

## Conditions and Challenges Associated with Women's Risk Sexual Behaviour in Informal Settlements Across South Africa

J.G. Kheswa

*Department of Psychology, University of Fort Hare, Private Bag X1314, Alice, 5700, South Africa  
E-mail: jkheswa@ufh.ac.za*

**KEYWORDS** Food Insecurity. Housing. Unemployment. Transactional Sex. Women

**ABSTRACT** This paper reports on the conditions and challenges faced by women in informal settlements across South Africa. To comprehend how lack of water and sanitation threatens women and adolescent girls' health owing to abject poverty and unemployment, this paper employed a systematic review by analysing the primary and secondary sources such as theses, dissertations, electronic journals and government gazettes. Guided by multiple theories and models such as Emerson's social exchange theory and Bronfenbrenner's ecological theory, findings reveal that women are subjected to gender inequality and experience physical and sexual abuse, which, in turn, gives rise to sexually transmitted infections, unwanted pregnancies and psychological distress. This paper argues that owing to lack of proper housing and electricity, teenage gangs and older men tend to prey on vulnerable women and adolescent girls living in informal settlements. Realising that cultural practices subjugate women, findings show that the human rights of adolescent girls are violated and caregivers do not report sexual exploitation by older men. Policies around children's rights should therefore be entrenched at the community level and schools to equip educators in the area of sexuality so that learners may take steps to prevent HIV transmission within 72 hours. In this regard, job creation becomes a necessity because when women with pre-existing health conditions such as tuberculosis do not cope with living in precarious conditions, they resort to drinking alcohol, thereby weakening their immune system and be susceptible to rape at the taverns.

### INTRODUCTION

In informal settlements also referred to as "squatter camps or *mjondolo*", Corburn and Sverdlik (2017) found that a large number of dwellers in South Africa face a challenge of unmet basic needs such as food, water, electricity and healthcare (Drimie et al. 2013; Kamusono 2018) due to entrenched poverty, unemployment, inadequate infrastructure and security (World Health Organisation 2016). According to Tshwane Municipality in Gauteng Province, South Africa, these settlements are temporal shelters, which may be in the form of a hut, tent, dwelling, building or any structure for residential purposes that do not comply with the provisions of the National Building Regulations and Building Standards Act, Act 103 of 1977 (Parliament of South Africa 1998).

In 2014, there were approximately 4.4 million of South African people living in informal settlements and twenty-five percent were estimated to be in Ethekwini District in Kwa-Zulu Natal Province (KZN) (Gibbs et al. 2014). In the Northern Cape Province, by 2015, almost 2,500 informal housing structures had been erected in Postmasburg, 23 km from the new mine, Kolomela

(Marais et al. 2018). What is appalling in many informal settlements is lack of sanitation (Motsoni et al. 2016), and such conditions pose unprecedented threat to the health of women and increases the risks to contract respiratory infections such as pneumonia, tuberculosis and asthma (Golubchikov and Badyina 2012; World Health Organisation 2016).

In informal settlements there are no lights just like in Ekuphumleni and Enkuthazweni, Port Elizabeth (Nelson Mandela Bay Metropolitan Municipality or NMMM 2014), Boiketlong (near Vereeniging) (Musa 2014) and Diepsloot (near Johannesburg and Pretoria) in Gauteng province (Basera et al. 2016). In Phillipi in the Western Cape Province, 72 residents share one unhygienic toilet (Brown-Luthango et al. 2017). Owing to lack of visible law and order in informal settlements, male gangs roam at night to engage in burglary or target women who stay alone and rape them (United Nation Human Settlements Programme 2003). For example, in the Cato Crest informal settlement in KZN, Meth (2017) reported sexual violence occurring in the homes through the windows (with no burglar proofs) to show that women and girls are the targets of sexual abuse. South African feminist research-

ers such as Dosekun (2013) and Gqola (2007) are concerned about the rate at which women and girls are sexually exploited and murdered.

### Research Questions

This paper attempts to answer the following questions and elucidate the rationale for that.

- ♦ What predisposes women and adolescent girls living in informal settlements across South Africa to risk sexual behaviour?
- ♦ What are the ramifications faced by women and adolescent girls in informal settlements across South Africa?
- ♦ What strategies can the government employ to ensure safety for women and girls living in informal settlements?

