

Original Research Article

Vulnerability and Gonorrhea: A Qualitative Study of Black Women in South Africa

Abstract

Background: Gonorrhea is becoming a health concern globally due to its susceptibility to antimicrobial resistance of antibiotics, and this is a concern particularly for Black women in South Africa. Vulnerability among Black women leads to unsafe sexual practices, and this qualitative study explores the relationship between vulnerability and risk of gonorrhea.

Methods: To understand this relationship, participants were interviewed using an in-depth questionnaire at Lovelife, a local non-governmental organization in the Langa township of Cape Town, South Africa from October 2014-December 2014. Interviews were conducted using the information-motivation-behavioral skills conceptual framework and analyzed using thematic coding and triangulated through member-checking.

Results: Vulnerability affected the women's motivation to change at-risk behavior because the control was out of her hands. Of the 12 respondents, 92% were unemployed and dependent on her partner and his family (in some circumstances), which lowered their sexual power and ability to make decisions about sexual behavior that led them to at least one gonorrhea infection.

Conclusion: The findings from this study are of great have social influence globally because regardless of age, social economic status (SES) or educational level, women feel a need to discuss behavior in a medium that is not judgmental or instructive, but one that fosters openness and support.

23 Vulnerability and Gonorrhea: A Qualitative Study of Black Women in South Africa

24 Introduction

25 Gonorrhea incidence rates in South Africa (SA) are among the highest globally (Titus,
26 2011). Coinfection with HIV is currently a concern with the distribution of gonorrhea among
27 teenagers and young adults whom who are at the highest risk of infection. Young women in
28 South Africa are at greatest risk of being infected with HIV with the prevalence in the age
29 group 15 to 24 being 16.9% in women versus and 4.4% in men in 2005 (Muula, 2008).

30 Gonorrhea is the second most common notifiable disease in the United States with 333,004
31 cases reported in 2013 (CDC, 2013). The rates of gonorrhea continued to be highest among
32 African Americans in 2013 with 426.6 cases per 100,000 occurring 12.4 times greater than
33 the rate among whites with 34.5 cases per 100,000 (CDC, 2013). African American women
34 aged 20 to 24 disproportionately had the highest gonorrhea rate of any ethnicity group of
35 1,949.1 per 100,000, followed by 15 to 19-year-old African American women of 1,768.5 and
36 20 to 24-year-old black men of 1,734.5 per 100,000 (CDC, 2013). The WHO estimates that
37 the total number of new cases of STIs in the African Region was 93 million and among that
38 number, there were 21 million cases of *N. gonorrhoeae* (WHO, 2008). According to a study
39 based in Ghana, gonorrhea is one of the most prevalent STIs worldwide, with a major
40 percentage found in developing countries (Duplessis et al., 2015). There was variation in
41 STI prevalence among African countries and targeted populations in studies of adults
42 presenting with STI symptoms with a gonorrhea diagnosis of 0.4% in Congo, 5.7% in Benin,
43 8.4% in Tanzania, 17.1% in Malawi, and 1.4% in Zambia (Duplessis, 2015, p. 20).

44 Gonorrhea is becoming a health concern globally due to its susceptibility to
45 antibiotic antimicrobial antibiotic resistance, and this is a concern particularly for Black
46 women in South Africa. In the recent years, antibiotic resistance has been found in many
47 countries, such as Norway, England, Austria, France, Canada, Vietnam, England, Wales, and

Sweden with 31% having decreased susceptibility to treatment (Duplessis et al., 2015).

Vulnerability refers to the individual factors that increase the risk of HIV/STI infection (Lamptey, 2002). The vulnerability paradigm explains that women's susceptibility to HIV is because of biological differences versus with versus men, reduced sexual autonomy, and men's sexual power and privilege (Higgins et al., 2011).

