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Assessing the determinants of antenatal care adherence for Indigenous and non-Indigenous women in southwestern Uganda

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ABSTRACT

Background: With an increasing number of women attending antenatal care for the recommended number of contacts, focus now must be placed on the quality and utility of care; without understanding adherence, the true contribution of antenatal care to improved maternal health outcomes is difficult to determine.
Objective: This research explored the practicality of antenatal care recommendations for women and the factors which facilitate or hinder adherence and shape the overall utility of care.
Design: Qualitative data were collected using a community-centred approach by means of focus group discussions with women and key informant interviews with healthcare providers throughout May and June of 2017. Data were analysed via thematic analysis guided by an essentialist/realist paradigm.
Setting: Kanungu District, Uganda; a district in southwestern Uganda.
Participants: A convenience sample of 38 Indigenous Batwa and non-Indigenous Bakiga women from four matched communities and three healthcare providers.
Findings: A number of barriers to antenatal care adherence were identified which included a lack of monetary and material resources, a lack of a shared understanding and perceived value of care, and gender and position-based power dynamics, all of which were compounded by previous experiences with antenatal care. The factors identified which influenced adherence were highly complex and non-linear, affected by individual, community, health centre, and health system-level factors. Promotion of spousal involvement in antenatal care had different effects based on pre-existing individual levels of spousal support, either improving or hindering adherence. A lack of resources created a double burden for women through which maternal health was jeopardized by the inability to adhere to antenatal care recommendations and the poor quality patient-provider relationships which resulted and deterred future antenatal care attendance.
Key conclusions and implications for practice: The capacity to avail oneself of antenatal care varied significantly for women based on their socio-economic status, levels of autonomy, and spousal support. Strategies to improve antenatal care need to focus on health equity to ensure care has a high degree of utility for all women. The interconnectedness of care and those who deliver care necessitates healthcare providers to develop strong patient-provider relationships through their attitudes, behaviours, and the delivery of equitable care. In light of a historical emphasis on attendance, this research highlights the significance of improving the quality and utility of antenatal care, inclusive of Indigenous perspectives, to deliver high-value care.

Introduction

Antenatal care (ANC) provides an essential intervention opportunity to promote the safety and well-being of mothers and

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their newborns (Benova et al., 2018; WHO, 2016); however, to what extent ANC is able to achieve this may not be consistent. While the model of ANC delivery may vary, most programs consist of components of health education, promotion of appropriate health service utilization, and prevention, identification, and treatment of pregnancy-related complications (WHO, 2016). Traditionally, individualized care, or "focused" or "routine" antenatal care as termed by the WHO, was recommended in low-income countries (WHO, 2011); a systematic review highlighted the benefits of this approach for low-income countries where Western models were not realistic or feasible (Carroli et al., 2001b). Individualized care is characterized by goal-oriented recommendations in lieu of a larger number of clinical contacts which are more realistic in high-resource settings (WHO, 2011); however, globally, women expressed a perceived need for additional time, attention, and consideration from their healthcare providers (Downe et al., 2019; Downe et al., 2016). Persisting challenges in ANC attendance are inherent; globally, only 62% of pregnant women attended ANC for the WHO recommended minimum number of four contacts between 2010 and 2016, and between country and within country variation remained high (UNICEF, 2016). By UNICEF (2016) region, the percentage of women who attended ANC at least four times was lowest with 45.8% in the least developed countries and highest with 96.6% in North America; when these numbers are disaggregated further, country variation ranged from 1.9% (Somalia) to 99.7% (Belarus). Despite the apparent challenges in comprehensive ANC attendance, the WHO (2016) increased the number of recommended ANC contacts to eight, providing additional opportunities of healthcare provider contact for women.

The utility and quality of ANC in varying contexts, particularly in low-income countries, is another crucial factor for consideration. While studies have begun to include quality of ANC services (Benova et al., 2018), an assessment of the quality of care may only provide an indirect estimate of the resultant adherence. This gap is especially detrimental in low-resource regions, as promoting attendance without equal consideration for the utility or usefulness of care may have a negligible effect or even contribute to the poor maternal health outcomes frequently observed in low-income countries (Hodgins and Agostino, 2014; Finlayson and Downe, 2013; AbouZahr and Wardlaw, 2003).

To address high national maternal and neonatal mortality rates, Uganda developed a roadmap for the reduction of maternal and neonatal mortality and morbidity (Ministry of Health, 2007). The use of ANC to improve health outcomes for mothers and their newborns is one priority highlighted in this document. Comprehensive ANC guidelines were developed and published in the *Uganda Clinical Guidelines* by the Ministry of Health (Ministry of Health, 2016). The document outlines the services and recommendations to be delivered to women throughout their pregnancies when attending ANC, and specifies how this care differs for timing of the contact and with individual circumstances. While these guidelines exist, the surveillance of ANC does not often extend beyond attendance and some rudimentary content measures, such as the testing performed, information given, and supplements prescribed (ICF and Uganda Bureau of Statistics, 2017, 2012; Hodgins and Agostino, 2014; Graham and Varghese, 2011).

