circumcision.

Health communication interventions should be directed at changing those variables that are important determinants of seeking male circumcision in the target population. Communication interventions that address an “unimportant” variable are likely to fail. Thus, before developing a communication intervention, it is important to determine whether people have or have not formed an appropriate intention, and, if not, to ascertain whether that intention is influenced primarily by attitudes, norms, and/or issues of self-efficacy.

Institute of Medicine Committee on Communication for Behavior Change in the 21st Century (2002) have argued that once the critical determinants of a specific behavior change in a particular population have been identified, what should follow is to develop health communication interventions to change those determinants. Ultimately, this process involves changing a person's underlying beliefs about the consequences of performing the health behavior, about the expectations or behaviors of others, or about one's ability to perform the behavior under a variety of challenging circumstances. For example, in order to change an attitude towards male circumcision, it is usually necessary to change outcome expectancies, that is, beliefs that seeking male circumcision will lead to certain positively or negatively valued outcomes. The more that a person believes that seeking male circumcision will lead to “good” outcomes (such as it will make me feel good) and prevent “bad” outcomes (such as prevent acquisition of HIV), the more favorable the person's attitude will be toward performing the cut. Similarly, the more one believes that specific relevant others think he should seek circumcision and the more one believes these others are performing the behaviors themselves; the more one will experience social pressure to seek circumcision. Lastly, the more an individual believes he can seek circumcision, even when specific impediments are present, the stronger that person's sense of self-efficacy will be. Therefore, a deeper understanding of the influence of interpersonal communication in the uptake of VMMC is necessary to create demand among older and married men.

Health Belief Model

Theory provides intellectual gyroscope for the conduct of research. Many theories and models of health behavior change are based on individual psychology. In fact, the assumptions (such as individualism as opposed to collectivism) on which these theories and models are based are foreign to many African cultures. In the majority of African contexts, the family, group, and community play a critical role in decision making. And yet, theories and models based on individualism continue to dominate communications strategies for HIV/AIDS prevention and care in such settings. While the effectiveness of these theories and models has been questioned in light of the growth of the HIV/AIDS epidemic in Africa, their value as important theories and models remains unchanged (UNAIDS & PennState, 1999). Consequently, the Health Belief Model was used in this study to explain the influence of interpersonal communication messages in the uptake of VMMC among married men.

As a theory, Health Belief Model (HBM) has a scholarly pedigree that is traceable to the early work of Hochbaum (1958) and continues to be a major organizing framework for explaining and predicting acceptance of health and medical care recommendations. It stipulates that a person's health-related behavior depends on the person's perception of four critical areas: the severity of a potential illness, the person's susceptibility to that illness, benefits of taking a preventive action,

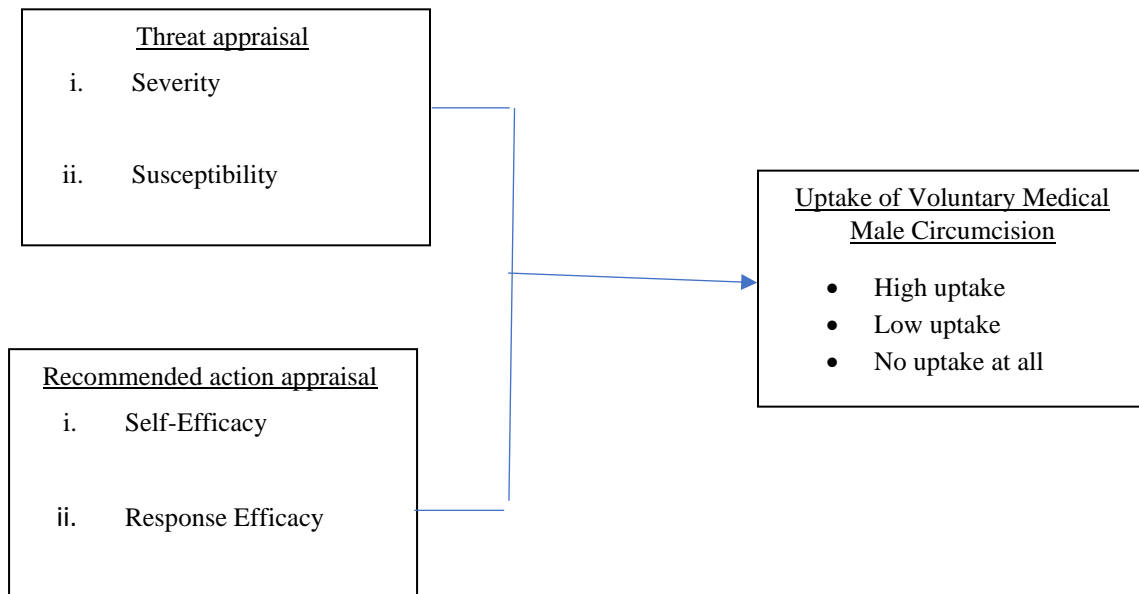
and the barriers to taking that action (Hochbaum 1958; Rosenstock 1960, 1966, 1974). The model also incorporates cues to action which are external influences promoting the desired behavior (e.g., approaching and talking to a health worker about VMMC) as important elements in eliciting or maintaining patterns of behavior (Becker, 1974). The so-called “cue to action” might be internal (i.e., symptoms) or external (e.g., interpersonal interactions). Most recently, the construct of self-efficacy, or a person’s confidence in his or her ability to successfully perform an action, was added to the model (Rosenstock, 1990), perhaps allowing it to better account for habitual behaviors.

