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Kalilla Dilgen

Bridging the Gender Digital Divide: An Exploration into Women’s Access to and Usage of Mobile Phones in Uganda

**Purpose of the Study:**

It is the objective of this study to explore the gender digital divide as it can be seen in the Busoga region of Uganda. In consequence, this research gives light to the potentials, as well as limitations, of mHealth and the use of mobile phones for sharing sexual and reproductive health (SRH) information with women in this region.

**Research Question:**

What are the existing barriers impeding women’s access to and usage of mobile phones as a means of accessing SRH information in the Busoga region of Uganda?

**Sub-Questions:**

In an attempt to best understand the essence and manifestations of these barriers the following specific questions will be explored and answered.

* What barriers exist for women to access and use a mobile phone in Busoga?
* What do women in this region currently use a phone for?
* How likely are women to currently have access to SRH services via a mobile phone? Do they utilize such services?
* What alternative to mobile phones do women have to access SRH information?
* What evidence is there for the ability of mobile phones to be used in sharing SRH information both in Uganda and globally?

**Background**

As illustrated by the consistent presence of STIs, HIV, AIDS, as well as the highest maternal mortality ratio in the world (533 deaths per 100,000 live births), the burden of disease in sub-Saharan Africa has long been dominated by SRH, with women carrying much of the burden (Kipp, et al., 2007). Although improving women’s health and wellbeing is a key difficulty facing many developing countries today, negative health outcomes related to SRH are not inevitable, they are, on the contrary, largely preventable with the appropriate education and access to information. However, such a task is often easier said than done for many countries that face a lack of infrastructure and resources, resulting in the need for innovative solutions.

One such innovation that has been widely recognized in development discourse, by both academics and practitioners, is a practice known as mHealth. MHealth utilizes the “ubiquitous power” of mobile phones (Kaplan, 2006) to disseminate health information and services to those most in need located in otherwise hard to reach settings. However, it has been made increasingly clear over the last 15 years that mobile phones are hardly ubiquitous, and that there remains a substantial ‘digital divide’ which excludes marginalized groups from accessing, using, and benefiting from mobile phones (Kasusse, 2005). As it is typically those with the greatest health

needs who are most excluded from the digital world, any development or medical practitioner hoping to employ mobile phones for the purposes of extending health care must first understand the barriers marginalized groups are confronted to both access and use them (Mitchell et al., 2011). It is, therefore, the purpose of this study to explore the lived realities of the digital divide amongst one of the most digitally ostracized groups in the world, women (Huyer & Sikoska, 2003).

**Methodology**

With a soaring unmet demand for family planning, low contraceptive use, extensive lack

of SRH education, and high fertility rates (DHS, 2018, Lawrence, 2015), Uganda represents an ideal location to conduct research on mHealth and related programs that work to assist women in navigating the perplexing deficiencies of SRH services. This study engaged primarily with a mixed-methods approach that analyzed primary data in addition to relevant secondary theoretical literature and empirical research. All primary data was facilitated and provided by Women in Leadership (WIL), including activity reports and participant lists from outreach events, as well as the My Body My Rights baseline report. During analysis, these reports were heavily considered as they provide a large sample size and heavily engage with the feelings and themes of women and men regarding mobile phones and SRH. These sources were supplemented by telephone surveys that were administered to women living within the Busoga Region. Surveys were written in English and translated into Lusoga, the local language, by a WIL staff member to ensure the best interpretation. Surveys consisted of both closed and open-ended questions, however, to best accord them taking place over the phone, fewer open-ended questions were chosen. Despite this, they were designed to still reflect the voices and perspectives of women as best they could by focusing on their personal experiences with regards to access to and usage of mobile phones and SRH information and services.

**Findings**

*Barriers to Accessing and Using Mobile Phones*

*Physical barriers:* Findings from survey responses and activity reports made evident that poor network coverage, high costs, and difficulties maintaining a phone charge greatly impede women’s access to and usage of mobile phones in Busoga. Women in this study who reported owning a phone were asked what challenges they face when using their phone and 100% chose physical related barriers: 83% cited poor signal and 36% said it was difficult to maintain a phone charge. Furthermore, of those who did not own a phone, 40% indicated the cost of a handset as the reason why.

