New media strategies for SRHR campaigns among the youth: Transcending the digital divide in Kenya's informal settlements

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Abstract
Unwanted pregnancies are an ongoing and grave concern as more girls and women get affected. The purpose of this paper is to explore the possibility and acceptability of using new media strategies (instead of conventional ones) to share sexual reproductive health and rights messages among the youth in informal settlements, the digital divide notwithstanding. Previous studies revealed that informal settlement dwellers are digitally divided by physical access. The objectives are to identify the new media strategies that can work in sexual reproductive health and rights campaigns in informal settlements and to understand the extent of the digital divide in Kibera (the largest informal settlement in Kenya). The study used qualitative in-depth interviews, focus group discussions and thematic analysis. Study findings indicate that the new media strategies that can work in informal settlements to assist with unwanted pregnancies include combination strategy; new media geographic-based strategy; school-based solutions; and sustained promotional strategy. Further, contrary to popular belief, Kenya's informal settlements have shifted to the second divide, and within these settlements, the internet can be accessed. The study also established that other digital divides exist in informal settlements such as the parent-child digital divide. The study recommends that; the government, civil society and others work together to provide the internet in under-resourced regions; media managers consider new media strategies for SRHR campaigns in informal settlements; and hold campaigns targeting older people in slums on how they can leverage the internet for development. Africa being one of the most under researched regions, this paper attempts to add to the growing body of literature on the digital divide.

Keywords: Digital divide; Sexual reproductive health and rights campaigns; New media strategies; Informal settlements in Kenya; The youth

Introduction

Unwanted pregnancies are a global concern (Ram, Andajani, & Mohammadnezha, 2020) and Kenya is not exempted according to data from the United Nations Population Fund (UNFPA) (2018) indicating that a staggering 378,400 adolescent Kenyan girls aged 10-19 years were affected by unwanted pregnancies between July 2016 and June 2017, out of which 28,932 were children aged 10-14. The informal settlements are heavily affected, posing an obstacle towards attaining Vision 2030. The repercussions of early pregnancies especially in developing countries include dropping out of school, early child marriages, lack of progression, risk of domestic violence, poverty and isolation (WHO, 2014). Moreover, early pregnancies may result in maternal deaths, abortions, infant deaths and sexually transmitted diseases (WHO, 2014). The Government of Kenya and nongovernmental organisations (NGOs) have in the past rolled out sexual reproductive health and rights (SRHR) campaigns to help with various health issues.

Previous SRHR campaigns targeted women of reproductive health about family planning and used conventional media (De Silva & Tenreyro, 2017). Moreover, the focus has been on HIV/AIDS, male circumcision, gender-based violence (GBV), female genital mutilation (FGM) and abortion; rarely were

messages specifically tailored to help the youth avoid unwanted pregnancies. Of note, many scholars have offered solutions which include using media campaigns (Gatere & Ongondo, 2019), improving parent-child communication (Maina, Ushie, & Kabiru, 2020), using new media (Adzovie & Adzivie, 2020), introducing sexuality education in schools (Mbugua & Karonjo, 2018) and increasing Sexual Reproductive Health and Rights (SRHR) information and services' access (Mogere & Obutu, 2014) among others. However, most of these efforts are sporadic and do not involve campaigns. Besides, to the author's best knowledge, these studies have not focused on informal settlements. To bridge this gap, the current research takes the perspective that SRHR campaigns using new media strategies can be disseminated even in informal settlements since, according to UNESCO (2021) most young people have shifted to new media channels for socialisation, business, engagement, education and health. Thus, young people in resource-constraint regions can benefit from the campaigns that use new media strategies. However, the digital divide may prevent them from accessing the benefits. This assumption is based on the 2021 Ibrahim Forum report that indicated that 89% of learners in Sub-Saharan Africa have no access to household computers, while 82% cannot access the Internet (Mo Ibrahim Foundation, 2021).

Scholars (Mbugua & Karonjo, 2018; Sidze, et al., 2017) have suggested that the best way to combat unwanted pregnancies is by placing crucial information in the young people's hands through comprehensive sexuality education (CSE). However, one in four Kenyan youth is misinformed about sex and sexuality despite undergoing the CSE curriculum (African Population and Health Research Centre, 2019). Wekesa et al. (2019) report on innovative approaches using mass media that have been used to promote CSE in Africa such as Television and radio in Zambia and several digital strategies in Kenya, Uganda, Ethiopia, Malawi and Ghana. According to Warira (2018), media can encourage the success of CSE, unfortunately, they have chosen to sensationalise the issue by giving more 0airspace to opposition than to expert voices. In recognition of the power of the internet, the World Health Organization (WHO) rolled out an e-health strategy by using information technology to improve health (WHO, 2021). There is little research on SRHR campaigns and use of digital means to reach the youth in informal settlements. The assumption that informal settlement dwellers face a yawning digital divide until they are excluded from important media conversations warrants this investigation.

Purpose Statement

The current research explores the possibility and acceptability of using new media strategies in SRHR campaigns, the digital divide notwithstanding.

Objectives

1. To find out the new media strategies that can be used in SRHR campaigns
2. To document the extent of the digital divide in Kibera

Literature Review

Sexual Reproductive Health and Rights

The 1994 Cairo International Conference on Population and Development (ICPD) defines reproductive health as "a state of complete physical, mental and social well-being ... in all matters related to the reproductive system." (Shalev 1998, p. 12). Healthcare is a constitutional right for every Kenyan citizen with sexual reproductive health being both a right and human development issue. SRHR enables an individual to be in a complete mental and physical state of well-being where s/he enjoys good sexual and reproductive health with the capability to reproduce and have freedom of choice (UNFPA, 2018). Some sexual reproductive rights, which are core in achieving sustainable development goals (SDGs), include: having access to accurate information as well as safe, effective, affordable and acceptable methods of contraceptives of choice (UNFPA 2018). If these rights are not properly managed, they can impact negatively on SDG areas like environmental degradation, poverty, food and water insecurity, state fragility, climate change, growing inequality, and economic crises (IPPF, 2016).

