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ORIGINAL ARTICLE

Prevention-of-Mother-To-Child-Transmission of HIV Services in Sub-Saharan Africa: A Qualitative Analysis of Healthcare Providers and Clients Challenges in Ghana

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ABSTRACT

Background: Developed by the World Health Organization (WHO) and partners, the correct adaptation and implementation of the global guidelines on prevention of mother-to-child transmission (PMTCT) of HIV is critical. This study explored the challenges that health workers face implementing WHO's PMTCT guidelines, and the experiences of HIV-positive clients receiving these services.

Methods: We interacted with 14 health professionals, and 16 PMTCT clients through in-depth interviews. Four of seven PMTCT sites within the Accra Metropolis were purposively included. Interviews were tape-recorded, transcribed, analyzed, and then sorted into themes.

Results: Health workers had challenges translating PMTCT guidelines into useful messages for their clients. Their counselling was often prescriptive. Counselors identified inadequate in-service training as a key reason for their outdated and inconsistent messages. HIV-positive clients exhibited general knowledge about the importance of doing exclusive breast-feeding for the first six months of life. Clients had confidence in antiretroviral for PMTCT. However, deeply rooted socio-cultural practices and the attitudes of counselors remain challenges to clients.

Conclusions and Global Health Implications: Counselors require refresher training which addresses, among other things, long-held socio-cultural practices. Publicizing these challenges will prod policy makers and program implementers to develop strategies that address the challenges both locally and globally.

Key Words: HIV • Service providers • Clients • PMTCT • Challenges

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Background

Mothers all over the world are concerned about providing the best for their infants. Mothers in extremely difficult circumstances, including those infected with HIV, do not lack these mothering tendencies. Unfortunately, the stigma often associated with HIV/AIDS make mothers' infant feeding choices very difficult. Most cultures in Africa encourage breastfeeding; HIV-positive mothers who choose to formula-feed might be unwittingly announcing their HIV status. Such announcements have implications. Additionally, due to the lack of essential facilities, infant formula preparation is often problematic. These background issues have led many HIV-positive mothers to breastfeed or to mix-feed, even when they have access to infant formula. [1.2.3]

The global guidelines on HIV and infant feeding have seen several revisions over the years. The latest revisions were done in 2010.[4] The frequency of revisions has left some health workers confused as to how best to counsel HIV-positive mothers. [5] The most recent revisions were motivated by the evidence that when antiretroviral medications (ARVs) are administered during pregnancy and postnatally significantly reduces the risk of vertical transmission even if breastfeeding is done.[4] The guidelines further advise that "when replacement feeding is acceptable, feasible, affordable, sustainable, and safe (AFASS), avoidance of all breastfeeding by HIV-infected mothers be done, otherwise, exclusive breastfeeding be recommended during the first six months of life with antepartum and postnatal antiretroviral prophylaxis or treatments. Most health workers according to a 2008 study do not understand the infant feeding guidelines despite their receipt of some training in prevention of mother-to-child transmission of HIV (PMTCT).[6] Other studies in West Africa^[7], and South Africa^[8] have documented similar challenges of nurses and midwives attributable to these constant revisions.

Ghana is currently implementing an adopted and lightly adapted version of the global HIV and infant feeding guidelines. The Ghana guidelines emphasize urgent need to scale up actions to achieve national coverage and universal access to HIV services. It emphasizes partnerships, participation of people

living with HIV and communities, as well as male involvement. Guidelines instruct that clients be provided services at no fee. The guidelines also contain local guidance on immunization. Finally the guidelines contain guidance to health workers on how to demonstrate respect for local customs, practices, and beliefs when helping a mother make infant-feeding choices. [9] There is limited assessment of the program. A recent study publicized the experiences and the challenges that HIV-positive mothers (but not health workers) in Ghana face.[10] The current study explored the challenges that health care workers face implementing PMTCT guidelines, and the experiences of HIV-positive clients receiving these services in the Accra Metropolis in Ghana. Documenting and publicizing these challenges may prod policy makers and program implementers to develop strategies that address the challenges.

Methods

Study Design, Sites and Setting. The study was hospital-based cross-sectional in design. It was conducted at four PMTCT sites in the Accra Metropolis; La General Hospital, Achimota Hospital, The Police Hospital and Ridge Hospital. Ridge Hospital is the Greater Accra Regional Hospital, Achimota Hospital and La General are district hospitals, and The Police Hospital is a quasi-government facility catering for both civilian and police officers. All these sites provide routine PMTCT services to women. While hospital-specific HIV prevalence were not available, the HIV prevalence for antenatal attendees in the Greater Accra region in 2009 was 3.2%; almost double the national HIV prevalence.