*Literacy barriers:* Primary data demonstrated that traditional literacy, including reading and writing, is a deterrent which continues to prevent women from accessing and using mobile phones. Among participants in this study, the inability to read and write (English and Lusoga) was stated as both a reason why women did not own a phone in the first place and why they were unable to register for the WIL USSD app.

*Socio-cultural barriers:* Social norms that dismiss women’s access to or use of phones based on promiscuity, gatekeepers that uphold and reinforce these social norms, and power structures in which both social norms and gatekeepers are embedded are the dominant socio-cultural factors in the way of women fully obtaining access to the digital age. Gatekeepers primarily include friends and family who project ‘negative feelings’ onto women who own phones, as well as husbands who often outright forbid it on the grounds that ownership ‘promotes promiscuity in the family’.

*Trends in Mobile Phone Usage*

An analysis of the data showed that women in Busoga are frequently engaged with mobile phones and interactive with a variety of applications such as, *phone calls, mobile banking text messaging, health information, internet, and emailing*. Of these activities, women identified phone calls and mobile banking as the most important functions of their phones. These findings suggest that despite low levels of traditional literacy, women in this region maintain a sufficient level of *digital literacy* that allows them to regularly use and benefit from several mobile applications.

*Uptake Patterns of SRH Information Services*

Survey results indicated that the majority of women in this region (84%) have access to and use a myriad of SRH information services such as *VHTs, local health centers, radio broadcasts, WIL outreach events, WIL app, and the internet*. Furthermore, 81% of participants who reported having access indicated that they generally do so from more than one source; 100% of women who used radio noted that they also use VHTs and outreaches events, 59% of women who received access through VHTs also visited health centers and, 55% of women who cited radio also listed health centers as their point of access. The below graph illustrates key survey findings, highlighting the SRH services most commonly used by women in Busoga.

*SRH Services and Mobile Phones*

Upon inquiry into women’s previous experiences with accessing SRH services through mobile phones in particular, 72% of all women stated that they have received SRH information through a mobile phone before. Women in this percentage listed multiple means of mobile access including the *WIL USSD APP, contacting VHTs and WIL Uganda, the internet, and the Ministry of Health.* Participants were also asked if they have ever received an automated text message with generic health information to which 72% responded yes. Of those who responded yes, 39% received the text from the Ministry of Health regarding COVID-19 and 44% from WIL. These results indicate that the majority of women in the sample were able to read and understand a text message with health information, making automated text messages a feasible method that should be considered for future projects. Due to the fact that users are not required to write anything into the WIL USSD app, only read from the menus automatically displayed, this research supports claims that USSD has the capability to reach populations that may be otherwise ostracized from both adequate health care and the digital world (Zhou et al., 2015, Sigard & Jared, 2014, Perrier et al., 2015). The below graph demonstrates the various mobile sources women use to access SRH information in Busoga.

*The Future of SRH mHealth*

Based on a synthesis of the broader literature and an analysis of the gathered empirical data this report argues that there is enough evidence to discern that mHealth, for the purposes of sharing SRH information, is a promising avenue for practitioners in Uganda, and elsewhere (Nchise et al., 2012, Siedner et al., 2012, Mitchell et al., 2011, Roberts et al., 2015). Survey responses, alongside secondary case studies, demonstrate that due to the high desirability of mobile phones, even women who do not own a phone themselves will find ways to access and use them (Wanyama et al., 2018, Girl Effect & Vodafone, 2018). The strong presence of digital literacy and experience with automated text messages amongst women in this study suggests that applications such as USSD will be effective in communicating information to women in hard to reach areas. In addition, the data illustrates that the majority of women in this study have previously accessed SRH information through a mobile phone, and 100% of those who did not stated that they would be interested in doing so. However, for such initiatives to be entirely effective and reach those most in need, the impediments identified in this study (*physical barriers, literacy barriers, and socio-cultural barriers*) must be addressed by stakeholders. Without a solid understanding of the barrier’s women face, and the socio-demographic factors which amplify them, the gender digital divide will persist, continuing to exclude women and girls from the digital age proceeding before them.

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