### RESEARCH METHODOLOGY

The researcher employed a systematic review to bring an understanding of the plight faced by women who live in the informal settlements across South Africa. The researcher preferred systematic review because unlike empirical studies, it does not require an approval of the Ethical Clearance from the hosts or research committees, which could take a longer period and require pilot studies for feasibility. Nevertheless, to ensure the rigour or reliability of this paper, the researcher downloaded the government gazettes, information from the international scales such as World Health Organisation, and articles that are indexed in the PsycINFO, Scopus and International Bibliography of the Social Sciences (IBSS) and Excerpta Medica database (EMBASE). To achieve the research objectives, the chosen articles had to meet the following criteria:

1. Living conditions in the informal settlements (though not limited to South Africa only).
2. Factors and effects associated with women's risk sexual behaviour.

### Literature Review

#### *Theoretical Perspectives*

Explaining why there would always be a challenge in overcoming the scourge of HIV and

sexual abuse of women and girls is Emerson's (1976) social exchange theory. Social exchange theory is based on the premises that women tend to sustain sexual relationships in which rewards outweigh costs. In the South African context, unemployed girls and women may trade sex for money and other gifts to their sexual partners to close their economic gap even though they put their lives at risks such as unwanted pregnancies, gender based violence, forced abortion and HIV/AIDS (Jewkes et al. 2014; Kheswa 2017a). A complementing theory by Bronfenbrenner's *ecological systems theory* states that as adolescent girls develop, they interact with various people in their environment, whom exert an influence on their sexual behaviour (Winter et al. 2020). Research by Nkosi et al. (2014) indicates that where there is alcohol, sexual relationships emerge and portend unprotected sex at the bars and taverns.

From the multiple articles analysed, the following factors and conditions stood out as key drivers for risk sexual behaviour amongst women and girls in informal settlements across South Africa and developing countries such as Kenya, Zimbabwe and India, and these factors include *accessibility to water and sanitation, transactional sex, intergenerational sex, substance abuse and education*.

#### *Accessibility to Water and Sanitation*

Owing to many informal settlements dwellers who are mired in poverty, Wilson et al. (2014) argue that for some girls it becomes an embarrassment when they menstruate because they lack privacy to access sanitary facilities and experience insufficient sanitary pads due to water shortage. This situation often puts their health at heightened risk for rape because they must wait until it is dark outside to throw away the used sanitary pads and release themselves since there is no electricity (Mokoena 2015). No wonder in Barrage, an informal settlement under the jurisdiction of Emfuleni Local Municipality (ELM), which is 20 km from Vanderbijlpark in Gauteng Province, girls dropped out of school because they could not access safe water and separate toilets (Mokoena 2015). In the North West Province, Johansson and Hellström (2018) found that lack of sanitary pads resulted in many adolescent females performing poorly academical-

ly, since on average they would be home for three days until they have stopped menstruating.

### ***Transactional Sex***

Transactional sex is a sexual intercourse associated with exchange for money and/or gifts, and it assumes the categories of prostitution or commercial sex work (Jewkes et al. 2012; Stoebenau et al. 2016). Owing to poverty, in the informal settlements of Khayelitsha in the Western Cape Province, Burns and Snow (2012) and Tenkorang et al. (2011) found that female youth were twice as vulnerable to HIV/AIDS. To cement the assertion above, Steenkamp et al. (2014) reported that forty-one percent of women who exchanged sex for money, tested HIV positive as compared to only twenty percent males in Walmer informal settlement under Nelson Mandela Bay Metropolitan Municipality (NMMM), Eastern Cape. Literature documents that the underlying reason for majority of women living in informal settlements to engage in transactional sex is to overcome the scourge of poverty because some of them are unemployed and have children to feed despite knowing the risk for contracting HIV and other sexually transmitted infections (Jewkes et al. 2014).

