1 2	Original Research Article Vulnerability and Gonorrhea: A Qualitative Study of Black Women in South Africa
3	Abstract
4	<b>Background:</b> Gonorrhea is becoming a health concern globally due to its susceptibility to
5	antiresistance of antibiotics microbial the resistance of antibiotics, and this is a concern
6	particularly for Black women in South Africa. Vulnerability among Black women leads to
7	unsafe sexual practices, and this qualitative study explores the relationship between
8	vulnerability and risk of gonorrhea.
9	Methods: To understand this relationship, participants Participants were interviewed using an
10	in-depth questionnaire at Lovelife, a local non-governmental organization in the Langa
11	township of Cape Town, South Africa from October 2014-December 2014. Interviews were
12	conducted using the information-motivation-behavioral skills conceptual framework and
13	analyzed using thematic coding and triangulated through member-checking.
14	<b>Results:</b> Vulnerability affected the women's motivation to change at-risk behavior because
15	the control was out of her hands. Of the 12 respondents, 92% were unemployed and
16	dependent on her partner and his family (in some circumstances), which lowered their sexual
17	power and ability to make decisions about sexual behavior that led them to at least one
18	gonorrhea infection.

Conclusion: The findings from this study are of greathave 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.

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

## Introduction

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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 atat 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 34.5cases 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 inof
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	antibioticntimicrobialantibiotic 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 herther 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 (Booysen & Summerton, 2002). Some of the individual factors include unemployment, illiteracy, and gender inequality. These factors arcean 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  $risk_5$  can decrease vulnerability and risk of infection among the most affected groups.

## Methodology

## Study Setting and Participants

The research was undertaken in a government-funded clinic in the Langa Township located in the metropolitan area of Cape Town, South Africa. Townships in South Africa are historically predominately Black African with a majority Xhosa in traditional ethnicity and language. In Langa, Black Africans make up 99.5% of the population, unemployment is 405640%, and females make up 50.424% of the population according to the 2011042011 Cape Town Census. Out of the female population in In Langa, 2.2% have no schooling, 4% have completed primary, 45% have some secondary education, and 334033% have a Grade 12 education (Cape Town Census, 2011). With females as the predominate predominante gender in Cape Town, the probability of reaching study participants was greater. One of the main reasons for the choice to study in this particular area was because these populations have high incidences of HIV and STI among Black females.

Many of the local residents use government-funded\_public health clinics because of easy accessibility, free services, and most residents do not have national health insurance.

The clinic has trauma services, mental health services, a pharmacy, obstetrics, and HIV/AIDS and STI unit, and psychiatric services, among others, making them full-service health facilities. The LoveLife organization is a non-profit group that caters to young adults and comprehensive sexual preventive services. LoveLife is very visible in the local area and

works with the local schools to deliver education about how to practice safe sex and other sexual preventive methods to curb the high rate of HIV/STIs in the area.

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To be eligible for the study, all participants had to be a Black female, aged 18 to 35 years old, read and speak at least intermediate English. All correspondence was translated in Xhosa to increase the chances of greater participation. Each participant would have had at minimum one sexual experience and at least one positive test for gonorrhea in the past wo-2 years. The goal was to recruit as many participants who had received a positive test for gonorrhea within the past two-2 years with a goal of no less than 10 participants. Ten was the minimum target because, in a review of prevalence studies within this geographic area and population, it was not difficult to recruit participants. Although this study had a small sample of 12 participants, this is normal in qualitative studies to allow the time for the researcher to establish trust with each participant and dig deeply into their thought processes and feelings. The order to recruit as many participants as possible to give a detailed understanding of the psychosocial effects of the women affected by gonorrhea, I asked LoveLife to assist in passing out flyers for participant recruitment. Walden's IRB board recommended this way of recruitment as opposed to clinic nurses and doctors asking participants directly to avoid participants being coercedcoercioneed into being in the study. Ethical considerations werewereere maintained throughout the entire study and IRB approval as part of the research protocol. The IRB approval number was 09-05-14-0132506. The participants' identity and research responses were kept confidential, and risks and benefits communicated were expressed to each participant before prior to data collection. LoveLife, as the community partner, allowed the use of their volunteers (GroundBreakers) for translation and assistance with distributing study participant recruitment flyers as well as

their LoveLife facility in Langa to host the interviews in a confidential area (the boardroom).

The Walden University Institutional Board (IRB) during the application process felt that the
focus groups initially proposed would not be conducive to participants sharing sensitive and
confidential information, so the accepted IRB application called for only one-on-one
interviews. The IRB also asked that consideration for possible translations to be a part of the
data collection in the case that a person who wanted to be a part of the study but could not
speak English fluently or was not confident in the language weould 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 wasere provided for given to participants for volunteering
their time to participating participateing 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. Derom 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. Methodological triangulation to establishestablished credibility and dependability was established in the data collection and analysis stages, respectively, as participants were given a questionnaire beforeprior to the interview to gather demographic information. When the research questions were given in the individual interview, more Perobing 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.