The HBM is based on value expectancy theory, that assumes that individuals usually take preventive actions (risk-reduction behaviors) when they are personally susceptible to a disease (self-perception of risk) and acknowledge the repercussions as severe; they believe that taking preventive actions will be beneficial in reducing the risk of contracting the disease (e.g., male circumcision is effective against HIV infection), and that its perceived benefits will be sufficient to overcome perceived barriers such as pain or inconvenience of undertaking the actions (Melkote & Steeves 2001: 132).

Perhaps the most critical determinant of whether a person does or does not perform a given behavior is the person's beliefs about performing that behavior. Thus, this theory is critical in this study as it *identifies two factors that influence health protective behaviour: (i) the feeling of being personally **threatened** by disease which in this study is HIV, and (ii) the belief that the **benefits** of adopting the protective health behavior (medical male circumcision) will outweigh the perceived costs of it (circumcision procedure being painful, shame and abstaining from sex till complete healing). According to Edberg (2010) few HBM studies have attempted to assess contribution of “cue” such as interpersonal interaction to predicting health actions. In this study, therefore the theory is crucial in evaluation interpersonal communication induced messages in influencing men to seek circumcision as recommended health action. In short, this study employs the tenets of this model of severity of the threat (HIV), personal vulnerability to threat, responsive efficacy (perceived effectiveness of male circumcision in averting the threat) and self-efficacy (perceived ability to seek male circumcision) and barriers to self-efficacy in the interpersonal communication messages and their influence in married men seeking circumcision.*

Conceptual Framework

Interpersonal Communication Messages Uptake of Male Circumcision



Message content is what is widely studied in a message variable in interpersonal communication. Characterization of such discussions tends to differ based on efficacy of the messages exchanged, and severity such messages elicit to the communication participants. According to Witte, Meyer & Martell (2001) message severity or the treat component should be analyzed based on the severity of the threat (is HIV threat serious or severe?) and susceptibility to threat (can it happen to me or can I contract HIV?). Efficacy issues or recommended response should address response efficacy (does response work?), self-efficacy (can I do response?) and barriers to self-efficacy (what blocks me from doing the response?). For example, a message that applies fear appeal focusing on threat alone and no efficacy the conclusion is implicit.

In other words, Wittte, Meyer and Martell argue that threat determines the strength of response while efficacy determines the nature of response. However, the authors are quick to add that the definition of threat varies with target audience and target of threat varies culturally (group or individual). In other words, it is expected that a balanced threat (severity and susceptibility) and efficacy (responsive efficacy and self-efficacy) would result in uptake of VMMC as championed by the Health Belief Model. It is therefore expected that in this study a balanced recommended action and threat would motivate men to seek VMMC.