### ***Intergenerational Sex***

In addition to the bleak picture painted above, studies show that majority of orphaned adolescent females living in child-headed households also exchange sex for money with multiple sexual partners (Lobi and Kheswa 2017; Sharer et al. 2015), and girls as young as 12 years are sexually coerced by older men (Giorgio et al. 2016; Hillis et al. 2016). Recalling that some few years ago, with the influx of foreigners in most informal settlements, Ndinda and Ndhlovu (2016) found that disgruntled dwellers in Diepsloot accused male foreigners of sexually violating girls. It could be for this reason that Diedericks and Van Eeden (2019) found teenage mothers in Bekkersdal with illegitimate children and cohabiting with mine workers originating from Zimbabwe, Mozambique and Malawi.

### ***Substance Abuse***

According to Charman et al. (2013), there are liquor vendors, who, operate without licenses

and it is estimated that there are between 190,000 and 265,000 and an uneven number is located in informal settlements. In a quantitative study conducted in Ethekwini informal settlements, KwaZulu-Natal, findings revealed that over two-thirds (68.7%) of women who experienced intimate partner violence were unemployed and reported alcohol and drug use (Gibbs et al. 2018). Substance abuse and risk sexual behaviour are biologically plausible as twenty-nine percent of women who lived in informal settlements near hostels in south-eastern Johannesburg, reported alcohol drinking, daily (Bello et al. 2017). Sadly, alcohol and drugs have psychoactive effects that cause poor concentration, judgement and are responsible for blurred vision owing to their ability to alter gamma-aminobutyric acid (GABA) receptors and change the body's serotonin level, resulting in disinhibition (Rehm et al. 2012).

### ***Education***

It is a fact that an alarming number of informal settlements in South Africa are mired in poverty but there are female-headed households, for instance, in Enkanini in Stellenbosch, Western Cape Province, where women show resilience through working as domestic workers to educate their children (Smit et al. 2019). Some depend on child support grants (CSG) from the government (Kovacic et al. 2019). In Orange Farm, which is situated in the south of Johannesburg, Habitat for Humanity (2013) noted that majority of girls show resilience but struggle to advance to tertiary institutions after they have passed Grade 12 (Walker and Mkhwananzi 2015). These are the girls who utilise every profitable resource (church, youth movements) to hold on to their hopes and dreams for attainment of educational goals (Harris and Little 2019). However, in Zandspruit informal settlements located within Johannesburg Metropolitan, north of Roodepoort (Motsomi et al. 2016), noted that adolescent girls were not adequately equipped concerning reproductive health issues. In this study, findings reveal that parents thought STIs are meant for adults and talking about sex with children was culturally sensitive.

### ***Ramifications Faced by Women Living in Informal Settlements***

It is important to note that due to poverty and receiving money or gifts from men by wom-

en and girls could bear ripple effects, which may aggravate their psychological well-being especially when there are no protective factors, around. These effects may lead to psychological stress and for being victims of sexual violence and gender inequality, could account for unwanted pregnancies.

### *Psychological Distress*

Various scholars employ Bronfenbrenner's socio-ecological framework (such as the individual, family, community and environment) to understand the causal factors aggravating the physiological and psychological health of women living in informal settlements (McIlwaine 2013; Walker and Mkwanzani 2015). Furthermore, lack of employment and durable housing, food insecurity, limited educational opportunities, violence and weak social ties because of overcrowding and lawlessness in informal settlements, are attributable to stress among women (Winter et al. 2020). It is important to note, these conditions also affect women in other countries such as Kenya (Winter et al. 2020) and India (Darwalla et al. 2019). Lack of support during pregnancy and postnatal development has been identified to cause psychological distress and postpartum depression among women (Garman et al. 2019; Holt et al. 2017). Postpartum depression (PPD) refers to a state of feeling hopeless, detached and neurotic that is common among women shortly after giving birth (Verreault et al. 2014).

### *Sexual Violence and Gender Inequality*

With reference to Connell's (2005), conceptualisation of hegemonic masculinity and theorisation about men's sexual health and identities in both qualitative and quantitative studies (Closson et al. 2020; Gibbs 2016; Gibbs et al. 2018; Gibbs et al. 2020) point towards men as perpetrators of intimate partner violence. In these studies, women reported their sexual partners as oppressors women's rights including their reproductive health, especially in the informal settlements. For those living in cohabitation, for instance, in Ethekekwini informal settlements in KwaZulu-Natal, police reports state that male sexual partners would slap, hit and lock women inside the shacks overnight or for many hours

(Willan et al. 2019). In the same informal settlements, findings revealed that over two thirds (68.7%) of women who experienced intimate partner violence were unemployed (Gibbs et al. 2018). Fleming et al (2016) add that normative influences such as stereotypical gender roles among men, who grow up in culturally embedded societies, tend to disempower women from negotiating safe sex.