With only minor declines in both maternal and neonatal mortality in recent years as indicated by the Ugandan Demographic Household Survey, a missed opportunity may exist in the delivery of ANC in reducing negative maternal and neonatal health outcomes (ICF and Uganda Bureau of Statistics, 2017). Strengthening ANC services may provide an opportunity to improve health outcomes (Benova et al., 2018; WHO, 2016). In Uganda, more than 97% of women receive ANC from a skilled provider at least once throughout their pregnancy; however, less than 60% of women attend for the recommended four contacts, thus pointing to potential shortfalls in the quality of care and adherence to the provided recommendations (ICF and Uganda Bureau of Statistics, 2017, 2012). These statistics, however, are not disaggregated on the basis of Indigeneity and vary with residence, region, education, and wealth quintile; women of low-socioeconomic status, characterized by less wealth, fewer years in the formal education system, and inhabiting rural areas, are at a significant disadvantage (ICF and Uganda Bureau of Statistics, 2017, 2012).

A disproportionate and widespread emphasis placed on ANC attendance has contributed to a tendency to overlook the importance of the quality and utility of care being provided (Benova et al., 2018; Hodgins and Agostino, 2014; AbouZahr and Wardlaw, 2003). ANC services provided to women throughout their pregnancies must be placed under greater scrutiny to ensure they are effectively promoting maternal and neonatal health and reducing the likelihood of poor outcomes. Beyond the quality, an understanding of the utility of ANC services and adherence to the associated recommendations in resource-poor regions and for key populations, such as Indigenous populations, is needed to determine the inherent value of care within these contexts (Finlayson and Downe, 2013).

We aim to fill this gap in the literature using a community-centred approach to understand the utility of ANC and the associated recommendations. Specifically, the objective of this research was to assess the implications of ANC recommendations received by Indigenous and non-Indigenous women in communities in Kanungu District of southwestern Uganda to determine factors which facilitate or hinder adherence and shape the overall utility of care.

Methods

Study location

This research was conducted in Kanungu District, Uganda, one of three districts where the Indigenous Batwa population lives (Uganda Population Secretariat, 2008). The District is bordered by the Democratic Republic of the Congo, Bwindi Impenetrable Forest, and Kigezi Game Reserve (Fig. 1). Bwindi Community Hospital (BCH), the referral hospital in the District, was initially intended to provide services exclusively for the Batwa but has since expanded services for the general population (Birungi, 2017). Kanungu District was selected for this research to gather local information which could benefit the hospital in improving its care for the Batwa in the region.

Kanungu District is home to approximately 252,075 individuals; non-Indigenous Bakiga comprise the majority of the population (UBOS, 2014). Approximately, 750 Batwa individuals are located in 10 communities dispersed throughout the District (Berrang-Ford et al., 2012); four communities varying in distance from the referral hospital in the region were selected to participate in this research (*Kihembe, Kebiremu, Mukongoro*, and *Buhoma*).

Study population

The Batwa in Kanungu District are the easternmost subgroup of the Indigenous Central African Pygmy population (Berrang-Ford et al., 2012). The Batwa were evicted from their forest homes in the early 1990s as a result of conservation efforts in the creation of the Bwindi Impenetrable Forest Heritage Site (Balenger et al., 2005; Zaninka, 2001). As a result of this eviction, the Batwa were forced to transition to an agrarian lifestyle from their traditional hunter-gatherer livelihoods (Balenger et al., 2005). The cultural and socio-economic transition has created diverse vulnerabilities whereby the Batwa experience marginalisation and discrimination, contributing to limited access to key social determinants of health and significantly poorer health outcomes than the Ugandan

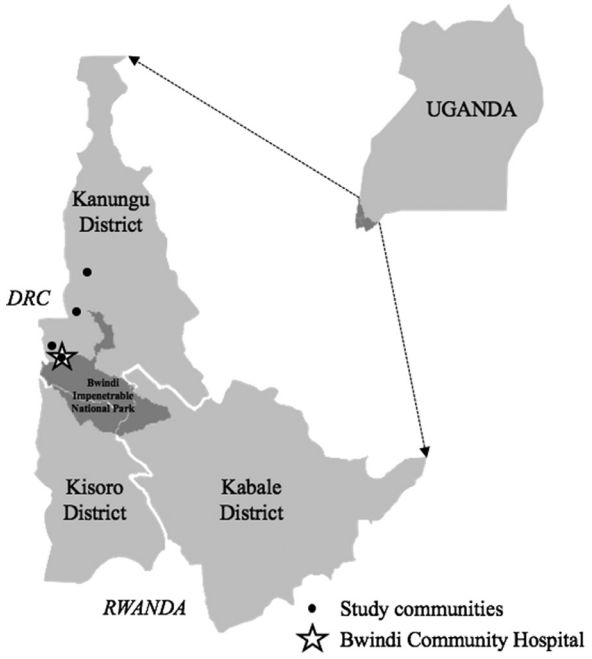

Fig. 1. Map of southwestern Uganda. The location of the four communities in Kanungu District included in this research are depicted, along with the surrounding geography of the region.

average (Sauer et al., 2018; Patterson et al., 2017; Clark et al., 2015; Berrang-Ford et al., 2012; Jackson, 2003). The Batwa experience a higher prevalence of diseases such as malaria, acute gastrointestinal illness, and heightened levels of food insecurity, malnutrition, and poverty than their non-Indigenous Bakiga neighbours (Sauer et al., 2018; Patterson et al., 2017; Donnelly et al., 2016; Clark et al., 2015; Berrang-Ford et al., 2012). Beyond the inequalities experienced by the Batwa (Lewis, 2000), the influence of gender contributes to inequalities in which Batwa and Bakiga women alike are at a significant disadvantage compared to their male counterparts and may face exacerbated discrimination (Jackson, 2003).