Methodology

Research Design

A quantitative research design was used to explore the factors hindering adoption of male circumcision for HIV prevention among men in Teso South Sub County in Western Kenya. This study was primarily designed to assess the perceptions of married men regarding averting the threat of HIV/AIDS, including their response to male circumcision message as one of the methods of preventing HIV/AIDS.

Study Site

This study was carried out in Teso South sub County in Busia County targeting married men aged between 20 and 49 years. The choice of the sub County was based on the fact that it is predominantly occupied by people from the Iteso ethnic group who do not culturally practice male circumcision as a rite a passage hence a target of VMMC campaign. According to Kenya National Population Census report (2009), there are 27372 households in Teso South Sub County with a total population of 66629 males. This sub County is subdivided into 12 rural administrative locations and 1 cosmopolitan urban location (Ang'orom location). The rural locations have a total of 21346 households.

Sample and Sampling Procedure

The sample size for this study's quantitative approach was 377 households/respondents that were distributed as follows:

Table 1: Distribution of Respondents

No	Name of Location	Total Households	Sample Size
1	Asinge	2080	37
2	Akoreet	1494	26
3	Okame	1825	32
4	Aremit	1650	29
5	Apegei	1533	27
6	Kwang'amor	1667	29
7	Among'ura	2128	38
8	Amukura	1179	21
9	Kaliwa	2216	39
10	Kaujakito	2563	45
11	Kotur	933	17
12	Ochude	2078	37
Total		21346	377

Systematic random sampling was used to pick the 377 households/respondents for this study. This sampling technique yields a representative sample in addition to more conducive to covering a wide study area. This random sampling technique employed to pick respondents for this study, gave it the necessary external validity as the findings of this study can be generalized to the target population. Using either a local chief's office or a road junction as the starting point in a given administrative location, counting of households started from the first homestead on the left side of the road. While walking, every household/homestead seen or identifiable (only on one side of the road) was counted. Every third household/homestead was selected as a potential respondent household.

Whenever nobody was found in the selected household, the researcher moved on and chose the next household until somebody could be found in a household for administering the questionnaire. After this finally selected household the counting started again with "1" and the next household/homestead no. 3 was selected. Only one man was selected from each household, and in households with more than one eligible man, a Kish Table was used to select the study participant so that to ensure random selection of the sample. This involved ascertaining

the number of eligible men in the household and listing them by age then the table determined the man to be picked. Respondents qualified for the study only if they fulfilled the following criteria: aged 20–49 years; married, being a member of the household for at least 12 months; present at the time scheduled for administering the questionnaires. These measures that were employed ensured 100% response rate for this study.

Data Collection

This study employed self-administered questionnaires to collect quantitative data. According to Rubin et al. (2010) self-administered questionnaires are best for collecting personal or sensitive information like information on male circumcision. The Kenya National Strategy on VMMC appreciates as a matter of principle that male circumcision is a culturally sensitive matter and recommends the need to minimize stigma that may be associated with an individual's circumcision status. Quantitative data collected included the nature of interpersonal communication messages about male circumcision and respondents' perceptions about the threat of HIV/AIDS in respect to severity and vulnerability to it, and efficacy in respect to response efficacy and self-efficacy. The study therefore used self-administered questionnaires to collect data from married men in the sampled households. The questionnaire was designed by the lead researcher with input from his supervisors.

Data Analysis and Presentation

Descriptive and inferential statistics were used to analyze content of quantitative data obtained from the questionnaires administered to the sample under this study. This data was tabulated and then appropriate statistical analyses, interpretation, and recommendations pertaining to the research objectives were made through the following steps: -

- i. Editing and coding survey data where coding involved responses being classified into meaningful categories with numbers assigned making intuitive sense
- ii. Entering of coded data into the computer using Statistical Package of the Social Science (SPSS)
- iii. Conducting basic analysis such as frequency distribution, means analysis
Using graphs and pie charts

In statistical analysis relationship between or differences supporting or at variance with the research questions were subjected to test of significance to determine validity of data and indicate conclusions. In statistical analysis, causal analysis of correlation analysis was applied. According to Kothari (1992) analysis is a joint variation of two or more variables whereas causal analysis was concerned with the study of how one variable affected changes in another variable; the functional relationship existing between existing two variables hence, regression analysis by use of a computer software SPSS. Open responses were coded before all were captured in SPSS for analysis. Data analysis focused on individuals' knowledge and perception of the danger of HIV/AIDS (severity and susceptibility) and efficacy of male circumcision (response efficacy and self-efficacy) based on interpersonal communication messages, willingness to seek circumcision and barriers to seeking circumcision.