Study Subjects. Fourteen health workers and 16 PMTCT clients were interviewed. The 14 health workers (11 nurses and three medical officers) represent the total population of health personnel providing PMTCT services at the facilities.

Sampling of PMTCT Clients. The target population were women who were enrolled in the PMTCT programs of the selected health facilities. From among pre-screened women, a sample was purposively selected deploying both the maximum variation technique^[12] and the principle of saturation.^[13]

In this study, a conscious effort was made to include a good mix of clients – from varying backgrounds. The interviews were terminated after the 16th participant when saturation was deemed to have been reached. In-depth interviews with service providers and their clients documented individual perspectives and experiences regarding the global infant feeding guidelines and the PMTCT in general. Conducted in English, all interviews were taperecorded, and complemented with handwritten field notes.

Ethical Considerations. We obtained ethical clearance from the Ghana Health Service Ethics Review Committee to conduct the study. Permission was also obtained from the health facilities where the research was conducted. All study participants provided informed consent prior to participating in the interviews.

Data Processing and Analysis. The tape recorded in-depth interviews supported by the handwritten field notes were transcribed and analysed manually using the principles of systematic text condensation as described by Malterud. We were cognizant of the potential for manual analysis of the data to result in the introduction of personal idiosyncrasies into themes that metamorphosed, therefore, themes from the manual analysis were later validated by NVivo qualitative data analysis software (QSR International Pty Ltd. Version 9, 2010).

Results

Selected Attributes of the Participants (Clients; and Service Providers). The 16 HIV-positive women who participated in the study were in their 20s and early 30s. None of them was widowed. Of these women, 11 (69%) were living with their partners, while majority (9; 56%) of the women were unemployed. The 14 service providers comprised 11 nurses and three medical officers. Two of the nurses had a qualification in public health in addition to midwifery qualification. Ten of the nurses had received some training on PMTCT that included HIV and infant feeding. Their ages ranged from 43-59 years, with 6-36 years of post qualification experience.

Challenges Associated with Implementing the Global PMTCT Guidelines. We summarize in Table I the challenges faced by both the service providers and their clients.

Table I Challenges faced by PMTCT service providers and their HIV-positive clients

Provider-specific challenges	Client-specific challenges
Lack of counseling acumen	Emotional challenges
Frequent update of guidelines	Psychological challenges
Confusion about infant feeding	Physical challenges
Lack of local adaptation of policies	Financial challenges
Inadequate logistics	Privacy/ service organization
Inadequate training	Quality of service provision
Workload and lack of motivation	Pressure from family and friends
Credibility of counseling information	No community-based support systems

Provider-Specific Challenges

Nurses are not Necessarily Counselor. Nurses performing counselling had challenges. Confronted with the generally poor socio-economic background of their clients, nurses inadvertently gave directive counselling–prescribing only exclusive breastfeeding. As a nurse counselor puts it:

"Looking at their condition in life they can't afford the formula, so I base my counselling on breastfeeding. How can I tell a client to give infant formula, when I know she cannot even afford the daily requirement for milk? Currently the small tin of lactogen costs I 5 Ghana cedis (US\$8.00). How many tins can she afford when she is just a petty trader? So I tell her all these other options and then finally we settle on breastfeeding" (Nurse #12 from the Achimota Hospital)

Conflicting Instructions Arising out of Changes in Guidelines. Internal conflicts within nurses impact negatively on their work. As part of the baby-friendly hospital initiative, antenatal nurses are supposed to encourage and promote breastfeeding for all mothers. For HIV-positive clients, nurses are obliged to talk about formula feeding as an option. One nurse highlights this conflict:

"But for HIV, I would never have talked about formula feeding during an interaction with an ANC client. And yet, I know they can never implement this feeding option. It is a real conflict for me; a dilemma of whether to say or not to say"

Health Workers' Own Confusion About Infant Feeding Messages. The reasons behind the infant feeding options for HIV-positive mothers were not very clear to some nurses. Two of the physicians highlighted a particular situation where the messages given out in the pharmacy were very different from what the PMTCT nurses gave out to clients.

Inadequate Training and Logistics. None of the health workers received prequalification training on HIV and infant feeding. Five received some level of inservice training.

"I completed midwifery school about 21 years ago, when we were in midwifery school HIV was not in the curriculum we didn't hear much about the HIV." (Nurse #4 from La General Hospital)

Nurses who had not been trained on infant feeding counsel using their own experiences:

"I haven't received any infant feeding training. I counsel based on my experience. I want to participate in training workshops; I don't want to be stuck here with the old knowledge." (Nurse #6 from Ridge Hospital)

Client-Specific Challenges. The challenges and experiences of HIV-positive women on PMTCT Services range from emotional to financial.

