Assessing Health Needs of the Women of Kolli, Benin: A Participatory Qualitative Study and Recommendations for Academic Medical Missions

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Abstract

Background: This study was conducted in the rural village of Kolli, Benin, where Ottawa-based medical trainees participate annually in a medical mission delivering primary care and health promotion activities. Academic international medical electives are often related to students' training rather than the host community’s health needs. A health needs assessment study is an essential tool to orient medical mission goals toward empowering community members to find solutions to unmet needs.

Objective: To evaluate Kolli women’s health needs; to identify solutions to health needs in concert with participants; and to guide future medical missions.

Methods: A community-based qualitative participatory study was conducted in November 2011. Data was collected through four focus groups with women-participants and semi-structured interviews with key health informants. Women participants were recruited using a purposive sampling based on mixed age categories. Key health informants were recruited by quota based on their inclusion in sanitary decisions and/or medical contact with women from the community.

Results: Women participants (n=55) and key health informants (n=7) identified two main health priorities: 1) lack of family planning and 2) poor access to healthcare. Solutions suggested to address these priorities were mostly in the area of education, including health education sessions aimed at women, men, and health providers.

Conclusion: Future mission goals in Kolli, Benin, are to expand its current clinical components to a more community needs-based educational approach. For medical trainees, this represents an excellent training opportunity to develop the key competencies of health advocacy, patient-centered communication, and medical expertise.

Keywords: (MeSH) Community-based participatory research; Women's health; Family planning; Medical students; Needs assessment; Developing countries; World health

Abbreviations: FG: Focus group; KHI: Key Health Informant; STI: Sexually Transmitted Infection; PNC: Prenatal Care Program; SDM: Standard Days Method; IUD: Intra-Uterine Device; HIV: Human Immunodeficiency Virus

Introduction

Since 2003, the Faculty of Medicine of the University of Ottawa, through its Office of Francophone Affairs, has supported a five-week global health elective for its medical students and family medicine residents. This elective has been organized annually since a formal collaboration was signed with the Faculty of Health Sciences (University of Abomey-Calavi) in 2003. The core rural clinical component of this elective takes place in the community of Kolli, in Benin, West Africa, where faculty and students provide care for an underserved population.

One of the goals of the collaboration is to improve both primary care and the implementation of primary prevention initiatives. As part of these one-week missions to Kolli, the medical team undertakes clinical activities by attending to approximately 150-200 patients daily, providing systematic de-worming treatment and organizing health education sessions with and for the community.

The World Health Organization’s 2008 World Health Report emphasizes the importance of organizing health services around people’s needs and expectations [1]. The research question of this study indirectly asks whether the activities of the Canadian group respond to specific health needs of the community it serves. The family medicine department at the University of Ottawa emphasizes patient-centred care. One of the principles of patient-centred care is said to be empowerment, such that individuals and communities must be given the opportunity and the means to take responsibility for their health [2]. Indeed, Paolo Freire’s Empowerment Model, which inspired community participatory research, states that education and community participation leads to community empowerment. This, in turn, leads to long-term community change [3]. It therefore becomes important to assess the health needs of the specific community, in order to better address unmet needs and expectations. These needs can be met with appropriate clinical and educational interventions, including the involvement and empowerment of the community members to take initiatives that benefit their health.

Although the recurrent nature of the mission in Kolli has provided much observational information, until now, limited work has been done to formally assess health needs in the community. Drawing on inspiration from participatory rural appraisals, an approach and methods for learning about rural life from, with, and by rural people [4]. The team conducted a qualitative study that involved participation and dialogue with community members and key health informants.

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Indeed, the two-fold advantage of community-participatory research is that it is not only a strategy for local people to become empowered by the chance to give insight and participate in health planning, but also for health workers to get a sense of strength and weaknesses of the services offered [3,5].

Inspired by the third Millennium Development Goal (MDG), to “promote gender equality and empower women” [6], the research team decided to focus this community-needs assessment on women and their health needs. Over the years, the team has benefited from good contact with adolescent and adult women of the community through education sessions-such as the popular Standard Day Method of birth control (SDM) and through clinics, where the majority of attending patients are women and their children. The team's observations from working in the community identified a gap between men and women in terms of health-related knowledge and educational opportunities. This is consistent with data on Benin showing inferior literacy rates in young women compared to men of the same age (42% vs. 64%) and inferior prevalence of general knowledge relating to Human Immunodeficiency Virus (HIV) (17% vs. 31%) [7].