The analyzed quantitative data was presented using text and tables. Tables were used for giving structured numeric information, graphs and charts for showing relationships and text to explain key points in the charts, graphs and tables.

Ethical Consideration and Approval

This study was approved by the board of Postgraduate studies of Jomo Kenyatta University of Agriculture and Technology and National Council for Science, Technology and Innovations of Kenya (NACOSTI). All respondents were given complete and detailed information about the study and signed consent form before the study to show willingness to participate in the study.

Results and Discussions

Socio-demographic Characteristics of Respondents

Age of Respondents and their Circumcision Status

Table 2 shows the distribution of respondents by age. The Table demonstrates that the respondents were between ages 20 and 49 years against their circumcision status.

Table 1: Respondents' Distribution by Age and their Circumcision Status

Age Cluster	Circumcised Respondents (n=327)		Uncircumcised Respondents (n=48)	
	Frequency	Percent	Frequency	Percent
20-24	23	7.0	4	8.3
25-29	65	19.9	5	10.4
30-34	56	17.1	11	22.9
35-39	84	25.7	14	29.2
40-44	62	19.0	5	10.4
45-49	37	11.3	9	18.8
Total	327	100	48	100

Note: "Undecided" are omitted.

Respondents' Educational Levels and their Circumcision status

Table 3 shows the distribution of respondents in term of the highest educational level attained against their circumcision status.

Table 3: Educational Level * Circumcision Status Cross Tabulations

		Respondents' Circumcision Status		
		Uncircumcised (%)	Circumcised (%)	Total (%)
Education Levels	Primary	32(66.7)	123(37.6)	155(41.3)
	Secondary	15(31.3)	136(41.6)	151(40.3)
	Tertiary	0(0)	51(15.6)	51(13.6)
	University	1(2.1)	17(5.2)	18(4.8)
Total		48(100)	327(100)	375(100)

Note: "Undecided" are omitted.

Circumcised respondents and when they were circumcised**Table 2: When the Circumcised Respondents were circumcised**

When Respondents were Circumcised	Frequency	Percent
When already married	117	35.8
Before marriage but after 18 th birthday	79	24.2
Before marriage and before 18 th birthday	130	39.8
No answer	1	.3
Total	327	100.0

From Table 4 above, only 35.8% said that they were circumcised while already married and 24.2% circumcised as adults but before marriage. Majority (39.8%) circumcised before attaining age 18. What can be deduced is that there are fewer people getting circumcised while already married. This means marriage is a barrier to seeking circumcision. In other words, there is low uptake of VMMC among married men and this gives impetus to this study.

Male Circumcision Interpersonal Communication Messages

Table 5 below outlines the most salient issues about male circumcision transacted via interpersonal channels obtained from the survey of this research. 2.7% of respondents said that they have heard that circumcision waters down their culture, 68.2% said it prevents HIV, 65% said prevents penile cancer, 75.6% said it gives nice appearance to the penis, 69.2% said circumcision is very painful, 39.3% said it improves sexual performance, 72.9% said it improves penile hygiene, 44.6% said it helps prevents cervical cancer to female sexual partners, 19.1% said that what they have heard is that circumcision reduces sexual satisfaction and 0.5% said that circumcision is only good for children and promiscuous men.