UNAIDS considers that vulnerability includes factors outside the control of the individual, which reduces her the ability of individuals and within communities to avoid the risk of HIV/STIs (Nzewi, 2009). Poverty is a characteristic that increases the vulnerability of women with unsafe sexual practices because of lack of knowledge, lack of access to protection, and the inability to negotiate condom use (Booyesen & Summerton, 2002). Some of the individual factors include unemployment, illiteracy, and gender inequality. These factors are can also be characterized as social, but in the context of this psychosocial study determinant factor, they will be classified as individual susceptibilities. The concept of vulnerability has been studied in various populations around the world, and although Black women in South Africa are affected the same way in regards to disease burden, this study used qualitative methodology to get a deeper understanding of how vulnerability affected the risk of gonorrhea.

The main objective of the study was "How does a woman's sense of vulnerability play a part in risk of gonorrhea among Black South African women?" Vulnerable persons in many countries can include adolescent girls and women. If any factors come into play, such as illiterate women with limited skills, few job opportunities, and limited access to health information and services, are more likely than other women to engage in unprotected sex for money increasing their vulnerability and risk of infection (Lamptey, 2002). Women are also considered vulnerable to rape and violence in their relationships and tend to have limited control over their sexual relationships (Johnson & Budlender, 2002). Promiscuity is

also a risk factor found in literature and women are put at risk because of whom they have sex with rather than how many people they have sex with (Johnson & Budlender, 2002). Interventions that address vulnerability to create economic opportunities for those at most risk, can decrease vulnerability and risk of infection among the most affected groups.

Methodology

The use of qualitative methods for this study was chosen after reviewing the literature with an emphasis on Black women regardless of geographic location because it allowed the participant to feel more at ease with the process of the research being in their home area. Particularly in South Africa, many research studies are ongoing that are mainly focused on maternal and child health and vaccine research. In particular, HIV studies are quantitative in nature, so this study design may be a refreshing change to allow for the participants to have a voice. The key concept used was the IMB theory that is used to define the constructs affecting risk-reduction behavior among Black women. Using the qualitative design methodology, the data collection methods used individual interviews to allow the women study participants to share their ideas on the psychosocial and behavioral manifestations that affect their sexual habits.

The IMB skills theory (Rudestam & Newton, 2007) used in this research was the framework to help construct the interview questions and frame the results. The theory defines the constructs in which women can share their ideas on the psychosocial and behavioral manifestations that affect their sexual habits to examine similarities with Black women. In order to do this, themes from open-ended questionnaires and focus groups that are characteristic of qualitative methodology would be the theoretically ideal structure for this study. Looking at specific elements in the research to either support or reject tested hypotheses or address the same from previous empirical research, quantitative would be better suited for this research. From the literature search, there have been no other studies conducted from an epidemiological standpoint to find out if psychosocial and behavioral factors contribute to risk of gonorrhea.

99 The research was undertaken in a government-funded clinic in the Langa Township
 100 located in the metropolitan area of Cape Town, South Africa. Townships in South Africa are
 101 historically predominately Black African with a majority Xhosa in traditional ethnicity and
 102 language. In Langa, Black Africans make up 99.5% of the population, unemployment is
 103 40.56%, and females make up 50.42% of the population according to the 2011 Cape Town
 104 Census. ~~Out of the female population in~~ In Langa, 2.2% have no schooling, 4%
 105 have completed primary, 45% have some secondary education, and 33.4% have a Grade
 106 12 education (Cape Town Census, 2011). With females as the predominate gender
 107 in Cape Town, the probability of reaching study participants was greater. One of the
 108 main reasons for the choice to study in this particular area was because these populations
 109 have high incidences of HIV and STI among Black females.

110 Many of the local residents use government-funded public health clinics because of
 111 easy accessibility, free services, and most residents do not have national health insurance.
 112 The clinic has trauma services, mental health services, a pharmacy, obstetrics, an HIV/AIDS
 113 and STI unit, and psychiatric services, among others, making them full-service health
 114 facilities. The LoveLife organization is a non-profit group that caters to young adults and
 115 comprehensive sexual preventive services. LoveLife is very visible in the local area and
 116 works with the local schools to deliver education about how to practice safe sex and other
 117 sexual preventive methods to curb the high rate of HIV/STIs in the area.

