### ORIGINAL RESEARCH ARTICLE

### Young women's perceptions of life in urban South Africa: Contextualising the preconception knowledge gap

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### Abstract

Raising awareness to support improved health and well-being of young women in sub-Saharan Africa is critical, particularly in the preconception period in order to achieve improved health for multiple generations. To inform messaging campaign on preconception health, we conducted eight focus group discussions (FGDs) with young women in Soweto to understand their perceptions and access to health messages. Preconception health was generally not a familiar topic for young women. Participants prioritised information seeking for other pressing challenges they faced such as poverty and unemployment. Within this context, mental health was viewed as important, while physical health only gained importance when illness was present or during pregnancy. Television, radio and community health workers were all viewed as useful communication channels for health messaging. Understanding the importance of preconception health of young adults to benefit from the triple dividend of better health now, better health for the future and for children is a critical knowledge gap for young women. Messages aimed to improve preconception physical and mental health could leverage significant health gains. Health messages should be contextualised within the experiences that young women face and should offer information to help young women cope with their challenges. (*Afr J Reprod Health 2021; 25[2]: 39-49*).

Keywords: Preconception health; Communication; Social media; Health promotion, Soweto, South Africa

### Résumé

La sensibilisation pour soutenir l'amélioration de la santé et du bien-être des jeunes femmes en Afrique subsaharienne est essentielle, en particulier pendant la période préconceptionnelle, afin d'améliorer la santé de plusieurs générations. Pour éclairer la campagne de messagerie sur la santé avant la conception, nous avons mené huit groupes de discussion avec des jeunes femmes de Soweto pour comprendre leurs perceptions et accéder aux messages de santé. La santé avant la conception n'était généralement pas un sujet familier pour les jeunes femmes. Les participants ont donné la priorité à la recherche d'informations sur d'autres défis urgents auxquels ils étaient confrontés, tels que la pauvreté et le chômage. Dans ce contexte, la santé mentale était considérée comme importante, tandis que la santé physique ne gagnait en importance qu'en cas de maladie ou pendant la grossesse. La télévision, la radio et les agents de santé communautaires étaient tous considérés comme des canaux de communication utiles pour les messages sur la santé. Comprendre l'importance de la santé avant la conception des jeunes adultes pour bénéficier du triple dividende d'une meilleure santé maintenant, d'une meilleure santé pour l'avenir et pour les enfants est un manque de connaissances critique pour les jeunes femmes. Les messages visant à améliorer la santé physique et mentale préconception pourraient générer des gains de santé significatifs. Les messages de santé devraient être contextualisés dans les expériences auxquelles les jeunes femmes sont confrontées et devraient offrir des informations pour aider les jeunes femmes à faire face à leurs défis. (*Afr J Reprod Health 2021; 25[2]: 39-49*)

Mots-clés: Santé avant la conception; La communication; Des médias sociaux; Promotion de la santé, Soweto, Afrique du Sud

### Introduction

The preconception period is recognized as a critical preventive window of opportunity to timely alter or eliminate risk factors for adverse pregnancy outcomes<sup>1</sup>. Early interventions during the preconception period can improve health behaviours amongst women, reduce the risk of

illness and disease, and consequently improve pregnancy outcomes<sup>2</sup>. Despite calls for increased emphasis on preconception health and health care, progress in implementing these recommendations has been slow in low-and-middle income countries (LMICs)<sup>3,4</sup> including South Africa<sup>5</sup>.

Promoting health messages to young women in South Africa is important in improving maternal and infant health outcomes, with nearly half of young women having their first child by the time they are 19 years old<sup>6</sup>. Recent data from KwaZulu-Natal province in South Africa suggests that up to 86% of pregnancies were unplanned<sup>7</sup>. Previous research in South Africa has shown many suboptimal health behaviours during preconception period, including poor nutrition and low levels of physical activity<sup>8</sup>. In addition, misperceptions about obesity, and normalization of larger body sizes means that many young women are overweight or obese<sup>9</sup> and enter pregnancy with an elevated body weight and increased risk for neonatal mortality<sup>10</sup>. Elsewhere, issues around body image have been positively associated with prenatal and postpartum depression11, while insufficient sleep has been linked with increased risk of obesity <sup>12</sup>. All these risk factors pose challenges to young preconception health<sup>2</sup>, and women's implications for maternal and child health<sup>13</sup>.