BCH, located in Buhoma, is a referral hospital delivering care to the people of Kanungu District (see Fig. 1). BCH is a private, not-for-profit community hospital; as such, despite donations, grants, and subsidy from the Ugandan Government, the operating budget of the hospital is raised in part from local community collections, such as through user fees and community insurance schemes. Maternal and perinatal mortality is a concern outlined in the BCH 12th annual report due to persistently high mortality rates in the catchment area of the hospital; on average, the hospital receives 30 referrals of pregnant women, performs 30–40 emergency caesarean-sections, and provides ANC services for 250 women per month (Birungi, 2015). The trends of high maternal and perinatal mortality documented by the hospital are mirrored in the pregnancy-related mortality rates in Uganda more broadly; while steadily declining, mortality rates remain high.

Data collection

Qualitative methods were utilized with an intersectional approach to acknowledge and elicit reflection on the interplay of social identities which constitute the individual experience (Hankivsky et al., 2010; Hancock et al., 2007). Intersectionality denotes the intersection of components of social identity which are actualized in systems of power and oppression and produce distinctive cases of marginalisation; these are not the summation of social characteristics, but rather are shaped by their interaction (Crenshaw, 1991). The experiences of Indigenous and non-Indigenous women are brought to light through the personal accounts of women within this dynamic setting, reflecting the interplay of gender, Indigeneity, and socio-economic status in Uganda.

Qualitative data were collected using focus group discussions (FGD) and semi-structured key informant interviews (KII). Eight FGDs were carried out in communities varying in distance from BCH to gather different perspectives from women based on their physical access to referral care. Four FGDs were carried out in Indigenous Batwa communities and four in matched non-Indigenous Bakiga communities in Kanugu District throughout May and June of 2017, including a total of 38 women (Fig. 1). Selection of FGD participants was based on a willingness to participate. Eligible participants were women who had attended ANC at least once during a previous or current pregnancy. FGDs were comprised of women of diverse ages, enabling an understanding of different experiences based on age and providing insight into the evolution of ANC services in the district through accounts of both historical and modern experiences.

FGDs used a semi-structured interview guide to elicit sharing of the lived experiences of women who attended ANC and to enable an understanding of ANC adherence. The discussion guide consisted of open-ended questions to facilitate storytelling and was developed and reviewed in collaboration with local research partners to ensure clarity, relevance, and cultural appropriateness. The discussions highlighted the perceptions, understanding, and utility of ANC and the associated recommendations. FGDs were led by the first author in English, with immediate translation to the local language of Rukiga and back translation of the provided responses to English by an experienced local Ugandan surveyor with a background in community care and knowledgeable of ANC. FGDs were audio recorded with permission from each FGD participant; on average, FGDs lasted 53:61 min (range of 35:57–1:18:08 min), with a total of 428:50 FGD-minutes recorded.

In addition, three semi-structured KIIs were conducted with healthcare providers involved in ANC delivery in the District. Individual healthcare providers from BCH, a health centre II (a regional healthcare facility equipped with a small staff of roughly 2–5 personnel led by a nurse, offering ANC and able to treat common diseases), and a mobile health service were interviewed to gain a comprehensive understanding of the diverse forms of ANC delivery. Interviews were conducted in English in a semi-structured format with a pre-formulated interview guide. All interviews were recorded and lasted on average for 38:13 min (range of 25:30–49:26 min), with a total of 113:19 interview-minutes.

Ethics approval was obtained from both Ugandan and Canadian institutions: Makerere University (Kampala, Uganda), the Uganda National Council of Science and Technology, and the University of Guelph. Informed consent was obtained from all participants prior to participation and on an ongoing basis; study participants were informed of the research goals and FGD structure, were made aware of the confidentiality of their individual responses, and were informed of their ability to choose not to answer or leave the group discussion at any point in time. Given the group format of the FGDs, participants were provided with the option to have a one-on-one discussion or to share their thoughts via video or audio recording to enable sharing from women in the event they were not comfortable doing so in a group setting.