118 To be eligible for the study, all participants had to be a Black female, aged 18 to 35
 119 years old, read and speak at least intermediate English. All correspondence was translated in
 120 Xhosa to increase the chances of greater participation. Each participant would have had at
 121 minimum one sexual experience and at least one positive test for gonorrhea in the past two

122 years. The goal was to recruit as many participants who had received a positive test for
123 gonorrhea within the past ~~two~~² years with a goal of no less than 10 participants. Ten was the
124 minimum target because, in a review of prevalence studies within this geographic area and
125 population, it was not difficult to recruit participants. Although this study had a small sample
126 of 12 participants, this is normal in qualitative studies to allow the time for the researcher to
127 establish trust with each participant and dig deeply into their thought processes and feelings.
128 In order to recruit as many participants as possible to give a detailed understanding of the
129 psychosocial effects of the women affected by gonorrhea, I asked LoveLife to assist in
130 passing out flyers for participant recruitment. Walden's IRB board recommended this way of
131 recruitment as opposed to clinic nurses and doctors asking participants directly to avoid
132 participants being coerced~~coercioneed~~ into being in the study.

133 Ethical considerations were~~wereere~~ maintained throughout the entire study and IRB
134 approval as part of the research protocol. The IRB approval number was 09-05-14-0132506.
135 The participants' identity and research responses were kept confidential, and risks and
136 benefits communicated~~were expressed~~ to each participant before~~prior to~~ data collection.

137 LoveLife, as the community partner, allowed the use of their volunteers
138 (GroundBreakers) for translation and assistance with distributing study participant
139 recruitment flyers as well as their LoveLife facility in Langa to host the interviews in a
140 confidential area (the boardroom). The Walden University Institutional Board (IRB) during
141 the application process felt that the focus groups initially proposed would not be conducive to
142 participants sharing sensitive and confidential information, so the accepted IRB application
143 called for only one-on-one interviews. The IRB also asked that consideration for possible
144 translations to be a part of the data collection in the case that a person who wanted to be a
145 part of the study but could not speak English fluently or was not confident in the language
146 would not be excluded due to a language barrier. Lovelife provided translators for use in the

study, which was satisfied through LoveLife that had translators available for my use. There were approximately four participants who asked for a translator to be part of the interview. Before the interview began, I went over the Informed Consent form and received consent from each participant.

A number of studies have been conducted in the clinics, so the participating women are aware of research study settings. Because of the number of studies that have been done in the clinics with HIV, the women are aware of how studies are conducted. Compensation of R50 grocery store vouchers were/was/were provided for given to participants for volunteering their time to participating/participate in the study. Data collection included individual one-on-one in-depth interviews.

Measures

The outcome variable *Vulnerability* was created using three sets of questions:

- a. Why would you refrain from sexual contact if you or your partner had gonorrhea?
- b. How confident are you with using condoms and are you able to negotiate with your partner to use condoms if you are not in a monogamous relationship?
- c. How confident are you to refuse sexual intercourse with your partner if they choose not to use a condom?

Coding of the following themes were uncovered by the participant's responses: The participant's respondents were then coded with the following themes: poverty, basic needs, sexual power, decision making, and violence in the relationship.

Data Analysis

Data analysis began with transcription of the focus groups and hand-coding of themes found from the one-on-one interviews with study participants. The interviews were

transcribed and hand-coded on a line by line basis. ~~From this process, descriptive~~ themes were ~~then~~ deciphered from the variables outlined with the psychosocial variables previously discussed. There was no need to use a qualitative software package because the ~~themes and~~ codes could be deciphered from hand-coding. ~~The use of methodological~~ triangulation to ~~establish~~ ~~established~~ credibility and dependability ~~was established~~ in the data collection and analysis stages, respectively, as participants were given a questionnaire ~~before~~ ~~prior to~~ the interview to gather demographic information. ~~When the research questions were given in the individual interview, more P~~ ~~probing~~ questions were asked for clarification if more analysis was needed from the participant responses. Member checking occurred at the completion of the interview through replaying the audio-tape to determine if the responses were accurate and if they reflected the ~~predicted~~ ~~true~~ outcomes.