Health promotion to raise awareness in young women about these risk factors during the preconception period is paramount<sup>14</sup>, and it is important that health promotion efforts align with young women's preferences<sup>15</sup> and contextual challenges<sup>16</sup>. Messages through mobile phone apps may provide health information and inform decision making in young women to improve health and well-being including during the preconception period<sup>17</sup>. However, little is known about young women's exposure to health information within their daily lives, their familiarity with preconception health and their preferences for receiving health messages and other information in Soweto. The present study aimed to assess young women's exposure to and perceptions of health messages in order to formulate a preconception health messaging strategy in Soweto.

### Methods

### Study setting and participant recruitment

This study was conducted in Soweto – a large urban area lining the mining belt in Johannesburg, South Africa, covering more than 200 km<sup>2</sup> with a population of approximately 1.3 million<sup>18</sup>. Rapid economic development, urbanisation, (im)mobility, and persistent inequality have cultivated an increasing reality in Soweto where there is an expanding middle class and persistent underclass - characterised by high rates of unemployment, poverty and food insecurity<sup>9</sup>. We used a purposive sampling approach to recruit eighty young women (aged 18-25 years), with or without children, and living in Soweto to examine a range of exposures to health messaging.

### Data collection

Eight focus group discussions (FGDs) were conducted between August and December 2019 in a private room at a research centre at the Chris Hani Baragwanath Academic Hospital in Soweto. Each FGD was composed of about 8-12 participants and multilingual research assistants (RAs) facilitated the FGD discussions using a semistructured interview guide. The interviews began with general life experience questions such as: What does success and doing well in life mean to you? What are the biggest challenges in your daily life in Soweto? The interviewer then shifted to questions around messaging on health including: Which social media channels do you like? Thereafter, participants were presented with key topics on health, and were asked questions such as: If you heard this topic on the radio, would you continue listening? [Health related topics; pregnancy and children topics; stress related topics; body appearance/image; and topics around sleep]. Participants were also asked questions around health and healthy living including: When you think about caring for your own health, what issues grab your attention? Do you know how your health before you become pregnant influences the health of your future baby? Lastly, interviewers asked women to discuss the key issues that they would like to be communicated and the preferred ways of introducing such topics in their community.

The FGDs were audio recorded, one RA conducted observations and took intensive notes as a backup for the audio files. The discussions, which took 60-120 minutes, were conducted in English with flexibility of the participants to use vernacular languages. Audio files from the discussions were transcribed verbatim with translation as necessary. All transcripts were checked against the recordings to verify accuracy and credibility and small changes were made where necessary.

### Data analysis

Data were thematically analysed using deductive and inductive approaches to a point where no new themes emerged<sup>19</sup>. Deductive analysis was based on the study objectives and literature reviews which facilitated a general understanding of the research question. After the initial stage of familiarisation with the data and generation of deductive codes; the next step involved inductive coding which was based on new themes that emerged from the data. This facilitated an understanding of specific issues that young women faced, and how they related to their overall health and well being. Thereafter, other researchers involved in the study were asked to review the initial data classifications, and any identified discrepancies were solved at this level, with new insights used to refine the key themes. After the coding process, a list of categories were compiled by the first author and key themes (with sub-themes) were classified as follows: (i) pressing social issues that young women faced in Soweto: (ii) young women's understanding and perceptions towards healthy living (iii) exposure to messages on health; (iv) women's attitudes to and perceptions of messages on health; and (v) preferred topics and of communicating health messages. Illustrative quotes for each theme and sub-theme were extracted and are shown in the results section.