In practical terms the Table suggests that in as much as the VMMC campaign was rolled out as an HIV prevention strategy, what is rather outstanding is that only 68.2% of the survey respondents could cite its role in HIV prevention in the message circulating in their social networks. Given the higher percentage of respondents who have heard or know about VMMC it means other respondents got the information from other sources that such as mass media. Other popular positive information doing rounds in the social networks about male circumcision such as it improves penile hygiene, prevents penile cancer and gives the penis nice appearance could instead encourage more men to seek circumcision. However, there is negative information about male circumcision such as the procedure being very painful and it reduces sexual satisfaction and such messages account for low uptake of male circumcision. This is in tandem with Dunlop et al (2010) who argues that how positively or negatively people talk about a health topic influence health behavior and health campaign effects.

Table 5: Nature of Male Circumcision Messages

Variable	Characteristics	Frequency (n=377)	Percentage (%)	
Interpersonal communication messages	VMMC	It waters down culture	11	2.9
		It prevents HIV/AIDS	371	98.4
		It prevents penile cancer	263	69.8
		Gives nice appearance to the penis	291	77.1
		It is very painful	297	78.8
		It improves sexual performance	153	40.6
		It improves penile hygiene	269	71.4
		It helps prevent cervical cancer among female sexual partners	164	43.5
		It reduces sexual satisfaction	76	20.2
		It is only good for children and promiscuous men	9	2.4

Voluntary medical male circumcision was rolled out with the sole objective of tackling the spread of heterosexually acquired HIV. This study found out that more 98.4% of respondents had heard about voluntary medical male circumcision (VMMC) and its role in HIV prevention. Other positive messages about VMMC include: it prevents penile cancer (69.8%), gives the penis nice appearance (77.1%), it improves sexual performance (40.6%), it improves penile hygiene (71.4%), and it prevents cervical cancer among their sexual partners (43.5%). Negative messages about VMMC include: it waters down their culture (2.9%), it is very painful (78.8%), it reduces sexual satisfaction (20.2%), and it is only appropriate children and promiscuous men (2.4%).

In order to examine health risk messages, threat and recommended response components play critical roles. Threat entails severity of threat and vulnerability to the threat being getting infected with HIV via sexual intercourse. On the other hand, the nature of recommended response or efficacy entails response efficacy, self-efficacy and barriers to self-efficacy.

VMMC programme is founded of HIV/AIDS prevention. Various tenets of Health belief model are employed in achieving an effective VMMC communication strategy. According to the Health belief model, message effectiveness is dependent on the individual's self-efficacy and perceived benefits as well. The distinction between the expected behavioral outcome and efficacy of message is critical because both are required for behavior modification (Rogers & Storey, 1987). For individuals to positively respond and act on the health information that they receive, they must believe that the change will benefit them (responsive efficacy, that is, VMMC is effective in preventing HIV) and they must be willing and capable of adopting the behavior change (self-efficacy, that is, one is able to seek VMMC to prevent HIV/AIDS). For a message to be effective in eliciting behavior change, individuals must (as HBM theorizes) feel threatened by their current behavioral patterns (perceived vulnerability to and severity of HIV/AIDS) and believe that change aimed by health information will result in a valued outcome at acceptable cost (perceived benefit, that is, protection from contracting HIV/AIDS). They must also feel themselves competent to overcome perceived barriers to taking action (Stretcher & Rosenstock, 1997).

Threat

Threat component was examined through perceived susceptibility and severity of HIV/AIDS. On analysis of individual constructs, Table 6 below indicates that severity for circumcised and uncircumcised respondents represented by HIV/AIDS being severe at 97% and 95.9%, HIV/AIDS having serious negative consequences at 97.2% and 97.9%, and HIV/AIDS being extremely harmful at 96.3% and 100% respectively. Susceptibility to HIV was represented by likelihood of getting HIV at 89.6% and 85.5% among circumcised and uncircumcised respondents respectively, existing risk of getting HIV at 91.1% and 85.5%, and possibility of getting HIV at 84.1% and 79.2%.

Table 6: Perception of Individual Threat Constructs

Component	Construct	Circumcised Respondents (n=327)		Uncircumcised Respondents (n=48)	
		N	%	N	%
Severity	HIV/AIDS is severe	320	97.0	46	95.9
	HIV/AIDS has serious negative consequences	318	97.2	47	97.9
	HIV/AIDS is extremely harmful	315	96.3	48	100
Susceptibility	Likelihood of getting HIV	293	97.0	42	85.5
	Risk of getting HIV	298	97.2	42	85.5
	Real possibility of getting HIV	275	96.3	39	79.2

Note: "Strongly agree" and "agree" are combined.