Indeed, Kenya has made great strides towards implementing SRHR (Mogere & Obutu, 2014). Notwithstanding, some violations continue to be witnessed, either through commission or omission (KNCHR, 2019). Blame for these violations rests firmly on the government's shoulders for failing to implement agreements on budgets (DSW, 2014). Besides, the Government of Kenya continues to dilly dally as far as providing CSE is concerned, while many youths of tender ages engage in pre-marital sex without the knowledge of risk associated with it (Mogere & Obutu, 2014). Therefore, sexuality education and information should be disseminated through religious places, schools, colleges, health facilities and so on (Mogere & Obutu, 2014).

Research concerning the use of digital technologies in SRHR has been documented and includes: the use of mobile technology to address SRHR issues (Apondi et al., 2020); social media and SRHR (Adzovie & Adzivie, 2020); new media and the internet (Pankratova, 2020); and the use of websites (Clief & Anemaat, 2020). Others include mobile applications (Apondi et al. 2020), use of smartphones (Rono et al., 2020), text messaging (Pedrana et al., 2020) and so on. However, most of these studies report sporadic or individual effort in SRHR information dissemination and services. To the author's best knowledge, few studies have set out to explore use of new media strategies in SRHR campaigns in informal settlements, the digital divide notwithstanding.

Technology is increasingly being used to help address SRHR issues. Examples include mobile chat services and period-tracking applications (Lukhanyu, 2020). These interventions are among a few initiated by SRHR organisations in Kenya and are not necessarily widespread. For example, 'Lily Health' is a subscription-based mobile chat service that charges less than a dollar per month (Lukhanyu, 2020). It provides SRHR information on mobile messaging via WhatsApp, Facebook Messenger and SMS. Also, UNICEF has developed 'Oky', an Android app that provides young girls with information about mmenstruation and tips on individualised cycle trackers and calendars (Lukhanyu, 2020). The app is hailed as localised, open source, culturally sensitive, digitally inclusive and with high data privacy and security (Lukhanyu, 2020). Thus, the current study is relevant, given the advances made in the digital space.

New Media and New Media Strategies

New media refers to channels of communication that involve the combination of information technology, digital media, convergence, content and communication networks (Edwards et al., 2016). Social media (part of new media) are mostly used for social engagements (Siapera, 2018). Social media are the websites or applications that allow users to create and share content and participate in their networks (Edwards et al., 2016; Siapera, 2018).

New media strategies are a plan of action designed to achieve long-term goals using new media platforms (Pearson, 2016). These strategies include integrated or combination strategy (Golbeck, 2013), a solo platform strategy such as Facebook (Subandi et al., 2019) and others. Several efforts to use new media in a health context have been undertaken (Akinola et al., 2019) and these strategies include text messaging (Pedrana, 2018); digital billboards (Nemer, 2015); mobile applications (Apondi et al., 2020); social media platforms (Adzovie & Adzovie, 2020); and websites (Clief & Anemaat, 2020). Iwokwagh (2017) suggests that young people must be engaged in interactive communication by integrating appropriate new media technologies. New media can provide information and confidentiality; therefore, stakeholders should take advantage and fully exploit it as young people are heavy users and actively seek information from new media platforms (Iwokwagh 2017).

Theoretical Framework: The Digital Divide

The digital divide is founded on the theoretical insights of Karl Marx, Émile Durkheim and Max Weber about inequality. These insights are based on greater differentiation in a capitalist economy and its resulting organisation of societal status, class, and power (Durkheim, 1984; Marx, 1967; Weber, 1968).

The digital divide is a group of theories that explains the gap in internet access among various groups of people (Sorj, 2009; Van Djik, 2017). Van Djik (2017) argues that access to digital media means the full process of appropriation of technology by users which starts with motivation

and attitudes before trying to find physical access. The author found that the term created four misunderstandings: the presence of two divided groups with a yawning digital gap between them; a difficult gap to bridge; the presence of absolute inequalities between those included and those excluded; and that the digital divide is not a static and permanent condition (Van Djik, 2017).

Literature suggests that the most affected by the digital divide are informal settlement dwellers. According to Samuel (2017), informal settlements lack basic services such as access to information. Nemer (2015) suggested that internet access in informal settlements is limited and that people rely on public buildings and private internet cafes for access. However, young people in informal settlements have access too and actively participate in online discourses (Kibere 2016; Nemer 2015; Wyche 2015). According to Nemer (2015), Facebook is the main social media in use in informal settlements. Facebook is a place for the youth to express their individuality and to avoid being left out of conversations (Nemer 2015). Those without internet access find solace and usage in digital noticeboards - a type of public display which can be used for 'lightweight' advertising, with an interface that includes large visual displays, touchscreens and audio repositories (Samuel 2017).

Efforts have been made to provide informal settlements with access to the internet. For example, there is a free internet service provided by the 'Digital Doorway' (Steyn, 2013). In addition, there is a community center run by an NGO in Kibera that offers free though limited internet (Wyche, 2015). The people in Kibera also access the internet from cyber cafes (Wyche 2015; Kibere 2016). The little access offered is already beneficial to the people in informal settlements. For instance, it offered them political empowerment when they used Facebook to participate in the 2013 anti-government protests (Nemer, 2015). Further, innovative applications are enabling low-end mobile devices to access the internet and social networking sites (Sakil, 2017).

The digital divide affects society at all levels, even in America where African-Americans, Hispanics and low-income students are affected (McDonald, 2020). There appears to be converging viewpoints that the digital divide is not just about access to technology, but it has socio-economic and institutional components (Srinuan, 2018). It can refer to the disparity between individuals, households, communities and/or countries at different socioeconomic and institutional levels who have or do not have the opportunity to access and use ICTs (Srinuan, 2018). In fact, the divide of physical access is insufficient to explain the existence of the digital divide (Oduor, 2014; Pearce, 2017; van Dijk, 2017). Oduor (2014) found that a digital divide exists between urban and rural Kenya. Interestingly, a Dutch study established that people with low levels of education, the unemployed and disabled people were using the internet longer than the higher educated, employed and student populations (van Deursen & van Dijk, 2014).