Objectives

The main objective of this study was to explore and describe health needs and priority problems, as they are perceived by a group of women and key health informants in Kolli.

Secondary objectives were to: a) explore knowledge, attitudes, beliefs, and practices related to health priorities; b) probe for problem-solving ideas that could help address the main issues discussed; c) stimulate dialogue and participation in health initiatives by using a community participatory approach, thus empowering participants to take an active role in improving their health; d) use the context of focus group discussions as an opportunity to provide health education built around emerging topics, as well as perceived and observed needs. The latter would be based on previous clinical experience in the community (e.g., malaria or sexually transmitted infections)

Subjects and Methods

Ethics approval was first obtained from the Bruyère Continuing Care Research Ethics Board (Ottawa, Canada) and the Comité National d’Éthique pour la Recherche en Santé (Cotonou, Bénin).

Study population

The study took place in Kolli, located in the commune of Toffo, Sanitary Zone of Allada-Toffo-Zê in the Atlantic Department, Benin. Kolli encompasses 38 hamlets divided into three villages, and has a population of approximately 9000 inhabitants. Several ethnic groups are present, the majority of which are Aizo and Fon. In this rural area, most families are polygamous. Women are mainly involved in the commerce of agricultural and food produce; they are also often employed in agricultural labour and livestock farming [7]. In terms of accessibility to healthcare, the nearest available private and public clinics are located in Houebo, within the commune of Toffo, 7 to 9 kilometers away from Kolli. A community health center was built in Kolli in 2006 but is still not operational. Means of transportation are rare, and travel is usually on foot.

Study design

This qualitative study included both focus group (FG) discussions with women-participants and semi-structured interviews with key health informants (KHI).

Sample size

The sampling method for women-participants was a purposive one: the research team aimed to interview at least four focus groups with a minimum of 6-to-8 participants per group.

Recruitment

All community women between the ages of 15 and 49 years were invited to participate. This age bracket was chosen because it corresponds to the age of procreation, when women are exposed to increased health risks relating to pregnancy, and tend to have children in the household. In order to allow for inter-generational transmission of information, the team used mixed-age categories: Fifty percent were recruited from the 15-to-24 age bracket and the other 50% of women recruited were 25-to-49 years old.

Key health informants were recruited according to their inclusion in sanitary decisions and/or medical contact with women from the community of Kolli (village chief, traditional healers, chief medical officer, health agents, and clinical nurses).

Data collection

Data was collected in the context of FG discussions and semi-structured interviews using the same interview-guide with open-ended questions for both groups (please see Appendix for Interview guide). Each group was facilitated by a member of the research team along with a local facilitator who also acted as translator between Fon language and French. Data collection occurred over the period of one week in November 2011. Informed consent was obtained from each participant.

Analysis

All FGs and interviews were recorded and transcribed. Major themes and subthemes were then coded and analyzed using NVivo. By using both focus group and interview content from different sources, the analysis allowed triangulation of the data to therefore increase validity and reliability.

Results

Fifty-five women participants were recruited in total, 28 of whom were of the “younger” age category and 27 of whom were of the “older” age category. They were divided in groups of 10-to-15 participants. This represented more participants than the team had intended, but many women were interested in participating, and the team wanted to encourage them as much as possible. Seven KHI were recruited: one of the village chiefs, the chief traditional healer, the two local health agents, the Chief Medical-Officer of Houebo, the Assistant Medical-Officer of Houebo, and the Houebo private clinic nurse. Health priorities, knowledge, beliefs, practices, and problem-solving ideas, were examined for both the women FG participants and the key health informants in order to triangulate the analyzed data.

Health priorities

Content analysis of focus group discussions identified two major health priorities for women: 1) lack of family planning and 2) poor access to healthcare.

Lack of family planning

Lack of family planning included three sub-themes: Unmet needs for family planning, complications of multiparity, and illicit abortion as a means of birth control. Complications included post-partum haemorrhage; emergency caesarean section; pre-eclampsia; the
financial burden of having several children; fatigue; and illicit methods of abortion. Women spoke at length about the financial burden placed on them with multiple offspring. Since most men are polygamous, they cannot assume financial responsibility for all their children. The responsibility therefore lies with the mother to find work and ensure nutrition, education, and urgent medical care for her children. Three women across two FGs also spoke about illicit voluntary abortion as a means of birth control (using herbal teas, inserting branches in the cervix) or secret intrauterine device (IUD) insertion without their husband’s consent. The main obstacle to family planning, they said, was the unwillingness of husbands to allow their wives to use contraception. Explanations cited related to the husband’s pride in having many children:

“If the neighbour has 20 children then he will want 22.”