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

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

Total Commis (N. 12)

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

## Participant #8:

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

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

## Participant #9:

No, I didn't know [who gave her gonorrhea]. There was one time I did have a risky situation. So, it happened then, so I wasn't sure. I thought he [the boyfriend] would say it was from you, you came to me with this thing. But I had to speak to him about

it to go to the clinic. When the time came to have sex, I couldn't so I had to be open why. But I didn't tell him about the risky decision I had on the side. [Tell me more about the risky decision you had on the side] It was a guy I was chatting with and then the feelings developed and went to another level but after we did that, I just saw that it was wrong. I was flattered with the words he was saying, and then I did that [had 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 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 ofto 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 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 causal 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-to extend options and form a way out of

impoverished households and abusive relationships that can lead to high risk and burden of disease—Thisthat 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—Trural 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 challenges in communities in most need will continue to be disenfranchised and underrepresented.

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

## Conclusion

This study focused on the attitudes and behaviors of Black women in the township of Langa in regards to their understanding of the variables that impacted their diagnosis of the STI gonorrhea. The literature stated that this population was most at risk for HIV/STIs<sub>2</sub> and this research has showedshowned that more work needs to be done to consider the individual components of sexual behavior among this population, partnership dynamics, and

social/environmental influence. PAlthough preventive methods have been implemented by
NGOs like LoveLife, inclusive of their local establishments and clinics, more continuous
work is needed to keep the at-risk group informed about their risk. The findings from this
study can be of great social influence globally because regardless of age, 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. 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.
References
Booysen, F. R., & Summerton, J. (2002). Poverty, risky sexual behaviour, and vulnerability
to HIV infection: Evidence from South Africa. Journal of Health Population
Nutrition, 20(4), 285-288.
Centers for Disease Control and Prevention. (2013). 2013 STD surveillance gonorrhea.
Retrieved from http://www.cdc.gov/std/stats13/gonorrhea.htm
City of Cape Town/ (2001). Population census. Retrieved from
https://www.capetown.gov.za/en/stats/2011CensusSuburbs/2011_Census_CT_Suburb_La
nga_Profile.pdf
Duplessis, C., Puplampu, N., Nyarko, E., Carroll, J., Dela, H., Mensah, A., Amponsah, A.,
Sanchez, J. (2015). Gonorrhea surveillance in Ghana, Africa. Military Medicine, 180(1),
17-22. doi: 10.7205/MILMED-D-13-00418
Higgins, J. A., Hoffman, S., & Dworkin, S. L. (2011). Rethinking gender, heterosexual men,
and women's vulnerability to HIV/AIDS. <i>American Journal of Public Health</i> , 101(4), 585.
Johnson, L., & Budlender, D. (2002). HIV risk factors: A review of the demographic, socio-
economic, biomedical and behavioural determinants of HIV prevalence in South

314	Africa. Care Monograph, 8, 1-49.
315 316	Lamprey, P.R. (2002). Reducing heterosexual transmission of HIV in poor countries. <i>British</i>
317 318	Medical Journal, 324(7331), 207-211. doi: 10.1136/bmj.324.7331.207
319	Mabey, D. (2010). Epidemiology of STIs: worldwide. Epidemiology and Sexual
320	Behaviour, 38(5), 216-219. doi: 10.1383/medc.29.7.3.28391
321	
322 323	Muula, A. S. (2008). HIV infection and AIDS among young women in South Africa.
324 325	Croatian Medical Journal, 49(3), 423-435. doi: 10.3325/cmj.2008.3.423
326 327	Nzewi, O. (2009). Exploring gender issues and men's vulnerability to HIV/AIDS in Sub-
328 329	Saharan Africa. Policy Brief 56. Centre for Policy Studies, Johannesburg.
330 331	Thomas, J., & Harden, A. (2008). Methods for thematic synthesis of qualitative research in
332 333	systematic reviews. BMC Medical Research Methodology, 8(1), 45-55. doi:
334 335	10.1186/1471-2288-8-45
336	Titus, A. (2011). The paradox of South Africa: how antibiotic resistance fits into the health
337	picture. Retrieved from
338	http://www.cddep.org/blog/posts/paradox_south_africa_how_antibiotic_resistance_fi
339	s_health_picture#sthash.uXXlfrE9.7s3YbPiO.dpbs
340	World Health Organization. (2008). Global incidence and prevalence of selected curable
341	sexually transmitted infections. Retrieved from
342	http://apps.who.int/iris/bitstream/10665/75181/1/9789241503839_eng.pdf
343	
344	