Data analysis

The English segments of the FGDs and KIIs were transcribed verbatim and back-checked by the first author for accuracy following transcription. An essentialist/realist paradigm was utilized to guide the thematic analysis whereby meaning is theorized based on a relatively straightforward relationship between experience,

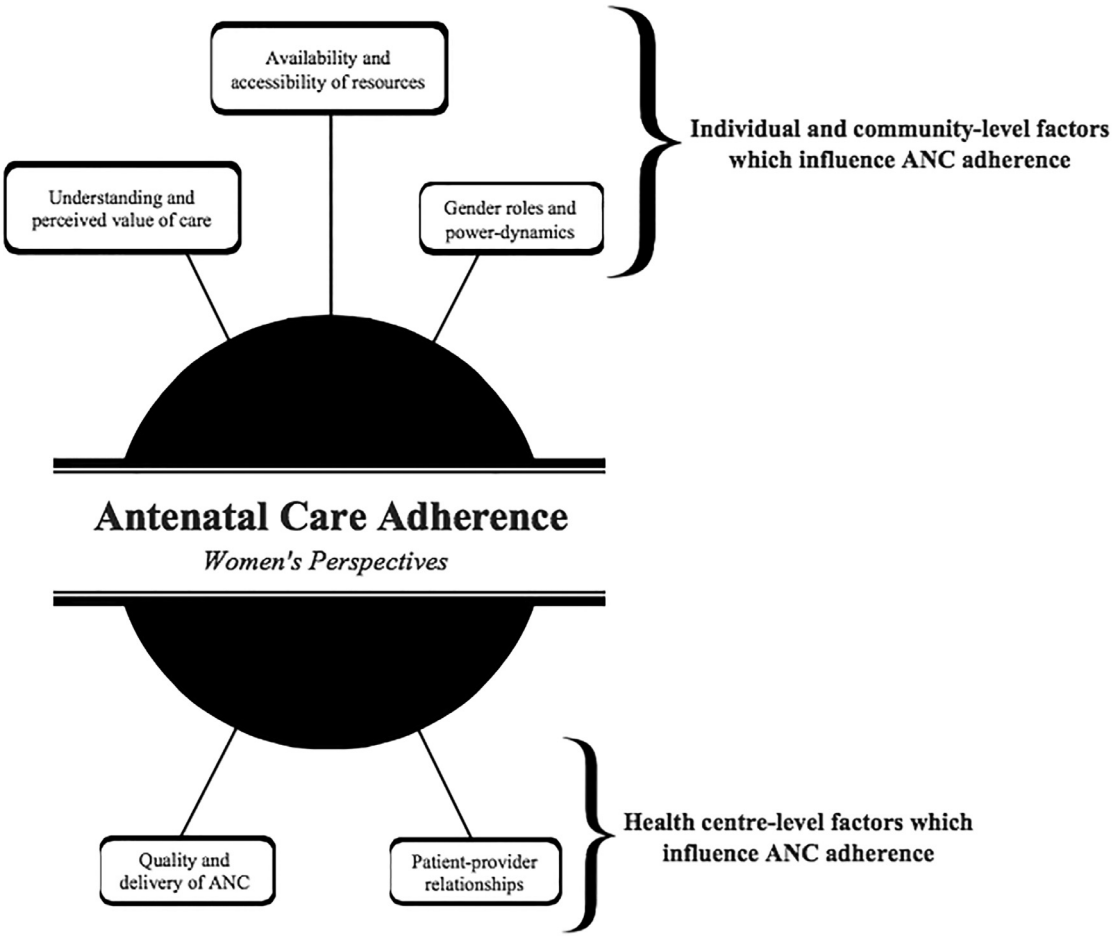

Fig. 2. Conceptual diagram of the research results. The factors which influenced ANC adherence reported by Indigenous Batwa and non-Indigenous Bakiga women in Kanungu District, Uganda, 2017, categorised as individual, community, and health centre-level factors.

language, and meaning (Braun and Clarke, 2006; Widdicombe and Wooffitt, 1995; Potter and Wetherell, 1987). Specifically, the analysis was guided by the following steps: (1) Familiarizing oneself with the data, (2) Generating initial codes, (3) Searching for themes, (4) Reviewing themes, (5) Defining and naming themes, and (6) Producing the report (Braun and Clarke, 2006; Widdicombe and Wooffitt, 1995; Potter and Wetherell, 1987). NVivo© 11 was used to facilitate manual coding of all transcripts. Drawing from memos formulated throughout the research process and initial coding, data were collated into key themes capturing the lived experiences of women who attended ANC (Birks et al., 2008). Member-checking with communities and debriefing with the research team were employed to confirm accuracy and reflectiveness of the analysis (Longhurst, 2009).

Results

ANC adherence was found to be highly complex and dependent on a myriad of factors which find their roots at the individual, community, and health centre-levels (Fig. 2).

Individual and community-level factors impacting ANC adherence

Availability and accessibility of resources

Women in all groups identified costs incurred due to both attendance and adherence to ANC recommendations. The direct cost of services, as well as the indirect costs of transportation, purchased meals, and time, were predominant barriers women identified for both attendance and adherence to ANC recommendations:

> "If you are not in eQuality [subsidized community health insurance by the local referral hospital], you don't go [for ANC] many times because you don't have all that money to pay. When you are in eQuality that is when you go as many times as you can because you are not paying money." (Bakiga FGD 2)

Recognising the various costs of ANC, one woman indicated that beyond the cost of services, "… *the real problem is that when you get there you have to stay there for some days and you don't have money or food*" (Batwa FGD 1). Compounding the demand for tangible resources, one woman highlighted that "*sometimes we don't have time [to attend ANC]*" (Batwa FGD 1). The emphasis women placed on time as a constraint was the result of the time needed to get to the healthcare facility, but also largely owing to the restricted availability of services and long wait times women experienced upon arrival for ANC.