### Results

Eighty women living in Soweto participated in this study. These women resembled the broader population of Soweto, that is, they were ethnically and linguistically diverse (English, Sesotho,

Setswana, Xitsonga, isiXhosa and isiZulu), lowand middle-income, and identified as Black African. Most participants had completed secondary education but had not furthered their studies due to lack of money; many were unemployed at the time of the interview.

## Theme 1: Pressing social issues that young women face in Soweto

Participants reported facing many challenges including social, economic, and family-related challenges as discussed below:

### a) Economic challenges

Economic pressure – including poverty, unemployment and lack of jobs emerged as key stressors that young women experienced in Soweto. Many revealed that economic challenges contributed to everyday stress:

"Unemployment is what causes me stress and it is something that you have to face every day."

"My current stress right now is lack of a job".

Unemployment and financial instability led to other issues such as poor nutrition:

"It is a bit difficult for me to get food that is healthy, and even if I do get the healthy food, they sell them in small portions, but junk food is cheap and will last for long".

### b) Family illness and death

Family illness and death emerged as the second most discussed stressor. Participants mentioned either having family members who were sick or managing chronic conditions (such as HIV, cancer or diabetes). Stress from family illness was exacerbated by costs of caring for the sick:

"My mom is a pensioner, and I am thinking about how she gets different kinds of sickness that are going to cost my family in terms of finances".

Other participants expressed their worry about inheriting or passing on disease:

"My mother's sister died of cancer, my grandfather also died of cancer, so I am worried Bosire et al.

because this disease [cancer] does not choose the age".

"Well, I also have an incurable disease, I am thinking if I might actually have a child, the chances of the child having the disease are very high".

### c) Social stressors

Social issues within the family such as conflicts and disagreements between family members were also discussed:

"At home I am trying to cope because, there is too much tension. I think there is something happening between my parents, there is a lot of stress".

Some participants reported that they did not disclose many of the challenges they were facing to their families because they felt being judged or unsupported:

> "They [family] are always judging me. They are always saying negative things about me, I actually just get motivation from people outside my family".

Unsupportive partners were also a cause of stress: "He [partner] should just be around so that we can raise the baby together, but he does not even want to hear about the pregnancy".

Participants also talked about negative family influence on career choices. Many narrated how family members would force them to take up careers that were not of interest to them.

### d) Environmental Stress

Environmental challenges including living in unsafe neighbourhoods, drug abuse and poor sanitation were also discussed:

"I am stressed up because my neighbourhood is not safe. The family and people that surround us, I mean many people are abusing drugs, you look at some of my peers and you can already see that this person does not have a life".

"I am worried about the environment that the child grows up in. Is it hygienic? Is it clean or dirty? And whether they [children] will have good influence or bad influence". Multiple social and economic stressors experienced by young women appeared to have a negative impact on their mental health: "Sometimes I think I have, I don't know, it's like stress. Sometimes I give up in life, I feel suicidal, I don't want to bath".

## Theme 2: Young women's understanding and perceptions of healthy living

Many young women lacked knowledge on what being healthy (including preconception health) entailed. Some participants suggested that being healthy involved their physical appearance:

> "Yes, we are healthy, when you look at us, the first appearance, we are clean, we are right, we are fresh, there is no way that we are going to have sicknesses".

In this regard, many participants did not perceive themselves or their children to be at risk of healthrelated issues. This influenced poor health seeking behaviours:

"It is something that you don't think can happen to you. You don't think you can give birth to a child with disability, it does not cross your mind [...] so, you don't feel the need to Google or look for information at the clinic".

A few participants seemed to have ideas on the importance of being healthy and linked this to preconception health:

"For me I think if you want to prepare to get pregnant, you must eat healthy, and also exercise".

Other participants indicated that young women largely pursued health only when they were unwell, rather than to prevent illness:

"We are going to eat healthy, do exercises, we will go for the check-ups if there is something wrong with us, we will go to the doctor to find out what is wrong with us".