Other reasons were: perceptions that wives might have extra-marital relationships if they use contraception; the importance of producing male offspring; and infant mortality. Women spoke with frustration about not being in control when it came to family planning:

“Here, our husbands make the decisions for us.”

Women stated their main exposure to contraceptive methods takes place during the post-partum visit with the midwives; however, their husbands still needed to approve it:

“After birth, the midwife tells us there are several contraceptive options available (injections, pill). However, she says we need to bring our husbands to discuss it and decide together – and when we tell them about it, they refuse to attend the next visit with the midwife. So we are not able to start contraception with her.”

Key health informants, particularly the ones involved in healthcare also cited lack of family planning and complications of multiparity as the health priority for women. Major complications were emergency caesarean sections and the financial burden placed on families (that, according to them, leads to increased infant malnutrition and poor access to medical care and education). The KHI s also corroborated women’s statements regarding men’s negative perceptions of contraception and reasons against it. Changing those perceptions can be very challenging, since health care providers have far less contact with men than with women. On the other hand, the local village chief felt that men are becoming more aware about family planning, especially the younger generation. Two KHI s felt husbands might be more open towards contraceptive methods than is believed by their wives and cited the importance of adapting the language for men to think of contraception in terms of “spacing” the births rather than “limiting the number of births”. One obstacle to family planning cited by two of the KHI s (but not by women in FG) was that the women themselves may sometimes compete with each other, mainly in polygamous households, to have more sons. Additionally pregnant women do not attend government-sponsored prenatal visits where they could receive information about contraceptive methods. Finally, KHI s also cited, as a potential limitation, the fears women have of contraception side effects (e.g., weight gain) as a barrier to usage.

Poor access to health care

Access to health care was the second most cited health priority for FG participants. Financial cost was cited as the main obstacle to obtaining medical attention and was related to the distance of travel to the nearest health center, as well as the cost of the medical consultation. As one woman stated:

“We need to walk 7 km until the closest health center in Houegbo. It is far and expensive. We usually start by traditional medicine locally.”

Women explained that they delayed consulting a physician, which often led to their health deteriorating even more:

“If we are sick, we will delay consulting at least 5 days…and then we are very sick.”

Information from KHI also validated the limited access to healthcare available to the women as well as the barriers to seeking medical attention. They felt that limited access to healthcare was a particularly important limitation for pre-natal care and delivery. As one KHI stated:

“Whenever the authorities for the region come to assess Houegbo’s needs, I tell them the number one thing is to have an operational health center in Kolli.”

Another KHI added:

“One of the big problems for women is the absence of a local health center, and specially the absence of a maternity-ward. It has occurred that women give birth on the side of the road because they are usually on foot and it is quite a distance to reach the health centers in Houegbo.”

Key health informants thought that the health center that was built in Kolli five years ago was not yet operational for both political reasons and difficulties finding medical staff. Key health informants working in western model healthcare said that women present to the clinic when a complication arises. However, if they have not attended the national prenatal care program (PNC), an emergency caesarean section is not be covered by public funding. The main obstacles to attending PNC were again the geographic distance from the clinic and financial cost of the travel. The KHI s also cited that women lack the autonomy to unilaterally make a decision about consulting: husband or husband’s parents must approve any cost.

Practices, beliefs, knowledge

Practices, beliefs, and knowledge relating to both health priorities were discussed.

Practices

Regarding poor access to healthcare, FG participants cited the practice of polygamy as indirectly limiting women’s ability to consult medically because of increased financial strain in such families. Focus group participants also explained they tend to delay consulting a physician as long as they can in order to prioritize the children for medical consultation. As such, most women participants stated they first use traditional medicine when ill, since it is locally available and therefore ultimately less expensive. Key health informants corroborated these practices and also cited the belief in voodoo as a limitation to accessing healthcare for some community members.

Beliefs

Their explanation was that voodoo gave women a different understanding of illness, which was not medical (e.g., illness caused by a curse) and therefore prevented them from seeking medical care when they in fact needed to. They also cited a lot of “back and forth between traditional and western medicine” which may prevent women from obtaining consistent medical care.