Most of the studies on the digital divide were conducted in America and Canada, with little empirical research from Africa (Srinuan, 2018). Ragnedda and Muschert (2013) argue that Latin America, Central Asia and Africa are the most under researched regions where the digital divide is concerned. The most researched topics were ICT diffusion and adoption, public policy and regulation, E-government, economic development and alternative technologies (Srinuan, 2018), hardly on SRHR and the digital divide. Research on the digital divide was overwhelmingly about physical access to personal computers and the internet among these demographical categories: income, education, age, gender and ethnicity (van Dijk, 2017). The current study fills this gap by focussing on the tradition of media effects of access and usage on social behaviour, relations, and societal effects, as envisaged by van Dijk (2017).

Van Dijk (2017) predicted that future research will see a shift from the first to the second digital divide amplified mostly about several digital skills, media literacies, and actual use of digital media and their outcomes. Van Dijk (2017) also found that research on the digital divide has mainly concentrated on the causes of the divide and predicts that future research will concentrate on the benefits of bridging this divide. The current paper follows this pattern by exploring the extent of the digital divide in Kibera as well as how the divide can be bridged to pass SRHR messages to the young people.

Methodology

The study adopts the qualitative approach as depicted in a constructivist approach where people

actively construct their own knowledge with their reality determined by their experiences (Creswell, 2014). The current paper gleans from the perspectives of 58 stakeholders (in-depth interviews (28) and FGDs (30) from diverse groups. The population under study included youth, parents, teachers, media managers, NGO communicators, healthcare workers and policymakers/implementers. The sample was largely drawn from Kibera although a few informants outside Kibera were interviewed.

In-depth interviews were conducted with seven media managers, eight NGO representatives, four young people, four policy makers, two parents, two healthcare providers, and one head teacher, a total of 28. Most of these informants are domiciled in Kibera. The paper used purposive sampling and snowballing (Creswell, 2014) to identify the interviewees. The number of participants was sufficient because the researcher began with a sample of 20 but continued to interview to saturation (28) (Creswell, 2014).

The FGDs comprised 30 members. Four groups involved members from Kibera while the last one had teachers from schools outside Kibera. Each FGD had at least 6 members, as suggested by Krueger and Casey (2000). The youth were aged between 15-24 (according to the United Nations), with each group balanced according to internet access, age, and those with/without children. The same criterion was applied to the parents in addition to those with/without grandchildren. The teachers were also gender-balanced and represented the various subjects they taught.

The following table represents informants who responded to questions in FGDs:

Table 1

Distribution of FGD members

SN	Category	Gender/Number	Total
1	Young people with children	3 females; 3 males	6
2	Young people without children	3 females; 3 males	6
3	Parents with and without grandchildren	3 females; 3 males	6
4	Teachers (In Kibera)	3 females; 3 males	6
5	Teachers (Outside Kibera)	3 females; 3 males	6
	FGD Total		**30**

Both the FGDs and interviews were recorded and transcribed in English. The few responses in Kiswahili were appropriately translated into English. Thematic analysis was used to look for patterns in the meaning of data and arrive at themes. Triangulation was achieved by the use of different data sources to justify the themes (Creswell, 2014; Baxter & Barbie, 2004; Bailey, 2007). Bailey (2007) posits that one way of triangulation is to use multiple methods for data collection. Additionally, data from the interviews was cross-checked with data from FGDs. FGDs were first conducted, and the data used to improve the interview questions. According to Creswell (2014), the researcher is the instrument in a qualitative study.

Results/Findings

The findings are grouped into two themes: potential new media strategies in informal settlements and digital divide. Theme one covers four subthemes, which comprise the strategies identified: combination strategy; new media geographic-based strategy; school-based solutions; and sustained promotional strategy. The second theme has two sub-themes, namely, the fallacy of a digital divide in informal settlements and parent-child digital divide.

Theme One: Potential New Media Strategies in Informal Settlements

Subtheme One: Integrated/Combination Strategy

Some informants revealed that not every member in the family has access to the internet. Of the six members in the parents' focus group, only one family had a laptop, desktop, and smart phone for

each member. Another family had smart phones only for the parents since they could not afford for the entire family. Sometimes, the children borrow a smart phone from their parents to engage online. In one family, the single mother has a smart phone for herself and has bought an extra one for her children who only log online under her supervision. Most of the young people interviewed in both in-depth interviews and FGDs are fully online, whether they have gadgets or not.

Some informants opined that opinion leaders can be used to promote the combination strategy for campaign success. The following perspective sheds more light on this:

> If we are working with the youth leaders, we reach out to them on a personal level. These leaders would be the best to push the message on new media platforms since the young people trust them more and easily relate with them. If they say let's go this way, everybody will go that way. So, target those leaders who have voices in the community to implore the youth to attend to the campaign when it's rolled out and explain why the campaigns are running on new media platforms (Informant C1).

Informants from the NGO world revealed that they are already using an unrefined type of combination strategy as captured in the following perspective:

> Right now, we have a campaign on teenage pregnancy and how the government needs to act on it. And the young people have developed messages which they have been disseminating on TV. There is also both a radio and Twitter campaign ongoing at the same time. And then, there are blogs and feature articles in our local newspapers (Informant B6).

Even, the government, through the Ministry of Health, has started working on a combination approach to reach as many, as possible as revealed in this perspective:

> You know, we have integrated communication. We sometimes make mobile calls to the young people concerned. Sometimes, the youth do face-to-face interaction or communicate through their phones. At times, they can tweet on the Twitter handles we have in the ministry. So, we do have a media interface for the young people. They can use the Ministry's website too (Informant C3).

Hence, combining both the conventional media and new media takes care of all demographics. An example of a combination strategy is a video shared on social media platforms, followed by frequent discourses around it by media managers such as radio and TV shows, interviews, drama and so on.