## **OBSERVATIONS AND DISCUSSION**

Based on the reviews of the selected literature, it is clear that for as long as women living in informal settlements are without permanent jobs, they are most likely to engage in sexual relationships characterised by social exchange in order to survive. Considering that in culturally embedded South African ethnic groups such as Sotho, Zulu, Tswana, Xhosa, Ndebele and isiSwati, women have been socialised to be submissive, it becomes difficult for them to negotiate safe sex although they are aware of being cheated on. This study concurs with the findings by Gibbs et al. (2018) that women aged, 18 to 30 years report low condom self-efficacy because they fear that their sexual partners might physically beat. The community and primary caregivers should be protecting girls in intergenerational relationships when physically and emotionally abused by older men by reporting the perpetrators to the police. By virtue of being minors, they are sexually abused regardless of whether the girls have given consent (Giorgio et al. 2016). Supporting evidence is demonstrated in a survey conducted among the Grade 8 learners in Pretoria, in which 17.3 percent of girls from homes in informal settlements reported physical and sexual abuse (Norman et al. 2012). There could be many more incidents of this nature and correct statistics with respect to sexual violence perpetrated against women and adolescent females in squatter settlements. But since they are financially dependent on their sexual partners, some decide not to lay the charges. By law, according to Criminal Law (Sexual Offences and Related Matters) Amendment Act (32 of 2007) and the Children's Act (Act 38 of 2005), anyone sexually coercing a minor (a child below age 18) regardless of their concern should be arrested.

On the other hand, girls suffer silently when abused by relatives and parents, and prefer not to report the matter to the police. In Gauteng Province, Otwombe et al. (2015) confirmed that intoxicated uncles and adult males from their communities would touch adolescent girls sexually, without their consent. Relatedly, an alarming number of parents still shift the responsibility to the Life Orientation educators and South African government public schools in the townships, who do not have qualified educators (as yet) in the field of sexuality education to equip adolescent females to know where to seek help in case of sexual abuse (Kheswa 2017 b). Ironically, the South African Children's Act and Regulations (2014) makes it mandatory for all children who have had vaginal penetration to receive therapeutic care, forensic medical examination, provision of emergency contraceptives and HIV post-exposure prophylaxis (PEP) within 72 hours and trauma debriefing.

Ethnographically, it has come to the attention of the researcher that the informal settlements continue to expand, and through interaction with civilians, there are people who applied for the houses more than 20 years ago, but even today, they are still on the waiting list for the RDP houses. Proper housing being regarded as one of the social determinants of health and overall well-being (Weimann and Oni 2019), one can imagine the helplessness and misery experienced by single mothers, whose shacks are dilapidated and prone to floods. Based on the literature findings, speculations are that those delayed to get the low-cost housing (RDP houses) from the government, are likely to experience stress especially when their neighbours move into new homes made of bricks. In this regard, the chances of resorting to alcohol and drug abuse are higher, which, in turn, may account for worsening their health if they were/are on treatment for diabetes, blood pressure, TB or HIV. There are three possible dangers that might occur if they go out to be with other patrons at the taverns.

- (i) They might be drugged, raped after consuming large quantity of alcohol and be infected with HIV.
- (ii) With the current contagion, *coronavirus*, which spreads amongst humans by person-to-person transmission, they can

contract it upon touching the viral droplets or saliva of an individual who sneezed or coughed as cautioned by Wang et al. (2017).

- (iii) Their health conditions would deteriorate and lead to death since coronavirus attacks the lungs and there is no vaccine, to date.