Knowledge

Regarding the lack of family planning, more than half of the women could not name a method of birth control. Women in the “older age
category” could cite some methods that were in order of frequency: the “bead necklace method” (Standard Days Method, SDM), “injections”, followed by oral contraceptive pills, and IUD. School-attending teenage girls did not appear knowledgeable about methods of contraception. The SDM is presented and explained to groups of women every year by the University of Ottawa group. Older women in most of the FGs were able to demonstrate the technique to younger women. However, the majority of women admitted to not using any means of birth control. Of those who did, most used the SDM. One woman admitted having had an IUD inserted without her husband knowing. Health-agent KHIs corroborated that some women practiced contraception, for instance Depo-provera injections, without their husbands’ knowledge.

Solutions to help address priority issues

In order to address key health issues for women, participants of FGs and KHIs were asked to find potential solutions they could undertake to help alleviate these problems, with an emphasis on solutions that were rooted in the community. Overall, most solutions proposed were in the area of education. In one FG, older women participants were asked by the younger ones to provide sexual health education and family planning sessions at the local high school; the older women accepted. In two other FGs, participants suggested that regular health education sessions within Kolli be given by the trusted female health agent who facilitated these FGs; the latter accepted and at the completion of the study, provided her phone number to participants should they seek confidential health advice. Participants in two FGs also proposed to disseminate knowledge they had acquired in FG discussions to their extended families and closest neighbours. Finally, in three of the four FGs, women cited having a locally running health center as a means of increasing access to healthcare.

The KHIs also identified education of both women and men as key in improving health outcomes. Regarding the community’s women, particularly younger females, KHIs explained that they tend to be less educated, as priority for education is given to male children for two primary reasons: 1) Insufficient income to educate all children with bias towards male children; 2) fear that girls attending school will more be exposed to pre-marital sex and become pregnant with no husband to support them. Most KHIs stated that educating women in the community would increase both their understanding of illness and ability to undertake family planning. They also felt that the medical team from the University of Ottawa had a major part to play in supporting women health education. Most KHIs stated that since men are ultimately the decision-makers in the home, it is very important to address them and concurrently direct education in the area of sexually transmitted infections (STIs), family planning, and complications of multiparity. The KHIs cautioned that educating men must occur in a culturally sensitive way:

“It is important to have the right approach with them. Their respected community leaders need to be involved. Also, it is in the way the message is delivered...If one says, 'limit the number of births,' it will not be as appropriate as 'spacing the years between births to have healthier children and accumulate resources over that time'.

Participants also recommended that the medical team from the University of Ottawa could focus health education toward the KHIs who could share this information with the community in a culturally appropriate manner. The KHIs were particularly eager to understand the causes of illness and common health problems. One participant said:

“When you are in clinic here, you must see many entities...We want to know more about the causes of the symptoms you see. We have not found all the traditional medicines to treat them”.

Finally, nearly all KHIs cited the importance of having an operational local health center with a maternity ward to help address complications of childbirth, family planning, and access to healthcare.

Discussion

In this first formal health needs assessment in the community of Kolli, Benin, by far the two most cited unmet health needs were related to family planning (and the ensuing complications of multiparity) and limited access to healthcare. The research team was surprised at the women’s openness, given the slightly larger-than-anticipated size of the focus groups, particularly relating to family planning. The results of this study show that when women felt comfortable and trusting in discussion, they engaged easily in the conversations.

Lack of family planning was a key issue for them. It impacted several aspects of their lives- their health, autonomy, finances, and general wellbeing. In fact, the importance that the women participants gave to family planning as an unmet need matches data from the Demographic and Health Survey (DHS) [8], which shows that unmet needs for family planning are the highest in the world in Sub-Saharan Africa (rates of over 20% in 22 of 28 Sub-Saharan countries). For Benin, rates have been comparable (26% in 1999).

In our study, women participants most often cited their husbands as the main obstacle to family planning. This is consistent with DHS results showing family opposition among 20-30% of Sub-Saharan African women surveyed [8]. In Sub-Saharan Africa, unmet need has been found to refer to spacing the births rather than limiting them [8]. The KHIs corroborated that women cannot exclusively decide on pursuing contraceptive method without the agreement of their husbands. However, KHIs also stated that men may be more interested in family planning than their wives perceive. Interestingly, when DHS data was re-analyzed to reflect husbands’ viewpoints in family planning, unmet needs were present but to a substantially lesser extent than for women [9]. It has therefore been suggested that the inability to practice family planning in Sub-Saharan Africa could in fact reflect a lack of communication between couples regarding use of contraception and reproductive goals [9,10].