Subtheme Two: New Media Geographic-based Strategy

The informants opined that media managers should partner with other stakeholders such as the government, NGO, community leaders, schools, parents and others to host both on-and off-the-ground campaigns as a way of bridging the divide. For example, once the message has been agreed upon, the campaign is hosted online for a while and then concluded in a designated physical location. The young people divulged that such events are exciting to them, as they see them as an opportunity to generate income. They can be hired to run these events both online and offline. The young people can design campaign material, have input on the message, source for materials and play a role to actualise the campaign since they can access the internet from the pro-bono services offered within the community.

One NGO informant disclosed that her organisation is already using the new media geographic-based strategy successfully. This is her view:

> We have a program on sports where we use competitions to create safe spaces for girls to meet and share. We usually share upcoming sports events on social media and on the material day the youth do come in great numbers. These competitions are often effective because the critical audience that has already heard of the message online now gathers to attend to more of these messages (Informant B3).

It was noted that the young people may be willing to receive SRHR campaign messages via this strategy since they are already engaged in some of the events both as organisers and recipients. These include

sports functions, drama festivals, poetry sessions and so on. Below is the submission of one media manager on how the new media geographic-based strategy can be actualised:

> You can have 10 youth cycle to *Ngong Hills*, where they have a small focus group discussion - at least you are educating them using an activity they feel is fun. Meanwhile, you can do a Facebook Live as the cycling activity is going on. Have an expert who can also share key messages to address the gaps and provide solutions. These 10 will come back to the community and share the message with a neighbour, a friend, maybe verbally in the church or mosque and also through a WhatsApp group (Informant A5).

Among the activities suggested by informants during the live geographic-based events include social events, entrepreneurial forums and competition forums such as sports or gaming activities. The youth revealed that they are likely to listen to a message disseminated by familiar media personalities than an advert running on TV or radio. Besides, they hardly listen/watch radio/TV anymore. This strategy also seems possible because the budget has already been allocated for SRHR in county governments (even if the budgets are still considered minimal).

Subtheme Three: School-Based Solutions

According to informants, the greatest concern particularly among the parents, is dissemination of messages on sexual content to underage children. Kenya's civil society and NGOs have continuously advocated for the introduction of CSE among primary school children. However, those opposed to the introduction of sexual content at an early age argue that it is a way to sexualise children, so that instead of acting as a deterrent, the content may trigger sexual experiments among children.

Another concern is the absence of gadgets and connectivity among the target audience. Some are not even allowed to use these gadgets or the internet both at home and in school for good reasons. Thus, informants suggested that indeed websites can be used to disseminate SRHR messages but in a school setting under the supervision of qualified and SRHR-trained staff.

Most informants agreed that age is a very important factor to consider. There was consensus that the older children can have their messages delivered via Smart TVs within the school setting as well as the computer lab with internet. These messages can be infused in the curriculum (if the policy makers would enhance this) so that students are graded. Again, all these would occur under strict supervision since some young people tend to visit sites that are forbidden. The younger children can have lessons in the computer lab but without the internet. Each computer is fed with the relevant SRHR content and conversations started around this topic. Thus, media managers can involve school administrations for new media SRHR campaigns and help to debunk the conversations around a digital divide.

Subtheme Four: Sustained Promotional Strategy

The informants opined that some members of the target audience may not fit in any of the categories discussed above. These could be school dropouts or teenagers who have just completed their studies or are employed/in business. One youth informant revealed that he is engaged in an income-earning career in photography, which incidentally flourished through the internet. The pictures he took depicting the informal settlement and posted online were noticed by an interested party overseas who sponsored him for a course as well as introduced him to global spaces where he conducts his photography business.

Hence, key messages can be created and shared within the spaces such as mobile applications, digital billboards and social media. The target audience requires more personalised messages which can be transmitted via mobile applications and the inbox section of social media.

In resource-constraint regions, informants believe that digital billboards are a way to bridge the divide and relay sustained long-term messages. One informant submits the following perspective:

> Some of us are idle but we do spend our time at Fort Jesus Square where there is this big board with flashy lights. Sometimes, we watch little stories about family planning and HIV/AIDS. They also have good advertisements and even NTV news (Informant FGD1).

The youth informants identified Facebook, Instagram and YouTube as the most popular new media they frequently engage in. They revealed that they are already receiving random SRHR messages through WhatsApp, Facebook and other social media forums. The youth are also engaged by health NGO's where they receive guided and vetted messages in WhatsApp health groups.

Even as parents, religious leaders, the government and others continue floundering on this very important topic, surprisingly, the young people have expressed a desire to learn more about their sexuality. One informant had this submission:

> I gave birth when I was 14 and didn't have information from my parents or school that sex would result in a child. I later got information about family planning through some people and I decided not to get another child until I'm ready. I wish I had this information earlier (Informant E4).

Theme Two: The Digital Divide in Kibera

Sub-theme One: The Fallacy of a Digital Divide in Kibera

Despite Kibera being a resource-constraint region, the young people have found a way around issues of access by using Wi-Fi set up by many NGOs and schools. An informant from the NGO category confirms that they have set up hotspot and information communication centres around Kibera.

> You know in the informal settlements, most of the young people don't have access to the internet in the first place. They depend on organisations that offer it like the community libraries where we offer free internet (Informant B5).

The youth informants revealed that they often get internet access (Wi-Fi) through the social centres set up by charity organizations. There are also many schools funded by charities who have also installed Wi-Fi that is accessible to the outside community.

> Kibera Girls Soccer Academy has very strong Wi-Fi and there is no password. The school borders our house, and I can access it from my bedroom window (Information FGD 2)

The young people also revealed that they hardly watch TV or listen to the radio because they can access these on the Internet.

Sub-theme Two: Parent-Child Digital Divide

Data from both in-depth interviews and FGDs revealed that parents view the internet negatively or irrationally. For instance, they thought that poverty in informal settlements has prevented them from accessing the internet, yet their children were mostly online. In one FGD with six parents, only one had bought a laptop for his son in college. This same parent had a desktop for the other children. Of the 6 parents, only two had smartphones as the rest could not afford it. Their perspectives are provided below:

> Another challenge is money. Most people don't have money to afford gadgets and internet, so how will you reach them? (FGD 3).