Results and Discussion

Demographics

Table 1 presents the demographic characteristics of the participants. The research participants (Table 1), 92% of the women were unemployed, 58% were high school graduates (25% had less than a grade 12 education, and 17% were university students). All of the participants considered themselves single, but 67% were in a relationship, and 33% were single, not in a relationship. The average age of the study participants was 21.7 years old.

Demographic Characteristics of the Study Sample

Measure	Total Sample (N=12)
Age (years, average)	21.7
Unemployed (yes)	92%
High School education completed	75%
Single (Not in a current relationship)	33%

195
196 | The desire to change at-risk behavior ~~in order~~ to prevent STI transmission and
197 | prevention is dependent on the individual motivation to make said changes. The majority of
198 | women in the study were adamant that after having a positive gonorrhea diagnosis, they are
199 | fully confident and motivated to practice safer sex. Vulnerability affected the women's
200 | motivation to change at-risk behavior because the control was out of their hands. The
201 | overwhelming majority, 92% of women, were unemployed and dependent on their partner
202 | and his family (in some circumstances), which lowered their sexual power and ability to
203 | make decisions about sexual behavior. About half of the women continue to stay in abusive
204 | relationships with the partner who gave them the disease. For some of the women, the partner
205 | never received treatment due to lack of believing that he was infected which makes for the
206 | answering of particular questions in the interview related to this determinant difficult to
207 | decipher among those women. Women are ~~put~~ at risk because of whom they have sex with
208 | (as found with the majority of women) rather than how many people they have sex with
209 | although in a couple of cases with the participants, affection and self-gratification was sought
210 | by casual encounters. This analysis solely focuses on vulnerability and was part of a larger
211 | study, thus the small number of participant responses and quotes from participants #8 and #9,
212 | respectively.

213 | Vulnerability focuses on the individual factors that increase the risk of HIV/STI
214 | infection that are out of the control of the individual. Several of these factors came out in the
215 | interviews including unemployment and gender inequality. The majority of women in the
216 | study stated that they do not work and rely on family and boyfriends for basic needs that at
217 | times results into violence in relationships with limited control in the relationship.

218 | Participant #8:

219 For most of them [women that stay in violent relationships], it's because they are
220 dependent on the guy--financially and emotionally. For them, they come from a
221 broken home, so they look at the boyfriend as a refuge because when you go home,
222 there is no food, mom is drunk and dad is drunk; no one has their story on. You go to
223 your boyfriend's house and then everyone welcomes you there with warm hands, you
224 can sleep there, they buy you clothes, everything. Behind closed doors, he beats you
225 up-blue eyes. The mom wouldn't be concerned and would ask about the blue eye, but
226 once you smile, they want to shower you with gifts. So that you forget the abusive
227 relationship so I think [they stay] because of broken families and depending on the
228 person.

229 Having multiple partners was found to be a factor in the data collection in the form of
230 women seeking out affection and self-gratification from someone other than their main
231 boyfriend.

232 Participant #9:

233 No, I didn't know [who gave her gonorrhea]. There was one time I did have a risky
234 situation. So, it happened then, so I wasn't sure. I thought he [the boyfriend] would
235 say it was from you, you came to me with this thing. But I had to speak to him about
236 it to go to the clinic. When the time came to have sex, I couldn't so I had to be open
237 why. But I didn't tell him about the risky decision I had on the side. [Tell me more
238 about the risky decision you had on the side] It was a guy I was chatting with and then
239 the feelings developed and went to another level but after we did that, I just saw that it
240 was wrong. I was flattered with the words he was saying, and then I did that [had
241 unprotected sex].

The research question asked: “How does a woman’s sense of vulnerability play a part in risk of gonorrhea among Black South African women?” The answer is that vulnerability is an important psychosocial factor ~~to predetermine~~into predetermining among high risk groups because it lowers the ability to make safe choices in relationships or home dynamics that contribute to the risk of disease. A key finding in this study was that the motivation to change risky behaviors is affected by the women’s sense of vulnerability to how much control she has in her relationship.