Since people from impoverished background struggle to adhere and comply with HIV treatments (Gonzalez et al. 2011; Kheswa 2017c; Ogoina et al. (2012) noted that lack of appetite, fatigue, oral thrush, diarrhoea, would weaken their immune system. Moreover, Kaposi's sarcoma, a cancer of the blood vessels affecting the mouth, skin and lymph glands due to human herpes virus 8 (HHV8) infection, would impair their brain functioning. Finally, if they have children and leave them unmonitored, this could propel them to experiment with substance abuse and engage in risky sexual behaviour.

Finally, for those women and girls who became pregnant because of cohabitation or inter-generational relationships, might experience stigma and discrimination especially from religious community members. To support this assertion, in a study which, recruited women three to six days after delivery at Midwife Obstetrics Units in Gauteng, Mokhele et al. (2019) found that of the seventy-three percent of women diagnosed with HIV/AIDS, aged 18-35, 19.2 percent were from informal settlements. In this study, 15.2 percent had indicated major depressive disorders and stated that their babies' fathers would not be involved in the upbringing of the babies.

## CONCLUSION

The above review shows that women and girls living in informal settlements will continue to be victims of risk sexual behaviour because majority are unemployed and have no formal education. As a result, they have been found to be submissive and become pregnant. There is lack of sanitation in informal settlements and the girls' academic performance drops because during their menstrual periods, they stay at home for days.

## RECOMMENDATIONS

Realising that in informal settlements the legal guardians and/or parents still find it hard to



talk freely to their adolescent females about sexuality, the government should conduct workshops and hire youth developers to work with parents and youth in ensuring a sound knowledge on reproductive health. Furthermore, job creation and poverty eradication should be among the priorities of the government to empower women and girls with skills. To stop the spread of HIV/AIDS in the formal in settlements, mobile clinics and peer counsellors should be accessible to ensure that women and girls go for testing and once diagnosed HIV positive, they should be taught the importance of adherence. Finally, there should be streetlights in informal settlements and the government should deploy police to patrol at night and enforce law and order to the taverns' owners without licences.