Pregnancy was also viewed as a state that demanded self-care, with participants reporting that they would take action to ensure that their children were Bosire et al.

healthy. Within this context, participants believed that good antenatal care could counteract poor preconception health:

"I need to take care of myself during pregnancy, because I did not take care of myself before pregnancy".

However, the focus of this antenatal self-care was very much about the health of the child and not the mother. Similarly, one participant vividly explained how she took good care of herself during pregnancy but not in the postnatal period:

"I did all of that, taking care of myself during my pregnancy, but after pregnancy I slacked. You don't have that much pressure to take care of self anymore".

### Theme 3: Exposure to health messages

Participants revealed that they had limited access to information regarding their health:

"It's rare for me to hear people talking about pregnancy, eating this and eating that, people never talk about these things. Even in health centres, when you go there, they never talk about pregnancies".

Young women talked about various communication channels and how they either hindered or promoted access to health messages. Firstly, participants discussed about health messages they received from the clinic. They indicated that health messages were largely provided when already pregnant during antenatal visits, rather than before getting pregnant: "It is when you are pregnant that they (nurses) will start seeing you." Generally, participants reported that public healthcare clinics and staff were unsupportive of young women who sought preventative healthcare. In addition, nurses in public healthcare clinics were described as having a negative attitude or were judgemental towards young women:

"Nurses should stop being judgemental. I went to the clinic and the nurse started shouting at me, calling her friends and judging me for having sex at my age".

"When you have pains, they [nurses] hit you or they pinch you".

Secondly, when discussing about health messages from home, participants reported that their families,

especially their mothers, were key in influencing their wellbeing: "She [mother] inspires me, she is always available, and she talks with us and discuss issues about life." However, it was reported that parents or caregivers avoided discussing reproductive health issues:

"Some of our mothers think that it is taboo to discuss things such as sex with their children".

"They think that if they talk to us [about sex], they are giving us the key to engage in sex".

In addition, some parents were said to be too judgmental, and this hindered discussion around reproductive health: "I know that she is going to judge me or whatever". This lack of support led to young women seeking information from outside of their home.

Thirdly, many participants reported that they sought information from social media (primarily Facebook and WhatsApp). This included information around health, body appearance, how to reduce stress and other daily stressors such as how to get a job. One participant said:

"Social media is where we spend our time, all the time, when you are in a taxi, you get your phone and you can read that information where they tell you what you should do".

We also found that celebrities played a key role in influencing young women on social media platforms, particularly on topics around body image and appearance. Yet, accessing social media platforms was challenging due to the cost of data. As such, Facebook and WhatsApp were used more frequently due to the perceived lower cost: "I like Facebook because it is cheap. It does not use a lot of data".

Participants also reported that they watched Television (TV) and listened to the radio for information. This is because, TV and radio were perceived to be more authentic and factual compared to social media platforms: "I watch SABC, I love factual information." Moreover, TV and radio were said to have good health-related content and messages: "Just like now on Jozi FM,

my mom was listening to it, they were talking about pregnancy, pap smear and all those things". Almost all participants revealed that they rarely read newspapers and only read them to view sensationalist stories.

## Theme 4: Women's attitudes towards and perceptions of health messages

To assess women's attitudes toward and perceptions of messages on health, we provided scenarios asking women whether they would be interested or not to listen to such topics on the radio. We discuss the findings below:

## a) Health related topics (Physical and mental health)

Many participants revealed that they would listen to health-related messages and wanted to learn more about different illnesses, particularly chronic illnesses:

"Yes, I will listen because, I would like my family to live a healthy lifestyle, people are getting sick at home".

### b) Topics on pregnancy and children

These topics caught women's attention, especially issues around improving the health of children. It appeared that many wanted to ensure that their children were healthy:

"I would tune in [to radio] just to learn about all these issues, because nobody wants a child with disabilities to be honest".

"I want to learn about pregnancy and what kind of things I should do when I get pregnant".

Again, this showed that young women were more motivated to look after their health when pregnant rather than prior to becoming pregnant. However, three participants in different FGDs revealed that they would not listen to such messages because they were not planning to have children in the future:

"I will switch the radio off because, I don't see myself having a baby".