> Yes, the first one is finances. You see, in my house, I don't have Wi-Fi. I buy bundles and it can be expensive, so we limit our use of smartphones. Then, some people do not have the gadgets such as laptops and smart phones (FGD 3).

Interview data shows that those without access were from the older generation who harbour preconceived ideas about the youth. They believe the internet only corrupts the youth's morals and therefore, willingly engage in the digital divide. This creates a parent-child digital divide, where young people strive to access the internet, even if it means borrowing, while the older ones deliberately stay away from the internet. Most of these parents were heavily against the use of new media for themselves and their families. Interestingly, they were unaware that their children are using social media, which they view as an avenue for loose morals.

Informants revealed that some of the youth in Kibera are already using the Internet for gain. One informant had a thriving photography business where he got clients online. Some informants revealed that they immediately enrolled to learn computer packages in Kibera once they completed secondary education while waiting to join college.

Discussion

The study found out that four new media strategies can be used in SRHR campaigns in informal settlements, despite the digital divide. These are combination strategy, new media geographic-based strategy, school-based solutions; and sustained promotional strategy. The research also established the fallacy of the existence of a yawning digital divide in Kibera, as well as the presence of a parent-child digital divide.

To take care of those who may not have internet access, the combination strategy can be used. There are several hotspot centres funded by approximately 511 NGOs operating in Kibera (Vo, 2023). For instance, Shining Hope for Communities (SHOFCO) runs a community centre complete with ICT facilities and this centre is fully patronised by the youth (SHOFCO, 2020). Thus, media can involve NGOs, opinion leaders, celebrities, social media influencers and so on to leverage the power in new media and push the SRHR agenda forward. In fact, the use of opinion leaders in these campaigns, whether on conventional or new media, is a proven tact according to the two-step flow theory where the message is first attended to by opinion leaders who then, use their influence and interpretation to pass it to lesser active people within their social circles. Combining both the conventional media and new media takes care of all demographics and is supported by Golbeck (2013) and Graham et al. (2019).

The youth can be engaged in activities even as they receive SHRH messages through the new media geographic-based strategy. The fact that the youth hardly consume conventional media implies that the digital divide may not exist in their space. This strategy finds support in the 2015 Adolescent Sexual Reproductive Health and Rights (ASRHR) policy which recommends the use of digital means to reach the youth with SRHR messages. Media managers can take advantage of these provisions to actualise the campaigns. Further, Mundt, et al. (2018) and Orsburn (2012) opine that social media geographic-based strategy is ideal for resource-constraint regions.

Another strategy proposed by informants is the school-based solutions. However, this strategy has already been opposed by mainly parents and religious leaders (Go Citizen, 2020) who posit that the introduction of sexual content at an early age can sexualise the children; instead of acting as a deterrent, the children might use the information to experiment. UNESCO (2021) opposes this view by stating that CSE is critical in addressing the health and well-being of children and young people. Most informants took UNESCO's position that the country can consider sexual education in schools provided the campaigns are planned and occur in school settings.

Further, informants opined that an effective way of passing behaviour-change messages to young people is through structured CSE embedded in the school's curriculum. Resistance to CSE introduction from parents, teachers, community, government, etc. is not new globally. It has manifested in countries like Mexico, Pakistan, Gambia, China, Zambia and Kenya (Chandra-Mouli, 2018; Sidze et al., 2017; Wamangati, et al., 2020; Zulu et al., 2019). Those who oppose CSE messages often cite culture and religion, similar to the Chinese community that has resisted CSE on the grounds that it teaches children how to have sex (Browne, 2015). Nevertheless, the current study found out that the young people are eager for information about their sexuality. This is in line with submissions of Guttmacher (2015) who opined that the young people even suggested what they would like to hear more from sexuality messages.

The last strategy suggested is sustained promotional strategy. Shelus et. al. (2017) found that women in Kenya were using Cyclebeads, an app that guided them on their menstrual cycle to prevent pregnancies. Smartphones or mobile phones have also been used in Kenya to address SRHR issues (Apondi et al., 2020: Pedrana et al., 2020; Rono et al., 2020). Worldwide, smartphones are being used to help with certain health conditions (Akinola, et al., 2019).

Literature shows that there are other apps already in circulation such as Sophie Bot; an information-provision app that uses artificial intelligence to engage in chat messages with the users (Lukhanyu, 2020). The argument is that these apps provide a safe and personal space where a young person's questions can be answered. This submission corroborates the views of Bongaart (2014) and Plan International (2020). Reproductiva (an SRHR app), for instance, has registered great success among young girls in East Timor by providing them with the relevant information to

prevent pregnancies (Plan International, 2021). In nearby Uganda, 'Ask Without Shame' is an initiative that relays SRHR information through an app, SMS and a toll-free line. Interestingly, while Sophie Bot is a Kenyan production, only 30% of the registered users are from Kenya with American users taking up 18% of the users (Lukhanyu, 2020). According to the Communication's Authority of Kenya (CAK 2021), Kenya has a very high internet penetration, especially with the introduction of Google Loon (to provide rural homes with the internet). Thus, mobile applications can be a rich medium to receive campaign information and lessen the digital divide.

The informants believe that digital billboards are a way to bridge the divide and relay sustained long-term messages in resource-constrained regions. This is supported by Samuel (2017) who posits that a well-packaged digital billboard is capable of attracting viewers. Digital billboards benefit the entire country and are richly packaged, drawing in audiences because of their inherent glaring qualities of bright lights, and other audio-visual elements (Samuel, 2017).

The youthful informants identified Facebook, Instagram and YouTube as the most popular new media they frequently engage in. This is in line with the views of Nemer (2015) and Wyche (2016) concerning new media consumption habits in informal settlements. They revealed that they are already receiving random SRHR messages through WhatsApp, Facebook and other social media forums.