In this study, the KHIs stated the importance of using appropriate culturally-sensitive language than would not deter men from family planning. This supports several studies conducted since the 1990s in rural Africa that have shown an interest in men gaining more knowledge about family planning [11-13] and messages adapted in a way as to entice men towards family planning [12,14]. A future goal of the medical mission in Kolli should, therefore, be education surrounding family planning directed at men, using arguments and language that are culturally-sensitive and would be better to foster rather than deter from family planning. Discussions should also include women to encourage communication between spouses.

Access to healthcare is a well-recognized unmet need in Africa, particularly in rural regions. Access to healthcare is key for progress and development, and particularly tied in to the 4th, 5th and 6th Millennium Development Goals, which relate to reducing child mortality, improving maternal health, and combating HIV/AIDS, malaria and other diseases [6]. In this study, the main reasons limiting access to healthcare were mainly financial cost and inconvenience of travel as no health care is provided within Kolli. In fact, a community health center was built in Kolli in 2006 and has been equipped for several years but has yet to open due to lack of human resources and probable political reasons.
The shortage of well-trained health workers in rural settings is mostly related to the fact they can earn more in urban settings [13].

A grander idea of this study, particularly in using a community participatory approach, was to involve the community in discussion and intervention that was of importance to them and ultimately to empower community members through participation. In this particular community, the research team is trying to affect long-term change in community health behaviour. Fortunately, results from our FGs and interviews with KCHs are encouraging as they show that the community is interested in participation and education: This is the first step towards empowerment and changes in health behaviour and outcome.

Limitations

Groups were generally larger (10-15) than had been projected (6-8), which can affect the way participants interact in the discussion. Larger groups are often less conducive to participants sharing equally. The team agreed, however, there was such an interest from the community's women to participate in this study that a step toward meeting community involvement goals was to turn away as few potential participants as possible.

The groups represented different age brackets intentionally to foster interactions and discussion. The research team observed this may have sometimes resulted in younger generation participants being more apprehensive within the group in front of older women participants, and, as such, perhaps they did not feel free to openly expose their views.

Focus groups were not all facilitated by the same research-team member and local member, which may affect differences in the topics discussed. Particularly, the third focus group was co-facilitated by a midwife who now lives and practices in an urban setting and it was perceived by the research-team members that she was at times condescending with the rural women-participants. This in turn seemed to incite women in this focus group to so be less open in discussion. Also, the fourth focus group was ultimately co-led by a trusted male health agent, after consent from participants of this group, because there was an unexpected absence of one of the female facilitators – this was the only focus group that did not discuss family planning or complications of multiparity as an issue. This could be due to the fact women did not feel comfortable doing so in front of a man.

Conclusion

This study has shown that there is a need for further health education and advocacy in the community. How then can these educational needs from the host community be met? The medical team from the University of Ottawa is already involved and trusted in the community and already provides some educational sessions during the medical mission. One idea would be to expand our medical goals in the community and already provides some educational sessions during the medical mission. The results highlight the importance of working in partnership with the local host community. This is one of the best ways to identify and respond to health needs in keeping with a patient and community-centred approach of primary care. Community participatory interventions are a useful approach to involve and empower community members to find solutions that address their health needs. Also, at a time when global health curricula are multiplying, and medical faculties are trying to establish goals for international electives, a needs assessment study allows such medical missions to shape objectives for all stakeholders: both the host community it serves and the physicians-in-training. Developing educational initiatives aimed at the community would provide the opportunity for medical trainees to increase clinical knowledge, while also developing advocacy and communication skills that are essential to strong and competent physicianship.

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Appendix

Interview guide for focus-group discussion and semi-structured interviews*

1. What health issues do you feel most affect women of the community?
2. Do women of the community know prevention related to these health issues?
3. Which challenges or limitations, in your opinion, may affect the incidence of these health issues?
4. Which beliefs or practices, in your opinion, may impact the occurrence of these health issues?
5. Do women in the community consult medically within a reasonable delay? What impacts the delay to consult?
6. Are there local activities or interventions that aim to prevent these health issues that are most important to women of the community? If so, what affects participation of women in these activities or interventions?
7. Which solutions would you propose to help address these priority health issues?

*In focus-group discussion, questions were re-phrased to include the pronoun “you” instead of “women of the community”.

References