"I don't want children but definitely I would want myself and my husband to be healthy".

### c) Messages on body image and appearance

This topic led to a heated debate across all the FGDs. Participants provided mixed reactions in

terms of their preferences for body image. Some agreed that they would listen to information on body image because they wanted to lose weight: "I would listen to it because, I really want to lose weight". Others shared similar sentiments if they wanted to gain weight: "I hate being skinny. I would listen because I would like to gain weight". It appeared that young women generally did not understand the relationship between body weight and health, including the impact of overweight on reproductive health. Interestingly, some participants associated body image or appearance with eating patterns and diet. Many admitted that they ate unhealthy foods and showed interest in learning more about healthy eating habits:

"I eat wrong food all the way; maybe I would like to have more food channels so that I can learn about healthy foods".

Yet, few others were reluctant to listen to such topics especially when they considered healthy living as expensive:

"I can't afford healthy meals, so I don't want to listen to the topic".

#### d) Stress messages

Almost all participants were interested in messages around stress. They agreed that they would continue listening to information delivered especially if this would help them learn how to manage the everyday stress they faced:

"If a radio gives us information on how to better care for ourselves or cope with stress, then I would continue listening".

However, a few felt that listening to stress messages would be a reminder of their past stressful experiences, indicating a need for more intense psychosocial support:

"This will take me back to bad memories [...]. I don't want to listen to anything about stress from radio or TV".

### e) Messages about sleep

Participants seemed not to be interested in listening to sleep-related topics. This appeared to be largely due to lacking knowledge of how important sleep was for their health:

"I won't listen to it [...] my father always says that people who sleep a lot, life passes them, so I don't entertain sleeping".

Table 1: Preferred topics for discussion

Preferred topics	Quotations
Socio-economic issues	"Topics on how to start your own business, how to be apply for jobs, structure your CV."  "How to budget for money, what kind of things should you buy, having such programmes on TV and everywhere, on social media, it will be of great benefit."
Physical illnesses/health	"For me because most of my family members died from HIV, so I want to know more about what causes it and stuff like that."
	"Diabetes is a silent killer. We need this information in the townships."
Mental health	"I think many of us have suffered from depression and anxiety. We need to learn about mental health."
Physical activity and healthy eating	"Programmes that motivate healthy eating and physical activities will be helpful especially in my township."

Table 2: Preferred ways of communication

Theme	Quotations
Use of TV, radio and	"I think using TV or radio will do. TV programs can teach young women how to live a healthy
pamphlets	lifestyle."
	"I think they should start by making a small pamphlet or flyers and give people in the community."
Engage community	"So, they can send a person who can come and explain, someone who is passionate so when she
health workers (CHWs)	speaks, people will listen to her. It is much better for them to send CHWs and leave the nurses with their attitude."
Group forums and peer	"We should have open discussions in groups to talk about women issues, to talk about our health and
mentors	what we should eat, then have different opinions from different people."
	"It should start with me. I start by exercising, I live healthy, I eat healthy, I go to the clinic, I do check-ups, then others will follow me."
Setting up organizations	"They can open up a foundation where they can teach young women how to live a healthy lifestyle,
to teach women	like if you want to be healthy during your pregnancy, you have to do this and this and before you are pregnant, you have to do this and this.
Engaging caregivers and	"If I had a chance to discuss these things with my mother, I would not have done them. Parents must
partners	play a role in educating young women about preconception health."
-	"I think you must recruit maybe one or two men who will sit into these meetings so that they can also know their responsibilities on issues around preconception health."

### Others argued that:

"Whenever my body feels like going to bed, I would go to bed. I don't need advice on that".

In contrast, a few participants said they may consider listening to sleep topics as they had difficulties in sleeping:

"I will listen because, I have got a problem that disturbs my sleep. I would be sleeping but also thinking, and when I wake up, I would be very tired, my brain is tired".