The results of this shows that there is adequate threat in interpersonal communication messages for both circumcised and uncircumcised respondents. The treat is also higher among the uncircumcised than among the circumcised respondents. It is expected that the higher the perceived vulnerability to a negative event and perceived severity of a health condition or other negative consequence, the higher the intention to follow the recommendations. According Witte, Mayer & Martell (2001) threat motivates action while efficacy determines the nature of action to be taken. They add that when the threat is low, there is no response expected to the message where it is not even processed while efficacy is not even considered.

Recommended Response

In this study the recommended action (efficacy) is to adopt male circumcision as a measure to partially prevent acquisition of HIV. Efficacy takes the form of self-efficacy and recommended efficacy. Self-efficacy was examined based on respondents' willingness and ability to undergo male circumcision in order to partially prevent acquiring HIV. Response efficacy, the perception that the recommended action in the messages is an effective and feasible method to avoid the threat, was examined based on respondents' subjective assessment that male circumcision was effective in averting the HIV/AIDS danger.

Table 7: Perception of Individual Efficacy Constructs

Component	Construct	Circumcised Respondents (n=327)		Uncircumcised Respondents (n=48)	
		N	%	N	%
Self-efficacy	Ability to seek circumcision to prevent HIV	279	85.3	25	52.1
	Ability to approach and talk to a health worker about adopting circumcision to prevent HIV	307	93.9	37	72.9
	It is easy to seek circumcision	289	63.9	28	58.4
Response efficacy	Effectiveness of circumcision in preventing HIV	237	72.5	13	23.0
	Less likelihood of getting HIV if circumcised	282	86.2	30	62.5

Note: “Strongly agree” and “agree” are combined.

On analysis of individual efficacy constructs as shown on Table 7, among circumcised and uncircumcised respondents, self-efficacy was represented by ability to seek circumcision to prevent HIV at 85.3% and 52.1%, self-efficacy in seeking health information about male circumcision in preventing HIV at 93.9% and 72.9%, and the ease of seeking circumcision to prevent HIV at 63.9% and 58.4% respectively while responsive efficacy among circumcised and uncircumcised respondents was represented by perceived effectiveness of circumcision in preventing HIV at 72.5% and 23%, and reduced likelihood of getting HIV once circumcised at 86.2% and 62.5% respectively.

Threat and Recommended Response

Table 8 above shows that a majority of circumcised respondents (97.3%) and 97.9% of uncircumcised ones said that HIV/AIDS is severe. On their vulnerability to HIV infection, 88.3% of circumcised and 83.4% of uncircumcised respondents said they were vulnerable to HIV infection when not circumcised. The Table indicates that 89.2% of circumcised and 64.5% of uncircumcised respondents believed that they either are able to seek or they sort circumcision to prevent acquiring HIV (self-efficacy) while 79.3% of circumcised respondents said that male circumcision is effective in preventing acquisition of HIV (responsive efficacy). Among the uncircumcised respondents, only 42.8% believed that male circumcision is effective in preventing HIV (responsive efficacy).

Table 8: Threat and Recommended Response Components in VMMC Interpersonal Messages

	Component		Average %
Circumcised Respondents (n=327)	Threat	Severity	97.3
		Susceptibility	88.3
	Efficacy	Self-efficacy	89.2
		Response Efficacy	79.3
Uncircumcised Respondents (n=48)	Threat	Severity	97.9
		Susceptibility	83.4
	Efficacy	Self-efficacy	64.5
		Response Efficacy	42.8

Note: “Strongly agree” and “agree” are combined.

It is expected that the higher the perceived self-efficacy and the more efficacious recommended response, the higher the intention to follow the recommendation. According to the extended parallel process model (EPPM) when the threat is high and efficacy is high then people control the threat and protect themselves. When the threat is high and efficacy is low then people control their fear and ignore the message.