The young people revealed that they desire to learn more about their sexuality. This finding corroborates a 2015 study by Guttmacher where 67% of the students reported that they wanted the curriculum adjusted to include more sexuality educative topics while 31% indicated that they would have wished this education started earlier. The youth informants in this study were overwhelmingly in support of sexuality education being introduced or firmed up in schools, websites, homes or other sources of information.

Concerning findings on the digital divide, the current paper established that despite Kibera being a resource-constraint region, the young people in informal settlements have found a way around issues of access by using Wi-Fi set up by many NGOs and schools. Vo (2023) documents 511 NGOs operating in Kibera alone, some of which include Carolina for Kibera, SHOFCO Kenya, Marie Stopes International, TICAH, Polycom Development and so on. Although, these NGOs focus on a particular area like health, education, water and sewerage, etc., some offer information communication services for free in almost all the 15 villages (Vo, 2023).

Thus, van Djik's (2017) assertion that the digital divide concept is a fallacy in Kenya's informal settlements is validated. There is no yawning gap between those in Kibera and those in more affluent locations. This finding also debunks the myth that the digital divide is difficult to bridge (van Djik, 2017). Further, the finding resonates with van Djik's (2017) view that the digital divide is not only about access but the full process of technology appropriation by users, beginning with motivation and attitude before access. The youth in Kibera have accessed the internet purely out of an attitude and motivation.

The young people in Kibera have internet access (courtesy of the organisations that have provided hotspots and wireless internet) while their parents do not have. Kenya is already at an advantage since internet penetration is fairly good (CAK, 2021) with 90% penetration and the rural areas have picked up mainly due to the availability of cheap smartphones. Moreover, reports indicate that about 40 million women and 70 million men have access to the internet in Sub-Saharan Africa (Habib, 2018). Women and Web Alliance is educating women in rural areas on digital literacy and how the internet can be used as a tool for social and economic empowerment (Habib, 2018).

While previous studies focused on access, the current study agrees with van Dijk's (2017) observation that the tradition of media effects of access and usage on social behaviour, relations, and societal effects ought to be studied as well. As predicted by van Dijk (2017), the youth in Kibera are interested in learning digital skills for development. However, their parents believe that the internet has negative consequences, so do not approve of it. This means that they have deliberately chosen to seclude themselves from the digital space, giving rising to a parent-child divide.

Conclusion

This paper established that it is possible and acceptable to use new media strategies in SRHR campaigns in informal settlements. The strategies that can work in informal settlements in spite of the digital divide include combination strategy, new media geographic-based strategy, school-based solutions, and sustained promotional strategy. The paper also established that there is no yawning gap in Kibera as far as the digital divide is concerned. Further, what exists in Kibera is a parent-child digital divide. The parents in informal settlements are digitally divided from their children purely out of a mindset that sees anything digital as immoral. Although resource-constrained, informal settlement dwellers are already using new media for social, economic and political purposes. Internet access has been provided by several NGOs and other donors, demonstrating that informal settlements may not be affected by physical access as presumed. Because the youth in informal settlements are already receiving SRHR messages via new media, this paper submits that it is possible and acceptable to use new media strategies in campaigns. The use of these strategies ensures that those without access or are lazy in accessing the Internet receive SRHR messages as well.

Recommendations

1. The government, civil society, and others to work together to provide internet resources in under-resourced regions
2. Media managers can consider new media strategies for SRHR campaigns in informal settlements
3. Disseminate Campaigns targeting older people on how they can leverage the internet for development

References

Adzovie, D. E. & Adzovie, R. H. (2020). *Impact of Social Media Usage on Adolescent sexual and Reproductive Health*, *P*roceedings of the 7th 2016 International Conference on Social Media & Society – SM Society '16. (2020). https://doi.org/10.1145/2930971

African Population and Health Research Centre (APHRC). (2014). Population and health dynamics in Nairobi's informal settlements: Report of the Nairobi Cross-sectional Slums Survey (NCSS) 2012. Nairobi: APHRC.

Akinola, M., Herbert, L.E., Hill, B. J., Quin, M., Hall, J.L., Whittaker, A. K., & Gilliam, M. (2019). Development of a mobile app on contraceptive options for young African and Latina women. *Health Education and Behavior, 46(1),* 89-96.

Apondi, E., Bakari, S., Kwendo, B., Ingari, J., Mcateer, C., Scanlon, M., Enane, L. A. (2020). HIV Fact Sheet: A mobile application designed and implemented by youth peer mentors to facilitate HIV and reproductive health care among adolescents and young adults. https://doi.org/10.21203/rs.3.rs-15674/v1

Bongaarts, J. (2014). The impact of family planning programs on unmet need and demand for contraception. *Studies in Family Planning, 45(2),* 247-262. Retrieved from http://www.jstor.org/stable/24642144

Browne, Evie. (2015). Comprehensive Sexuality Education. https://gsdrc.org/wp content/uploads/2015/09/HDQ1226.pdf

Chandra-Mouli, V., Gómez-Garbero, L., Plesons, M., Lang, I., & Corona, V. E. (2018). Evolution and resistance to sexuality education in Mexico. *Global Health, Science and Practice, 6(1),* 137–149. https://doi.org/10.9745/GHSP-D-17-00284

Citizen Go Africa. (2020). Reject Comprehensive Sexuality Education in Kenyan Schools.https://citizengo.org/en-af/fm/179733-reject-comprehensive-sexualityeducation-kenyan-schools

Clief, L. V. & Anemaat, E. (2019). Good sex matters: Pleasure as a driver of online sex education for young people. *Gates Open Research, 3,* 1480. https://doi.org/10.12688/gatesopenres.13003.1

Communications Authority of Kenya. (2020). First quarter sector statistics report for the financial year 2020/2021 (July - September 2020). https://ca.go.ke/wp-content/uploads/2020/12/Sector-Statistics-Report-Q1-2020-2021.pdf

Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches. (3rd ed.)*. USA: Sage Publications.