# Theme 5: Preferred topics and ways of communicating health-related messages

Towards the end of the discussions, participants suggested that messages around health must reflect practical challenges that they face in the community. For instance, many revealed that they would be interested in hearing how to address their economic challenges such as unemployment, poverty, or topics around chronic diseases (HIV/AIDS, cancer, diabetes, and mental health (Table 1). Interest about these illnesses was based on experiences of having close family members managing these illnesses. Despite a significant lack of information on reproductive health, messaging on antenatal, postnatal or preconception health did not arise as one of the preferred topics.

However, reproductive health information was recognized as a need with one participant suggesting that a specific organization be set up in the community to empower young women particularly in the preconception and antenatal periods (Table 2). Consistent with discussions above, TV and radio were also preferred media for messages on health. Few participants suggested

using pamphlets and flyers. In addition, given young women's negative experiences at the clinics in Soweto, many recommended the use of community health workers (CHWs) outside of the clinic to educate women in the community. Further, participants acknowledged the importance of parents, partners, group forums and the use of similar age role models and peers in communicating health messages in the community.

### **Discussion**

This study sought to understand young women's environment, knowledge, perceptions and access to health messages. The key findings suggest that young women face significant socio-economic challenges in their everyday lives and frequently prioritize information seeking toward dealing with these challenges. Also, there were clear gaps in health knowledge, particularly in reproductive health knowledge with the preconception period not a familiar concept to many young women. The associations between physical health and socioeconomic conditions such unemployment, and nutrition insecurity were not generally apparent to young women. However, there was an appreciation of the impact on mental health, particularly in relation to depression and stress. Health information seeking and motivation for self-care was higher when pregnant or ill, but less frequent outside of these conditions. Negative experiences at public primary healthcare clinics led young women to suggest that CHWs or communitybased programs may be more accessible and preferable for delivering in-person health messaging. While social media was used for information gathering, this information was less trusted than messaging received via radio or TV.

Group education, community-based social marketing and technology-assisted interventions have all shown some success in increasing knowledge around preconception health. However, to support behaviour change, interventions must consider the environmental, social and structural factors that shape preconception health<sup>20</sup>. The findings on the impact of socio-economic conditions on health are consistent with recent studies in Soweto which have shown how poverty is a key barrier to healthy living in Soweto<sup>5,16</sup>. Many

participants were unemployed, resembling the broader population of youth in South Africa where unemployment rate among youths aged 15–24 years was 55.2% in the first quarter of 2019<sup>21</sup>, a situation that has only worsened as a result of the COVID-19 pandemic. Within this context, healthy living and wellbeing cannot be discussed without acknowledging the socio-economic challenges women face. These socio-economic inequalities, which expose populations to poverty, unemployment, and other social challenges in South Africa have previously been associated with psychological disturbances<sup>22</sup> and poor mental health14.

In this study, participants demonstrated their understanding of the associations between the socio-economic challenges and their mental health, with young women revealing that they had struggled with stress, depression, or suicidal ideations. This was compounded by living in unsafe environments and the lack of support from parents/caregivers or partners as also previously reported<sup>14,15</sup>. Yet, none reported having received any psychosocial support, despite these and other reports of the mental health challenges many young women in Soweto face<sup>23</sup>. Previous estimates show that one in three South Africans are expected to develop poor mental health 24 and this has increased during the COVID-19 pandemic<sup>25</sup>. Yet, mental healthcare usage and access in South Africa is severely limited<sup>26</sup>. Prioritisation of messaging to promote improved mental health and access to care will be paramount within a preconception messaging intervention given the impacts this can have on the woman, child/children and the future generation. Thus, designing preconception health messages should not only focus creating awareness to prevent illnesses or diseases but also, ensuring preconception care, including psychosocial support is provided to young women in Soweto.