Beyond the challenges in ANC attendance, challenges in adhering to recommendations were also conveyed by most women. With limited financial resources, many women expressed the challenge of adhering to behavioural changes recommended during ANC contacts:

> "Sometimes we do not have money to do what we are supposed to do to look after our health. We need money to buy all of the recommended foods we are educated about but we don't have money." (Batwa FGD 1)

Increasing food intake, diet diversification, and limiting strenuous work were recommendations women often expressed difficulties in adhering to. This was especially evident in FGDs with poorer women and women with little support from their family and spouse, as they expressed the need to work in order to get food. For many women these recommendations were conflicting, as adhering to both was not possible given their circumstances, as one woman explained:

> "Sometimes because we are poor, you find though we are told not to do some strenuous work, heavy work at home … sometimes you are doing it because you don't have food to eat." (Bakiga FGD 2)

This experience was not universal; some women were unable to work due to a lack of energy. Their immobility facilitated their adherence to the recommendation of limiting strenuous work; however, as a result, they were unable to fulfil the diet recommendations. There were a relatively small number of instances where women were able to adhere to both recommendations as a result of spousal support: "*the majority of the men here don't help the pregnant mothers, but some do*" (Bakiga FGD 3).

Understanding and perceived value of ANC

Many women indicated that sickness and pain had prompted their ANC contact. This line of thinking was translated to adherence to ANC recommendations, resulting in hesitancy in taking treatments such as Fefan (an iron and folic acid nutrition supplement) in the absence of illness:

> "For us, as the Batwa, they usually give us [Fefan] and we don't take them all when we are feeling okay … but when we feel weak, that is when we take them." (Batwa FGD 2)

This sentiment and the resultant implications for adherence were identified by Batwa and Bakiga women alike.

An apparent low prioritization of ANC was partially attributed to a lack of information, as one woman acknowledged, "… *I did not know the purpose of going to the antenatal clinic*" (Batwa FGD 1). The lack of information led to a subsequent lack of understanding and recognition of the preventative value inherent in ANC. Many of the women indicated their perceived value of ANC lay in its provision of treatment: "*It is helpful for us because when we have problems with our pregnancy we go to the hospital and we are given treatment*" (Batwa FGD 2).

Conceptualization of preventative care was difficult, however, prescriptive care was more familiar: "*I understand what they tell me, like if they give me treatment, they are like take it like how many times, I understand that but I don't understand why they are doing [blood] pressure or [stomach] palpation*" (Batwa FGD 4).

Historical experiences of pregnancy and birth were contributing factors in the determination of ANC adherence. Women with mothers who delivered well from home and without the help of a skilled provider acted as a source of reassurance in not attending or adhering to ANC recommendations and reaffirmed perceptions of ANC:

> "… our mothers, when they were producing us, the hospitals were not there and they would produce very well and they were strong. So, we still have some of that belief that we can keep at home minus antenatal" (KII 3)

Similarly, perceptions of ANC were affected by previous personal experiences, as one woman described:

> "I never trusted them because I went to a clinic because of lower abdominal pain and they said I was not pregnant, but when I went home I had a miscarriage. I never wanted to go back for antenatal because they did not tell me the truth." (Batwa FGD 1)

Gender roles

Women expressed the increasingly common emphasis placed on their spouses accompanying them for ANC as a factor which impacted their ANC attendance and adherence. Women who were accompanied by their husband for ANC were attended to first. At the health centre-level, healthcare providers noted that "… *because we know the men … they are impatient, they can't wait for long, so we normally work on them [first]*" (KII 2). The constructive reasoning behind this recommendation was also recognised: "… *when you go for antenatal, you go with the husband because you have to go for HIV screening*" (Bakiga FGD 1) and "… *if there is any problem, the husband may be near and can quickly help*" (Bakiga FGD 4). Many women acknowledged additional potential benefits derived from this recommendation: "… *we always get good service when we go with the husband because we are taught together … the husband learns from the hospital*" (Bakiga FGD 3).

While these benefits were recognised by women and healthcare providers alike, a greater emphasis was placed on the negative impacts of spousal involvement in ANC. One healthcare provider acknowledged a potential drawback of this recommendation in stating that, "… *when you are doing health education talks and the husbands are there, they [the women] don't speak*" (KII 3). Additionally, one woman expressed the challenge this particular recommendation created for her:

> "I have been getting some challenges going for antenatal because when you go there they first attend women who are there with their husbands. If you go minus a husband, you find they have to neglect you, and they will attend you later." (Bakiga FGD 1)

Both Batwa and Bakiga women expressed difficulty in having their husbands accompany them for ANC:

> "… men usually do not respond positively to come with us because sometimes they have some work to do at home and they are like maybe going to the hospital for antenatal, if they are not sick, it is like wasting time." (Bakiga FGD 4)

Although challenges to involving women's spouses in ANC were widespread, Batwa women perceived this as more difficult in their communities. One Batwa woman emphasized "… *as the Batwa, the men usually refuse to go there [to ANC] with us*" (Batwa FGD 2).