From the summary illustrated on Tables 8 above it can be deduced that overall interpersonal messages have high threat in respect to susceptibility to and severity of HIV/AIDS to both circumcised and uncircumcised respondents. Regarding efficacy, circumcised respondents' self-efficacy and responsive efficacy were quite high while among the uncircumcised respondents' efficacy hit a lower score especially in the response efficacy component. According to Witte, Meyer & Martell (2001) when the threat is high, that is, individuals believe the threat is real, severe and they are vulnerable to it yet efficacy is low, that is, individuals believe that the recommended action (circumcision) cannot avert the threat (HIV/AIDS) and even if they could it would not work anyway, people control their fear and ignore the message.

Witte, Meyer & Martell assert that as long as the perceived efficacy is stronger than the perceived threat, then individuals are most likely to control the danger by accepting the message's recommendation and take appropriate action. However, they are quick to add that when the perceived threat slips above the perceived efficacy, where people no longer think they can do something to effectively avert the threat. Once that perceived threat exceeds perceived efficacy, then people begin to control their fear instead of the danger therefore they reject the message (Witte, Meyer & Martell, 2001).

Further, this study found out that 75% (n=36) of the uncircumcised respondents were willing to seek circumcision for other reasons such as penile hygiene but not as a measure to prevent HIV (Table 9). This is in tune with IAS conference that reported that the so-regarded as secondary benefits of social conformity, sexual attractiveness and feelings of being in control as a man were considerably more critical in making the decision to undergo the surgery than the expected perceived direct health benefits (International AIDS Society, 2013) and Lissouba et al (2011) who observes that while many men seeking VMMC may understand the protective benefits of circumcision, they are more likely to consider VMMC for other reasons, including hygiene, pleasing a sexual partner, and conforming to peer norms. Doyle and colleagues (2010) argue that VMMC campaign message emphasize that male circumcision is an additional prevention method

for men, but that it does not replace measures such as delay in the onset of sexual relations, avoidance of penetrative sex, reduction in the number of sexual partners, and correct and consistent use of male or female condoms (Doyle et al., 2010). However according to Dikson et al (2011) there is enough evidence that communicating partial protection remains challenging. This may account for low responsive efficacy in the male circumcision messages shared via interpersonal contacts.

Table 9: Willingness to Adopt Circumcision for other Reasons not HIV prevention

	Circumcised Respondents (n=327)		Uncircumcised Respondents (n=48)	
	Frequency	Percent	Frequency	Percent
SA/Agree	239	73.1	36	75
SD/Disagree	88	26.9	12	22.9

Note: "Undecided" are omitted.

Barriers to Self-efficacy

Having examined the threat/efficacy beliefs, it was imperative to establish barriers to recommended action (undergoing male circumcision). According to Witte, Meyer & Martel (2001), a high efficacy message addresses barrier to recommended response. The potential negative aspect of a particular health action may act as an impediment to undertaking the proposed behavior. A kind of cost benefit analysis is thought to occur wherein the individual weighs the action's effectiveness against perceptions unpleasant, inconvenient, and dangerous and so forth.

Table 7: Perceived Barriers to Seeking Male Circumcision

Issues	SA/Agree (%)	SD/Disagree (%)
I cannot get circumcised because it is already too late and shame to circumcise at my age	33.4	66.7
I cannot get circumcised because the surgery procedure is painful	43.8	56.3
I cannot get circumcised because what I have heard from my friends elicit a lot of fear	54.2	45.8
I cannot get circumcised because the recommended six weeks post-surgery sexual abstinence is too long	54.2	45.9
I cannot get circumcised because my spouse/other sexual partner(s) may cheat on me before I heal	18.8	83.0
I cannot get circumcised because I have been told that it may take too long to heal	52.1	48.0
I cannot get circumcised because I may not get the necessary post-surgery support for and from my family	91.7	8.3

Note: "Undecided" are omitted.