### REFERENCES

- Basera TJ, Takuva S, Muloongo K, Tshuma N, Nyasulu PS 2016. Prevalence and risk factors for self-reported sexually transmitted infections among adults in the Diepsloot informal settlement, Johannesburg, South Africa. *J AIDS Clin Res*, 7(539): 1-5.
- Bello B, Moultrie H, Somji A, Chersich MF, Watts C, Delany-Moretlwe S 2017. Alcohol use and sexual risk behaviour among men and women in inner-city Johannesburg, South Africa. *BMC Public Health*, 17(3): 548.
- Brown-Luthango M, Reyes E, Gubevu M 2017. Informal settlement upgrading and safety: Experiences from Cape Town, South Africa. *Journal of Housing and the Built Environment*, 32(3): 471-493.
- Burns PA, Snow RC 2012. The built environment and the impact of neighborhood characteristics on youth sexual risk behavior in Cape Town, South Africa. *Health Place*, 18(5): 1088-1100.
- Charman AJE, Petersen LM, Piper L 2013. Enforced informalisation: The case of liquor retailers in South Africa. *Development Southern Africa*, 30(4-5): 586-593. <https://doi.org/10.1080/0376835X.2013.817306>
- Corburn J, Sverdlik A 2017. Slum upgrading and health equity. *International Journal of Environmental Research and Public Health*, 14(4): 342.
- Closson K, Hatcher A, Sikweyiya Y, Washington L, Mkhwanazi S, Jewkes R, Gibbs A 2020. Gender role conflict and sexual health and relationship practices amongst young men living in urban informal settlements in South Africa. *Culture, Health & Sexuality*, 22(1): 31-47.
- Connell RW 2005. Hegemonic masculinity: Rethinking the concept. *Gender & Society*, 19(6): 829-859.
- Daruwalla N, Machchhar U, Pantvaitya S, D'Souza V, Gram L, Copas A, Osrin D 2019. Community interventions to prevent violence against women and girls in informal settlements in Mumbai: The SNE-HA-TARA pragmatic cluster randomised controlled trial. *Trials*, 20(1): 743.
- Diedericks M, van Eeden ES 2019. Assessing the Eco-health and well-being of the Bekkersdal informal settlement in South Africa. *Journal of Public Administration*, 54(1): 130-149.
- Dosekun S 2013. Rape is a huge issue in this country: Discursive constructions of the rape crisis in South Africa. *Feminism & Psychology*, 23(4): 517-535.
- Drimie S, Faber M, Vearey J, Nunez L 2013. Dietary diversity of formal and informal residents in Johannesburg, South Africa. *BMC Public Health*, 13(1): 911.
- Emersson RM 1976. Social exchange theory. *Annual Review of Sociology*, 335-362.
- Fleming PJ, DiClemente RJ, Barrington C 2016. Masculinity and HIV: Dimensions of masculine norms that contribute to men's HIV-related sexual behaviors. *AIDS & Behaviour*, 20(4): 788-798.
- Garman EC, Cois A, Tomlinson M, Rotheram-Borus MJ, Lund C 2019. Course of perinatal depressive symptoms among South African women: Associations with child outcomes at 18 and 36 months. *Social Psychiatry and Psychiatric Epidemiology*, 1-13.
- Gibbs A 2016. Tackling gender inequalities and intimate partner violence in the response to HIV: Moving towards effective interventions in Southern and Eastern Africa. *African Journal of AIDS Research*, 15(2): 141-148. <https://doi.org/10.2989/16085906.2016.1204331> PMID: 27399043
- Gibbs A, Dunkle K, Washington L, Sikweyiya Y, Willan S, Shai N, Jewkes R 2020. Factors associated with young people's attendance at an IPV prevention intervention in informal settlements in South Africa: A prospective analysis. *Global Public Health*, 15(2): 161-172.
- Gibbs A, Dunkle K, Willan S, Jama-Shai N, Washington L, Jewkes R 2018. Are women's experiences of emotional and economic intimate partner violence associated with HIV-risk behaviour? A cross-sectional analysis of young women in informal settlements in South Africa. *AIDS Care*, 1-8.
- Gibbs A, Sikweyiya Y, Jewkes R 2014. 'Men value their dignity': Securing respect and identity construction in urban informal settlements in South Africa. *Global Health Action*, 7(1): 23676.
- Giorgio M, Townsend L, Zembe Y, Guttmacher S, Kapadia F, Cheyip M, Mathews C 2016. Social support, sexual violence, and transactional sex among female transnational migrants to South Africa. *American Journal of Public Health*, 106(6): 1123-1129.
- Golubchikov O, Badyina A 2012. *Sustainable Housing for Sustainable Cities: A Policy Framework for Developing Countries*. Nairobi, Kenya: UN-Habitat.
- Gonzalez JS, Batchelder AW, Psaros C, Safren SA 2011. Depression and HIV/AIDS treatment non-adherence: A review and meta-analysis. *Journal of Acquired Immune Deficiency Syndrome*, (2): 181-187.