Calling attention to the ways in which this particular recommendation disproportionately impacted "poor" families, one healthcare provider made the observation that:

> "… poor families don't usually have a respect of going to the hospital because … they are dirty … they are afraid of getting into the hospital … the people who are well off usually escort their wives for antenatal … but the poor ones don't usually go with their wife for antenatal." (KII 3)

Beyond not wanting to attend themselves, women indicated that men may not permit their wives to attend ANC as a result of not understanding or valuing the unique needs of a pregnant woman: "*Partners do not support their wives, so that is a major challenge. They even stop the wives from going for antenatal*" (KII 1).

Women oftentimes did not have, or perceive themselves to have, the power or control over resources to carry out the given ANC recommendations. Women discussed men as typically controlling household wealth and not contributing support for the needs of pregnant women: "*… if you have a drunken husband you find every income, any income, is spent in the bar. So, you have to look after yourself*"; however, this woman also stated that "*... some men do help*" (Bakiga FGD 2).

Health centre-level factors impacting ANC adherence

Patient-provider relationships

Women's experiences in ANC and health centres ranged broadly. Some women had friendly interactions and open communication with healthcare providers: "*The midwives were friendly to us because when we reach there, they would welcome us very well and attend us very well*" (Bakiga FGD 1). Despite this, there were common instances among women's experiences where interactions were characterized by feelings of disrespect. For example, disrespect from healthcare providers arose when women made their ANC contacts beyond the return date given, as one woman said "*sometimes… they talk rudely to you, "you were supposed come on the 10th and today it is the 14th", so they shout at you*" (Bakiga FGD 2). Another said, "*sometimes you go for antenatal when you are not clean, when you are not dressed smartly, and you can't face the health workers on good terms*", because "*if you are not clean they usually become rude to you*" (Bakiga FGD 2).

These negative experiences were mentioned more frequently by Batwa women. Beyond the impact of their lower wealth, the stigmatization they face as an Indigenous population induced additional feelings of disrespect and fear: "*The Batwa usually have a stigma when we go for antenatal because we don't have what is needed for antenatal, like clothing, and we don't even have soap to wash our clothing* " (Batwa FGD 2). Stemming from this, Batwa women expressed less trust for healthcare providers, primarily non-Indigenous individuals, than Bakiga women; one Batwa woman, stressing the impact of her ethnicity, stated that "*… we don't trust them [the healthcare providers], because they may give us half doses because they don't respect us as the Batwa*" (Batwa FGD 1).

Quality and delivery of ANC

The needs of women throughout their pregnancies varied. In Kanungu District, health centres combine group education with individualized care. One healthcare provider described current ANC services with an emphasis on this dual approach to delivery of care: "*… after health education, … we have individualized care … we discuss with her according to her needs …*" (KII 2). Additionally, healthcare workers tailored services to education, employment, and wealth status:

> "… we tell them according to the jobs they do. If someone says I am a peasant, I am a housewife, I don't have a job, we don't tell that one to go and buy cow's milk, eat meat, we health educate on greens, on the things that are available." (KII 3)

Despite this, many women expressed their inability to meet the personalized recommendations: "*… the problem is we don't have money to buy food, we don't have enough land to grow crops, so though we are receiving all the information it is not put in practice*" (Batwa FGD 3).

Discussion

Lack of understanding or perceived value of care

In the absence of available healthcare service information, previous experiences, as well as community and traditional beliefs shaped women's perceptions of ANC in southwestern Uganda. These findings are consistent with the literature which points to traditional beliefs and previous experiences as forming the basis of perceptions, understanding, and utilization of ANC services in Uganda and other African countries (Roberts et al., 2017; Gebremeskel et al., 2015; Atekyereza and Mubiru, 2014; Tekelab and Berhanu, 2014; Turyasiima et al., 2014; Mathole et al., 2004); however, anthropological research has also highlighted the deep-rooted structural basis for women's understanding and utilization of maternal health services. Women's perceptions and understanding, while held at an individual level, exist and are mediated by societal and cultural factors (Basnyat, 2011; Liamputtong et al., 2005; Simkhada et al., 2008). The acknowledgement of the social and biomedical experiences of pregnancy and birth has proliferated globally in the past several decades with advances in science and medicine (Liamputtong et al., 2005). The application of an intersectional lens highlights the complex interaction of the social and biological constructs of pregnancy and birth (Hankivsky et al., 2017). For example, failing to recognise the social determinants of health produces an incomplete understanding of healthcare and health inequalities; beyond biological processes, women interpret pregnancy and childbirth in the context of their social circumstances (Basnyat, 2011). For marginalised populations such as the Indigenous Batwa, overlooking the social experience of pregnancy and childbirth in the delivery of care and health service information represents an enactment of power imbalances, reinforcing health inequities and perpetuating the cycle of marginalisation (Basnyat, 2011). So, while healthcare providers in southwestern Uganda acknowledged that health education about ANC is central to facilitate positive experiences, this must be in the context of women's social relationships with health resources and interactions with structural barriers, or else the value of care will not be fully recognised.