Financial. Some clients complained about transportation costs. A recurring complaint had to do with the monthly transportation cost to the facility. Even though the cost of ART is highly subsidized in Ghana (clients co-pay a token of GH \square 5; about US\$2 per month), this plus a transportation cost to the facility can be prohibitive to a family living on less than a dollar a day.

Lack of Privacy/Service Organization. Privacy is seriously constrained in most of the facilities. In some instances, the rooms in which PMTCT counseling is carried out are along corridors and boldly labeled to the full glare of everyone. In some places, a designated nurse is the sole counselor. The various complaints tabled about this setup are exemplified by this quote:

_"When I'm called into that room, I feel violated because my status is immediately disclosed to all others seeking care at the facility." (PMTCT CLIENT #13, La General Hospital)

Pressure from Family and Friends. Some of the mothers face challenges implementing their chosen infant feeding options.

"... Even though I received counseling on infant feeding from my nurse, and opted to do exclusive breast-feeding my family members sometimes gave my baby other foods without my consent". (PMTCT CLIENT #4, Ridge Hospital)

Absence of Community-based HIV Support Systems. Community-based supportive systems do not exist in the Accra Metropolis for this category of mothers. Of note, majority would not access those services even if they existed.

"Using such a service will be an avenue for self-disclosure of one's HIV-status to the community, which can lead to stigma as well as give "difficult partners" an opportunity for victimization." (PMTCT CLIENT #11 La General Hospital)

Discussion

The study has identified a myriad of challenges for services providers and clients. These challenges are presented in Table I. Even though the main goal of the HIV and infant feeding guidelines is to guide health workers^[4,15], this study show that health professionals overtly show the lack of conformance to some of the clauses of the internationally-developed, and locally-adapted guidelines. Almost all the nurse midwives interviewed believed that only one option was best for their clients – exclusive

breast feeding. This finding concur with that of de Paoli and colleagues, who observed a similar practice in a research conducted in Tanzania.[16] This directive counseling is certainly paradoxical given that same health workers mentioned mothers were at liberty to choose what to feed their babies. This development is particularly worrying because implicit in the WHO guidelines on HIV and infant feeding[4] is the mother's right to choose whatever option she deems appropriate, based on impartial information provided by health workers. We believe that while some health workers are unable to divorce themselves from a timeless attitude of paternalism, others may be ignorant of the guidelines and the issues around them. Prescriptive counseling violates the informed choice clause of the guidelines. We also assert that choice is not just 'a clause in the guidelines,' but also a human right.

From our interactions, it was apparent that a number of the nurse-midwives were unprepared for their role of providing infant feeding counseling. They lacked pre-service capacitation on the subject and their in-service training proofed largely inadequate. All the nurses disclosed that they lacked opportunities to update their knowledge and thus expressed the desire to have regular refresher trainings to keep them abreast of current information. An earlier study in Tanzania had reported a similar appeal by nurse counselors.^[3]

The current study also confirms prior studies that nurses rendering PMTCT services are overworked and overwhelmed by the increase in the volume of pregnant women who come for counseling. The doctor-population ratio, and nurse-population ratio in Ghana are respectively 1:13,683 and 1:1,415 per 100 000.^[18] This current assessment found that nurses were carrying out up to 100 consultations per day during HIV clinic days. This is far greater than the WHO recommended maximum of 30 consultations per day.^[19]

While most of the providers were concerned about the above challenges and also the possibility that clients' perception of their ability and credibility could be negative, most clients were concerned about confidentiality, respect, and service infrastructural layouts more than the veracity of the technical information that providers deliver to them.

The issue of facility layout is particularly important given the highly stigmatized nature of HIV. Lack of privacy and conspicuous designation of consulting rooms and particular health personnel for PMTCT programs can be counterproductive. Such arrangements, a client argues, indirectly labels clients who interact with the nurse at the said consulting room as HIV-positive.

Conclusions and Global Health Implications

This study shows that service providers in the surveyed hospitals are noncompliant with the stipulated PMTCT guidelines in Ghana. Providers require refresher training which should address, among other things, paternalism and long-held socio-cultural practices. Local public health agencies need to examine settings-peculiar challenges when adopting or adapting globally-developed health guidelines. Sharing the challenges faced by providers and clients may potentially prod policy makers and program implementers to develop strategies that address the challenges in fully utilizing international guidelines to address local needs.

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