Our findings also showed young women in this environment had significant knowledge gaps on health generally and specifically on reproductive health, which was compounded by limited access to healthcare information during the preconception period. This unfamiliarity with the preconception period and why preconception health is important for future maternal and child health has also been found in high-income countries<sup>7</sup>. Linking

preconception health messaging with topics that interests young women may be critical to increasing awareness on preconception health. For example, participants were interested in hearing more about body image, appearance and stress. Campaigns that build on these diverse topics, and that demonstrate how they relate to physical, mental and reproductive health may show more success than preconception messaging alone. Examples could include the associations between body image and depression<sup>11</sup>, or sleep and overweight or obesity<sup>12</sup>. Though, it would be critical to acknowledge cultural values placed on fuller bodies that exemplify strength, beauty, sexual desirability, success and affluence, or that contribute to normalization of larger body sizes<sup>9</sup>.

Methods are also needed to engage young women who do not perceive preconception health as relevant to themselves. Fransen and others<sup>27</sup> reported that many young women consider themselves to be at a lower risk of perinatal problems, and are largely reluctant to seek preconception care, consistent with what we found in this study. Additionally, young women who did not want to have children demonstrated disinterest. However, given that many pregnancies in South Africa are unplanned<sup>7</sup>, there is a need to engage all preconception health men and women in messaging. As Hemsing and colleagues<sup>20</sup> have pointed out, preconception messages should target both women and men to include gender transformative principles.

Young women's access to in-person health information in Soweto is limited, and their negative experiences at the clinics have been reported in other studies<sup>15</sup>. Training healthcare providers on cultural and structural competence skills would enable a better understanding of young women in their socio-cultural contexts, when providing preconception care<sup>28</sup>. Although young women often acknowledged and appreciated family support, many reported that the family did not provide useful health messages, especially around mental and reproductive health. This was due to caregivers/parents being judgemental or engaging young women in conversations around sex<sup>29</sup>. Educating caregivers to young women is also key, given that they can shape young women's behaviour during their preconception period.

Our finding that young women spent significant amounts of time on social media platforms including Facebook and WhatsApp is in line with other studies in South Africa where young people (18-34 years) were shown as the most active social media users in the country<sup>30</sup>. Social media may have potential as an effective health promotion tool in South Africa, due to its low cost, and ability to have many young people interact virtually<sup>31</sup>. Indeed, social media platforms can be influential spaces for the communication or dissemination of healthrelated messages<sup>32</sup>. However, there is need to ensure that correct and accurate health messages are channelled through social media platforms. This is particularly important given that many participants in this study trusted TV and radio more compared to information provided on social media platforms. Entertainment-Education (E-E) on TV or radio may offer a way to reach a broad audience, embedding messages around preconception health within storylines and characters attractive to the target audience. This approach has shown significant improvements in knowledge, attitudes, intention and behaviours across a wide range of health domains<sup>33</sup> including many relevant to preconception health such as family planning, pregnancy, safe sex, sexually transmitted infection screening and prevention, obesity prevention, birth control and alcohol use. Using radio or TV series to embed health messaging is not new to Africa or to South Africa<sup>34,35</sup>. However, careful consideration will need to be given on how to assess the impact of such an approach.

### **Ethical considerations**

This study was approved by the Human and Ethics Research Committee at the University of the Witwatersrand. Written informed consent was obtained from the study participants prior to collecting data and all participants received reimbursement for transport to the hospital.

### **Conclusion**

Most young women in Soweto are unfamiliar with the preconception period as a time where significant health gains may be made, with health-seeking and access to health information largely focused on illness or during pregnancy. Efforts to raise awareness around preconception health need to acknowledge the everyday socio-economic challenges young women face and embed useful information to support access to better health and holistically including opportunities and support for mental health. Entertainment-Education on TV or radio may offer a viable way to improve preconception knowledge and behaviours if topics of interest are included, though assessing the impact of such programs requires consideration.

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### Contribution of authors

All authors have read and approved the final manuscript. ENB analysed and interpreted the data, drafted the manuscript, and incorporated reviews from co-authors; LJW and CED conceptualised study and reviewed the manuscript; BA and LK reviewed the manuscript; SL conceptualised the study; SAN conceptualised the study, reviewed the manuscript and financial support.

### **Conflict of interest**

The authors declare that there are no conflicts of interest.

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