In order to effectively promote ANC attendance, a strong foundation of communication and trust needs to be formed between a woman and those individuals delivering care (WHO, 2016; Pell et al., 2013; Mathole et al., 2004). The present research is indicative of the same relationship existing in adherence to ANC recommendations. Batwa women, having used traditional medicinal practices for ANC prior to their eviction from their ancestral homes and experiencing stigmatization from community members, expressed less trust for healthcare providers when compared to their Bakiga counterparts. The discrimination and stigmatization the Batwa face is not a new concept, nor are the implications this has on relationships with community members, including healthcare providers (Balenger et al., 2005). The stigmatization Batwa women face as an Indigenous population induced feelings of disrespect and fear; these findings resonate with those of others researching minority women's experiences in communicating with healthcare providers (McKinn et al., 2017). Beyond racial inequities, socio-economic factors and their manifestation often determine the quality of patient-provider relationships (Mannava et al., 2015; Pell et al., 2013). As healthcare and those who deliver care are intrinsically connected in the minds of women receiving care, it is essential that positive relationships are fostered by healthcare providers enacting non-discriminatory attitudes and behaviours to facilitate effective communication, ANC delivery, and adherence. To enable this, the WHO (2016) emphasizes the importance of providing adequate time and privacy for the formation of authentic and supportive patient-provider relationships to facilitate a positive pregnancy experience and improve health outcomes, healthcare quality, and utilization of services. Strong patient-provider relationships can act as rich sources of information and comfort for women during their ANC contacts, offering a key opportunity to enhance ANC attendance and adherence.

Living in a community in which women face many everyday challenges in meeting the basic needs of themselves and their families, implementing preventative care such as ANC is a luxury not afforded by most community members. In southwestern Uganda, many women struggled with conceptualizing and recognising the importance of ANC. With the majority of the household workload typically falling on the shoulders of women, and with resources at a premium, there is little essentiality placed on preventative care. A large number of women indicate that sickness and pain are what

prompt their initial ANC contact (Tekelab and Berhanu, 2014; Finlayson and Downe, 2013). Moreover, in Kanungu District, this line of thinking was translated to the utilization of ANC recommendations, resulting in hesitancy in taking treatments such as Fefan in the absence of illness. So, while the value women placed on ANC was largely the result of addressing the health concerns detected during their visit, this was insufficient to facilitate adherence to the preventative elements of ANC in the absence of illness; this is despite research indicating the high degree of importance of ANC in detecting and addressing maternal and fetal abnormalities to reduce negative health outcomes (Campbell and Graham, 2006; Carroli et al., 2001a). Likewise, Tekelab and Berhanu (2014) described the common view of ANC as a means to receive curative rather than preventative care for women in southern Ethiopia. In southwestern Uganda, attending a healthcare service and being prescribed treatments are not traditional actions for women to take when they are feeling healthy, nor are they necessarily feasible in low resource settings. This is reinforced by the little emphasis placed on the role understanding of quality and preventative value of ANC has to play in overcoming barriers to ANC attendance and adherence (Benova et al., 2018; Pell et al., 2013; Simkhada et al., 2008).

Gender roles

In East Africa, many studies have found that within the household men have more power and influence (Atekyereza and Mubiru, 2014; Singh et al., 2014; Atuyambe et al., 2009). Our study found that men controlled money and generally did not support their spouses' needs during pregnancy; research pertaining to spousal involvement in maternal healthcare from sub-Saharan Africa suggests that a number of different socio-demographic, sociological, and health service factors may influence the level of support a pregnant woman receives from her spouse (Ditekemena et al., 2012). With low levels of support, women expressed challenges in exercising their autonomy given the large number of responsibilities they are traditionally tasked with within the household. In light of low levels of autonomy and control over resources, income-generating activities that put money in the hands of women have been investigated and have provided evidence to suggest that women's empowerment and maternal health service utilization may be improved through their implementation (Haugh and Talwar, 2016; Bandiera et al., 2014; Duflo, 2012; Ahmed et al., 2010).

The involvement of women's spouses in ANC is currently being prioritized by healthcare providers with the intention of providing additional support, understanding, and couple's testing for HIV. While this can be constructive and have positive benefits, a broader scope of inquiry must be applied for a comprehensive understanding of the implications of spousal involvement in ANC (Forbes et al., 2018; Aguiar and Jennings, 2015; Yargawa and Leonardi-Bee, 2015; Jennings et al., 2014). Women in southwestern Uganda placed a greater emphasis on the negative impacts spousal involvement in ANC created. The difficulty women face in asking their spouses to accompany them for their ANC contacts can act as a source of embarrassment and disempowerment, further disenfranchising women with already low levels of spousal support and inadvertently creating a disincentive for women to attend ANC. Most studies that have investigated spousal involvement in maternal health services have found improvements to maternal health through the reduction of complications and the increased utilization of services (Yargawa and Leonardi-Bee, 2015). While overall maternal health may improve, this may not be appropriately targeting the most vulnerable women. The possibility of perpetuating inequities exists in research which characterizes the impact of spousal involvement in ANC on individual women who receive spousal support as positively influencing maternal health, but which fails to consider the wider implications of this recommendation on women who do not have support (Jennings et al., 2014). In light of the dearth of literature pertaining to the implications of spousal involvement in ANC, this research corroborates the call for additional research to determine both the potential benefits and consequences of this involvement to ensure equitable ANC delivery.