De Silva, T. & Tenreyro, S. (2017). Population control policies and fertility convergence. *The Journal of Economic Perspectives,31(4),* 205-228. http://www.jstor.org/stable/44425388

DSW (Deutsche Stiftung Weltbevoelkerung). (2014). Family planning in Kenya: A review of national and district policies and budgets.http://www.dsw.org/en/wp-content/uploads/2017/01/DSW_Kenya-BudgetStudy_30062014.pdf

Durkheim, E. (1984). *The division of labour in society*. Basingstoke: Macmillan.

Eboi, A. A., Ismail, A., & Hamid, N. (2022). Planning a new media strategies' sexual reproductive health & rights campaigns using the 5 Ps of Presentation among the youth in Kenya's informal settlements. *Journal of Special Education*, *37(3),* 4392-4411). https://internationaljournalofspecialeducation.com/submission/index.php/ijse/article/view/669/486

Edwards, A., Edwards, C., Wahl, S. T. & Myers, S. A. (2016). *The communication age: Connecting & engaging*. Thousand Oaks: CA.

Gatere, B, N. & Ongondo, C. (2019). Literature review of sexual reproductive health campaign messages: What are the milestones and potential research topics within the Kenyan context? *Journal of Media and Communication Studies*, *11(6),* 57–67. https://doi.org/10.5897/jmcs2019.0664

Golbeck, J. (2013). *Analyzing the social web*. USA: Elsevier.

Graham, E., Moore, J. L., Bell, R. & Miller, T. (2019). Digital marketing to promote healthy weight gain among pregnant women in Alberta. *Journal of Medical Internet Research,* 21(2). DOI: 10.2196/11534

Guttmacher Institute. (2015). From paper to practice: Sexuality education policies and their implementation in Kenya. https://www.guttmacher.org/report/sexuality-education-kenya#

International Planned Parenthood Federation (IPPF). (2016). Sexual and reproductive health and rights-A crucial agenda for the post-2015 framework. https://www.ippf.org/sites/default/files/report_for_web.pdf

Iwokwagh, N. S. (2017). Enlarging participatory communicative spaces on adolescents sexual and reproductive health in Nigeria: A look at new media technologies. *Digital Transformation in Journalism and News Media*, 37–53. https://doi.org/10.1007/978-3-319-27786-8_5

Jolly, S., Oosterhoff P., Faith B., Braeken D., & Shepard K. (2020). A review of evidence: Sexuality education for young people in digital spaces. UNESCO, 35.https://healtheducationresources.unesco.org/library/documents/review-evidencesexuality-education-young-people-digital-spaces

Kibere, F. (2016). The paradox of mobility in the Kenyan ICT ecosystem: An ethnographic case of how the youth in Kibera slum use and appropriate the mobile phone and the mobile internet. *Information Technology for Development*, *22(1),* 47-67. DOI: 10.1080/02681102.2016.1155144

Krueger, R. A. & Casey, M. A. (2000). (3rd ed.). *Focus groups: A practical guide for applied Research.* Thousand Oaks, CA: Sage.

Lukhanyu, M. (2020). Kenya's Lily Health and Oky among 6 Startups selected into Duke-UNICEF Innovation Acceleration. https://techmoran.com/2020/02/19/kenyas-lily-health-oky-among-6-startups-selected-into-duke-unicef-innovation-accelerator/

Maina, B. W., Ushie, B. A. & Kabiru, C. W. (2020). Parent-child sexual and reproductive health communication among very young adolescents in Korogocho informal settlement in Nairobi, Kenya. *Reproductive Health, 17(1).*

https://doi.org/10.1186/s12978-020-00938-3

Marx, K. (1967). *Capital, Vol. 1*. New York: New World Paperbacks.

Mbugua, S. M. & Karonjo, J. M. (2018). Reproductive health knowledge among college students in Kenya. *BMC Public Health, 18(1),* 907.

McDonald, J. (2020). Despite improved access, digital divide persists for minority, low-income Students. https://newsroom.ucla.edu/releases/digital-divide-persists-for-minority-low-income-students

Mogere, D. & Obutu, C. (2014). Access to sexual reproductive health rights information among the youth: A case of Gucha South District, Kisii County-Kenya. *Value in Health, 17(3).* https://doi.org/10.1016/j.jval.2014.03.135

Mundt, M., Ross, K. & Burnett, C. M. (2018). Scaling social movements through social media: The case of black lives matter. *Social Media & Society*. https://doi.org/10.1177/2056305118807911

Nemer, D. (2015). Online Favela: The use of social media by the marginalized in Brazil. *Information Technology for Development, 22(3),* 364-379. doi:10.1080/02681102.2015.1011598

Oduor, E., Neustaedter, C., Judge, T. K., Hennessy, K., Pang, C. & Hillman, S. (2014*). How technology supports family communication in rural, suburban, and urban Kenya*, Proceedings of the 32nd Annual ACM Conference on Human Factors in Computing Systems - CHI 14.

Orsburn, E. M. (2012). *The social media business equation: Using your social connections to grow your bottom line*. Boston, MA: Cengage. doi:10.1145/2556288.2557277

Pankratova, L. (2020). Socio-communicative space of formation of modern Russian youth's sexual culture. *DEStech transactions on social science, education and human science*, (icesd), https://doi.org/10.12783/dtssehs/icesd2020/34158.

Pearce, K. E. & Rice, R. E. (2017). Somewhat separate and unequal: Digital divides, social networking sites, and capital-enhancing activities. *Social Media Society, 3(2).*

Pearson, V. (2016). Writing a communications strategy.https://www.ox.ac.uk/sites/files/oxford/media_wysiwyg/Writing%20a%20communications%20strategy%20%2818.02.16%29.pdf

Pedrana, A. E., Pina, J., Padmawati, R. S., Zuhrina, R., Lazuardi, L., Lim, M. S. C., … & Prabandari, Y. S. (2020). A quasi-experimental text messaging trial to improve adolescent sexual and reproductive health and smoking knowledge in Indonesia. *Sexual Health, 17(2),* 167. https://doi.org/10.1071/sh18199

Ragnedda, M. (2013). *The digital divide: The internet and social inequality in international Perspective.* Routledge: London.