Table 7 shows that 33.3% of uncircumcised said they cannot get circumcised because it is shameful to “cut” at their present mature age while 66.7% disagreed. Another barrier uncircumcised men have towards seeking circumcision is pain during surgery whereby 43.8% agreed while 56.3% disagreed and 54.2% said the messages they have heard from people elicit a lot of fear while 45.8% disagreed. The recommended six weeks’ post-surgery to allow healing is another deterrent against circumcision where 54.2% view that as a barrier while 45.9% do not. Again, 18.8% of the same uncircumcised respondents said that they cannot seek circumcision because they fear that their spouses and other sexual partner(s) may cheat on them while they will be healing. Likewise, 16.7% of the uncircumcised respondents said that they cannot seek circumcision because they will be perceived to be promiscuous.

The Table indicates 52.1% of uncircumcised respondents won’t seek for circumcision because they have heard that after circumcision it may take too long for the wound to heal. Concerning post-surgery support, 91.7% of uncircumcised respondents said that they fear they may not get the necessary support from and for their family after circumcision and that makes them shun the surgery.

Some of the barriers identified in this study are supported by what other previous studies have found out such fear of HIV testing that precedes circumcision, concerns about adverse effects (e.g. lack of sexual pleasure), (Lagarde et al., 2003; Ngalande et al, 2006) transport costs (Nieuwoudt et al., 2012), time off from work (Nieuwoudt et al. 2012; Rain-Taljaard et al, 2003), temporary sexual abstinence and unsupportive cultural norms (Nnko et al., 2001). Herman-Ruloff et al. (2011) noted that among older men it is the hesitations about taking time off work after surgery and particular concerns regarding abstinence from sex for the recommended six weeks’ post-surgery especially among married men. To others it is the fear that it would be painful (International AIDS Society, 2013).

Suffice it to note that out of the interviews the findings show that where there are discussions about male circumcision, a significant content of messages shared about it were negatives such as it being painful, the wound may not heal, shameful and inappropriate at older age. Previous studies show that conversational valence has a substantial influence on health-related attitudes, subjective norms, perceived behavioral control, intentions, and behaviors (Hendriks et al., 2014). Discussions that is positive toward healthy behaviors or negative toward unhealthy behaviors result in desirable and healthy attitudes, intentions, and behaviors. However, when people speak negatively about healthy behaviors (being circumcised) or positively about unhealthy conduct (being uncircumcised), this results in unhealthier determinants of health behaviors. Despite these studies demonstrating the important consequences of conversational valence, it is not yet known whether conversational valence can be predicted by health campaign exposure. However, health campaigns can prompt a more negative conversational valence about unhealthy behaviors because many health messages aim to reduce unhealthy conduct by stressing the negative consequences of unhealthy behavior (Hendriks, n.d; Hendriks et al., 2014).

Thus, as Rosenstock of the health belief model observes that the combined levels of susceptibility and severity provides the energy or force to act and the perception of benefit (less barriers) provides a preferred course of action (Rosenstock, 1974). This means that there is need to address the above perceived barriers to adopting circumcision. From the interpersonal communication messages, there is a high combined level of susceptibility and severity that offers adequate force for men to seek male circumcision so as to enjoy the perceived benefit (HIV

prevention and other non-medical reasons such as penile hygiene). However, there are outstanding barriers such as post-surgery support which counters the force to act (seek circumcision) hence impeding uptake of VMMC.

Conclusion

In conclusion, this study revealed various fundamental insights into the nature of interpersonal messages about male circumcision and examined their effectiveness in the uptake of VMMC among married men based on the health belief model (HBM). Because of low response efficacy on VMMC messages, more men are seeking male circumcision for other reasons such as penile hygiene, peer pressure, perceived improved sexual performance to but a few and not as a method to prevent HIV/AIDS- the overall objective of VMMC program. It is important therefore for new campaign messages to focus more on response efficacy (because people are already scared of HIV). This can be done by firstly by addressing the barriers to seeking male circumcision and secondly providing more evidence of male circumcision's effectiveness in preventing HIV. Furthermore, many people are seeking circumcision for other reasons not HIV prevention such penile hygiene and improved sexual performance. Given that HIV prevention—the public health goal of VMMC—may not be the highest priority or most attractive benefit of the procedure for most males, it is important to consider positioning and messaging VMMC in ways that move beyond HIV in addition to addressing the barriers to VMMC (self-efficacy).

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