Inequitable care

While individualized care is a focus of the WHO, women still face numerous barriers to meet personalized recommendations, particularly in low-income countries (Carroli et al., 2001b). In Kanungu District, with high levels of poverty and food insecurity (Patterson et al., 2017), challenges to meet ANC recommendations were particularly evident. Personalized care is not sufficient for the provision of quality ANC to women of low socio-economic status who lack the means to adequately provide for themselves during pregnancy. When women are of low socio-economic status and do not possess sufficient resources, or competition for scarce resources results in insufficient resource allocation to women generally and to ANC, adherence to care is jeopardized (Peltzer and Pengpid, 2013; Ahmed et al., 2010; Mishra et al., 2005). Although healthcare providers in southwestern Uganda indicated information pertaining to a woman's socio-economic status was documented and influenced the care given, to what effect is unclear; efforts to support women who were unable to meet ANC recommendations and develop strong patient-provider relationships was often not possible due to a lack of resources on behalf of the healthcare centres. An inability to adhere to the given recommendations negatively affects patient-provider relationships, creating a double burden for women who are unable to adhere to ANC recommendations. This highlights how a lack of available resources may jeopardize the utility of provided care, demonstrating a general trend of decreasing value of ANC as poverty increases and producing inequitable care which reinforces community-level inequalities rather than redresses them (Forbes et al., 2018). The alleviation of poverty is necessary for health interventions to be effective (The World Bank, 2014; Marmot and Bell, 2012; Wagstaff, 2002); this rings true with ANC both from the perspective of the women seeking care and those delivering this form of care in resource-poor settings.

Limitations

As a research team comprised of Canadians and non-Indigenous Ugandans, we strived to recognise our positionality and think reflexively to identify strategies to reduce power imbalances. Our priority was to ensure women felt comfortable and safe in sharing their experiences. The study design used semi-structured FGDs conducted in women's communities to empower women to share their stories, experiences, and perspectives. We acknowledge that some topics were sensitive, so there exists the possibility of under-reporting or misrepresenting women's experiences. Incorporating the perspectives of spouses may present a limitation of this study; however, the research aimed to privilege the voices of women in assessing the determinants of antenatal care. Spousal support was identified as a significant barrier and warrants further investigation . Translation by a facilitator created the potential for misinterpretation; we attempted to mitigate this through training, review sessions after each FGD, and backchecking with the facilitator following transcription of FGDs to ensure validity. Preliminary results were shared with stakeholders and research staff; member-checking and feedback from all groups were used as additional forms of data validation.

Next steps

Personalized care provides the opportunity for healthcare providers to tailor care to a woman's unique needs; however, the recommendations provided to women during their pregnancies should promote equitable improvements in health, and warrants further investigation. Without improvements to income equality and strategies to address the underlying poverty which exists, even individualized care will continue to fall short (The World Bank, 2014; Marmot and Bell, 2012; Wagstaff, 2002). The reorientation of health care services, including ANC, to address the social determinants of health is crucial for reduced health inequalities and equitable improvements in health (Marmot et al., 2012; Frieden, 2010; Commission on Social Determinants of Health, 2008). For example, research into possible income generating activities for women throughout their pregnancies, particularly those which do not include strenuous work, represent a possible avenue through which some barriers to ANC can be overcome and health can be improved (Haugh and Talwar, 2016; Bandiera et al., 2014; Duflo, 2012; Ahmed et al., 2010).

Women and healthcare providers indicated that spousal involvement in ANC is being encouraged and improving men's awareness of the importance of ANC is being widely promoted. The encouragement of spousal involvement in maternal health decision-making and ANC must not come at the expense of the thoughts, opinions, and needs of women (Forbes et al., 2018; Jennings et al., 2014). Women who have a spouse but lack spousal support should not be placed at a greater disadvantage or punished on the basis of the actions or inactions of their spouse when seeking ANC. To this end, research and health programming should be designed to investigate and promote meaningful spousal support and engagement in ANC (Forbes et al., 2018; Aguiar and Jennings, 2015; Yargawa and Leonardi-Bee, 2015; Jennings et al., 2014). Additional consideration for single women and widows is essential to ensure these women do not face negative consequences as a result of their lack of a spouse (Aguiar and Jennings, 2015). Strategies must be enacted to ensure all women receive equal consideration, treatment, and care when attending ANC.

Conclusion

In conjunction with the emphasis on promoting healthcare seeking behaviours and ANC attendance, equal consideration must be given to the quality and utility of care being provided. This research highlights the unique considerations to promote ANC adherence beyond an exclusive focus on ANC attendance. ANC attendance does not directly translate to improved health; this is particularly evident in the lives of the most vulnerable women. Persisting poverty will continue to prevent women from realizing good health. To this end, the most effective health interventions will target poverty reduction and facilitate an associated improvement in the socio-economic status of the most vulnerable women. To ensure high-quality care, the care provided must be tailored to women in a way which is appropriate given their circumstances, and policy makers, program planners, and healthcare providers must place a renewed focus on health equity to deliver ANC with a high degree of utility for all women. This research underscores the essentiality of looking at ANC adherence to ensure a comprehensive understanding of the value of ANC in the lives of women in southwestern Uganda and the true contribution of ANC in the amelioration of maternal and neonatal health.

Conflict of interest

None.

Ethical approval

Ethics approval was obtained from both Ugandan and Canadian institutions: Makerere University (Kampala, Uganda), the Uganda National Council of Science and Technology, and the University of Guelph.

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