Ram, S., Andajani, S. & Mohammadnezhad, M. (2020). Parent's perception regarding the delivery of sexual and reproductive health (SRH) education in secondary schools in Fiji: A qualitative study. *Journal of Environmental and Public Health*, 1–8.

Rono, H., Bastawrous, A., Macleod, D., Bunywera, C., Mamboleo, R., Wanjala, E., & Burton, M. (2019). Smartphone-guided algorithms for use by community volunteers to screen and refer people with eye problems in Trans Nzoia County, Kenya: Development and validation study (preprint). https://doi.org/10.2196/preprints.16345.

Sakil, A. H. (2017). ICT, youth and urban governance in developing countries: Bangladesh Perspective. *International Journal of Adolescence and Youth, 23(2),* 219-234.

Samuel, M., Taylor, J., Winschiers-Theophilus, H. & Nieminen, M. (2017). *Improving the flow of livelihood information among unemployed youth in an informal settlement of Windhoek, Namibia*. Proceedings of the 8th International Conference on Communities

and Technologies - C&T 17. doi:10.1145/3083671.3083687

Shalev, C. (2000). Rights to sexual and reproductive health: The ICPD and the Convention on the Elimination of All Forms of Discrimination against Women. *Health and Human Rights, 4(2),* 38. https://doi.org/10.2307/4065196

SHOFCO. (2020). Essentials Services.https://www.shofco.org/approach/community-and-economic-empowerment/

Shelus, V., Ashcroft, N., Burgess, S., Giuffrida, M., & Jennings, V. (2017). Preventing pregnancy in Kenya through distribution and use of the CycleBeads mobile application. *International Perspectives on Sexual and Reproductive Health, 43(3),*131-141. https://www.jstor.org/stable/10.1363/43e4617

Siapera, E. (2018). *Understanding New Media*. Thousand Oak, CA: Sage.

Sidze, E. M., Stillman, M., Keogh, S., Mulupi, S., Egesa, C. P., Leong, E. & …Izugbara, C. O. (2017). From Paper to Practice: Sexuality education policies and their implementation in Kenya. https://www.guttmacher.org/sites/default/files/report_pdf/sexuality-educationkenya-report.pdf

Sorj, B. (2009). Dimensions of the digital divide. SciElo Books. http://books.scielo.org/id/cvgxd/pdf/sorj-9788599662489-07.pdf

Srinuan, C. & Bohlin, E. (2018). *Understanding the Digital Divide: A Literature Survey and Ways Forward*, 22nd European Regional ITS Conference, Budapest 2011: Innovative ICT Applications - Emerging Regulatory, Economic and Policy Issues 52191, International Telecommunications Society (ITS).

Steyn, J. & Van der Vyver, A.G. (eds.). (2013). *Public and Private Access to ICTs in Developing Regions*, Proceedings of the 7th International Development Informatics Association Conference, held in Bangkok, Thailand, ISBN: 978-0-620-58040-3, pp.186-205.

Subandi, F. D., Putri, D. A. D., Hermanto, E., Turnip, S. S. & Keumala, N. S. (2019). *'BERKOOLIAH: Utilizing Social Media to Encourage Youths in Pursuing Higher Education*, Proceedings of the 2nd International Conference on Software Engineering and Information Management, Pages 274–278 https://doi.org/10.1145/3305160.3305165

Van Deursen, A. J. & van Dijk, J. A. (2014). The digital divide shifts to differences in Usage. New *Media & Society*, *16(3)*, 507-526. doi:10.1177/1461444813487959

Van Dijk, J. A. G. M. (2017). Digital divide: Impact of access. *The International Encyclopedia of Media Effects*,1-11. doi:10.1002/9781118783764.wbieme0043

Vo, L. (2023). Kibera slums: When kindness kills development.https://rotarypeacecenternc.org/kibera-slum/

UNESCO. (2021). Switched on: Sexuality education in the digital spaces. https://en.unesco.org/sites/default/files/unesco-swtiched_on-technical_brief.pdf

United Nations Population Fund (UNFPA, 2018). The state of the world Population 2018. https://www.unfpa.org/press/state-world-population-2018

Warira, D. (2018). Why media is critical to the success of the demographic dividend agenda in Africa. https://www.afidep.org/why-the-media-is-criticalto-the-success-of-the-demographic-dividend-agenda-in-africa/

Weber, M. (1968). *Economy and society*. Gunther Ross (ed.). New York: Bedminister.

Wekesah, F. M., Nyakangi, V., Onguss, M., Njagi, J., & Bangha, M. (2019).Comprehensive sexuality education in Sub-Saharan Africa. Nairobi, Kenya: African Population and Health Research Center (APHRC). https://aphrc.org/wp-content/uploads/2019/12/COMPREHENSIVE-SEXUALITY-EDUCATION-IN-SUB-SAHARAN-AFRICA-1.pdf

Westlund, O. & ewis, S. C. (2014). The agents of media innovation activities: Actors, actants, and audiences. *The Journal of Media Innovations, 1(2).*

Wirtz, B. W., Pistoia, A., & Mory, L. (2013). Current state and development perspectives of media economics. *Media Management Research. Journal of Media Business Studies, 10(2),* 63-91. oi:10.1080/16522354.2013.11073564

World Health Organisation. (2021). Global strategy on digital health. https://www.who.int/docs/default-source/documents/gs4dhdaa2a9f352b0445bafbc79ca799dce4d.pdf

World Health Organisation. (2014). Sexual and reproductive health and rights: A global development, health, and human rights priority. https://www.who.int/reproductivehealth/publications/gender_rights/srh-rights- comment/en/

Wyche, S. (2015, May 15). *Exploring Mobile Phone and Social Media Use in a Nairobi Slum: A Case for Alternative Approaches to Design in ICTD*. Paper presented at the 7th International Conference, Singapore. Doi: 10.1145/2737856.2738019.

Zulu, J. M, Blystad A., Haaland M. E, Michelo C., Haukanes, M. & Moland K. M. (2019). Why teach sexuality education in school? Teacher discretion in implementing comprehensive sexuality education in rural Zambia. *Int J Equity Health 18(116).*

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