The research addressed social and structural barriers that increase vulnerability of STI infection—two of the key strategic objectives for the South African National AIDS Council’s National Strategic Plan--is critical to decreasing sexual disease epidemics that affect the country, in particular, impoverished areas that have limited basic resources.

Implications for Practice and/or Policy

Recommendations for further research should include a wide vast of women in surrounding townships in Cape Town inclusive of Khayelitsha (one of the largest townships in Cape Town) and Nyanga, and also townships within the greater Johannesburg area. Because of the interest of the women to “tell their story” and to have a say about their life, concerns, and behaviors, this study could easily expand to not only South Africa, but to all parts of the world. A comparison study of Black women in South Africa with Black women in populated areas in the United States could really give salient information about the information, motivation, and behaviors of sexually vulnerable women in regards to relationships and relevant target focused support interventions could be established all over the world.

The effectiveness of the targeted interventions could have a significant impact on the disproportionate incidence and prevalence of HIV/STIs among Black women globally. The

interventions have to allow the participants to speak freely about their vulnerabilities and influence of peer and family pressures on sexual behavior, and lack of economic and social support in their understanding of sexual behavior information and knowledge to actually make a difference in consistent practices of preventive sexual behaviors. Individual interviews are ideal to gather information with someone experienced and understanding of impoverished communities to incite real and authentic conversations among the participant group in regards to personal conversations about sexual behavior.

The potential impact of this study for positive social change at the individual level is the confidence and sexual power that a vulnerable woman can develop. Women's understanding of the importance of maintaining confidence (information and motivation) in providing and using contraception whether in a monogamous or casual relationship is imperative in reducing the burden of disease among this population.

Families have to have a significant change in conversation and dynamic in order for a woman to feel secure enough to trust those around them to speak up and not hide concerns when they feel a sense of vulnerability to their sexual behaviors and relationships.

Having knowledge of the impact of education and economic factors on women of reproductive age can be resourceful in establishing job creation and awareness of the importance of education. Education would extend options and form a way out of impoverished households and abusive relationships that can lead to high risk and burden of disease. This can be addressed at the societal and policy levels, respectively. Most of the stakeholders and advocates of social change in regards to HIV/STIs affecting vulnerable populations found in townships and in rural areas of South Africa link together with other human rights organizations (i.e. Treatment Action Campaign (TAC)), to spark movements of change, but are currently under-sourced and underfunded. If this continues to occur, health

290 challenges in communities in most need will continue to be disenfranchised and under-
291 represented.

292 The **main** recommendation for practice in a community such as Langa is that it is
293 imperative **to first to** get a sense of the dynamics of the community that is involved in the
294 research. **~~This allows dialogue~~ Dialogue will to** maintain consistency and also limit risks
295 associated with studying a vulnerable population. Also, development of relationships by the
296 researcher with the community partner assisting in the research from the executive level to
297 the entry level is crucial in maintaining integrity and support throughout the data collection
298 and data analysis stages of the research. At the end of the **studyresearch**, a presentation **given**
299 by the researcher to the stakeholders in the community—inclusive of the community partner
300 and its' stakeholders allows those involved and even those not directly involved to
301 understand that they were a significant partner in the outcomes of the research done in their
302 community.

303 **Conclusion**

304 This study focused on the attitudes and behaviors of Black women in the township of
305 Langa in regards to their understanding of the variables that impacted their diagnosis of the
306 STI gonorrhea. The literature stated that this population was most at risk for HIV/STIs, and
307 this research has **showedshowned** that more work needs to be done to consider the individual
308 components of sexual behavior among this population, partnership dynamics, and
309 social/environmental influence. **PA**Although preventive methods have been implemented by
310 NGOs like LoveLife, inclusive of their local establishments and clinics, more continuous
311 work is needed to keep the at-risk group informed about their risk. The findings from this
312 study can be of great social influence globally because regardless of age, SES or educational
313 level, women feel a need to discuss behavior in a medium that is not judgmental or
314 instructive, but one that fosters openness and support. Quantitative follow-up studies should

be conducted to get access to the quantifiable psychosocial determinants of a larger population of women **in order** to tailor support groups and workshops to each particular variable to impact this sentinel group.

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