- Gqola PD 2007. How the 'cult of femininity' and violent masculinities support endemic gender-based violence in contemporary South Africa. *African Identities*, 5(1): 111-124.
- Habitat for Humanity 2013. Gauteng:Orange Farm. From <Http://Www.Habitat.Org.Za/Index.Php? Pageid=79> (Retrieved on 6 August 2013).
- Harris JC, Little S 2019. Mapping hope: How do vulnerable youth locate hope in informal settlements? *Urban Forum*, 30(3): 289-306.
- Hillis S, Mercy J, Amobi A, Kress H 2016. Global prevalence of past-year violence against children: A systematic review and minimum estimates. *Pediatrics*, 137(3): 1-13.
- Holt C, Milgrom J, Gemmill AW 2017. Improving help-seeking for postnatal depression and anxiety: A cluster randomised controlled trial of motivational interviewing. *Archives of Women's Mental Health*, 1-11.
- Jewkes R, Gibbs A, Jama-Shai N, Willan S, Misselhorn A, Mushinga M, Washington L, Mbatha N, Skiweyiya Y 2014. Stepping Stones and Creating Futures intervention: Shortened interrupted time series evaluation of a behavioural and structural health promotion and violence prevention intervention for young people in informal settlements in Durban, South Africa. *BMC Public Health*, 14(1): 1325.
- Jewkes R, Morrell R, Sikweyiya Y, Dunkle K, Penn-Kekana L 2012. Transactional relationships and sex with a woman in prostitution: Prevalence and patterns in a representative sample of South African men. *BMC Public Health*, 12(1): 325.
- Johansson L, Hellström H 2018. *Is The Menstrual Cup Filled With Capabilities?: A Qualitative Case Study of a Menstrual Hygiene Program in the North West Province of South Africa with Focus on Female Students*. Bachelors Dissertation. Stockholm: Södertörn University.
- Kamusono JT 2018. *An Assessment of the Social Impacts of Water Pollution on Children in Informal Settlement: The Case of Kliptown Informal Settlement, Soweto, Johannesburg*. Doctoral Dissertation. Pretoria: University of South Africa.
- Kheswa JG 2017a. Investigation of transactional sex among adolescent females in Alice, Eastern Cape, South Africa. *Journal of Social Sciences*, 53(1): 20-26.
- Kheswa JG 2017b. The benefits of teaching sexuality and HIV/AIDS curricula in Psychology Foundation Module. A case study from one South African University Campus. *The Anthropologist*, 30(2): 139-146.
- Kheswa JG 2017c. Exploring the factors and effects of non-adherence to antiretroviral treatment by people living with HIV/AIDS. *Indo-Pacific Journal of Phenomenology*, 17(1): 1-11.
- Kovacic Z, Musango JK, Ambole LA, Buyana K, Smit S, Anditi C, Nsangi G 2019. Interrogating differences: A comparative analysis of Africa's informal settlements. *World Development*, 122: 614-627.
- Lobi T, Kheswa JG 2017. Exploring challenges of adolescent females in child-headed households in South Africa. *Journal of Human Ecology*, 58(1, 2): 98-107.
- Marais L, Cloete J, Denoon-Stevens S 2018. Informal settlements and mine development: Reflections from South Africa's periphery. *Journal of the Southern African Institute of Mining and Metallurgy*, 118(10): 1103-1111.
- McIlwaine C 2013. Urbanization and gender-based violence: Exploring the paradoxes in the global South. *Environment and Urbanization*, 25(1): 65-79.
- Meth P 2017. Informal housing, gender, crime and violence: The role of design in urban South Africa. *The British Journal of Criminology*, 57(2): 402-421.
- Mokoena M 2015. *Strategy for Developing an Ecological Sanitation System at the Barrage Informal Settlement*. Masters Dissertation. Vanderbijlpark: North West University.
- Motsomi K, Makanjee C, Basera T, Nyasulu P 2016. Factors affecting effective communication about sexual and reproductive health issues between parents and adolescents in Zandspruit informal settlement, Johannesburg, South Africa. *The Pan African Medical Journal*, 25: 1- 7.
- Musa CT 2014. *Perceptions of Informal Settlement Residents on Water Supply and Sanitation: The Case of Boiketlong in Emfuleni Local Municipality*. Doctoral Dissertation. Vanderbijlpark: North West University.
- Ndinda C, Ndhlovu TP 2016. Attitudes towards foreigners in informal settlements targeted for upgrading in South Africa: A gendered perspective. *Agenda*, 30(2): 131-146.
- Nelson Mandela Bay Municipality 2014. *Integrated Development Plan, 2011-2016*. 13<sup>th</sup> Edition, 2014/15 Financial Year. Port Elizabeth: Government Printer. <http://nelsonmandela.gov.za>
- Nkosi S, Rich EP, Morojele NK 2014. Alcohol use, sexual relationships power, and unprotected sex among patrons in bars and taverns in rural areas of North West Province, South Africa. *AIDS Behaviour*, 18(11): 2230-2239.
- Norman RE, Byambaa M, De R, Butchart A, Scott J, Vos T 2012. The long-term health consequences of child physical abuse, emotional abuse, and neglect: A systematic review and meta-analysis. *PLoS Med*, 9(11): 1-31. <https://doi.org/10.1371/journal.pmed.1001349>
- Ogoina D, Onyemelukwe G, Musa BOP, Babadoko 2012. Seroprevalence and determinants of human herpes virus 8 infection in adult Nigerians with and without HIV-1 infection. *African Health Sciences*, 11(2): 158-162.
- Otwombe KN, Dietrich J, Sikkema KJ, Coetzee J, Hopkins KL, Laher F, Gray GE 2015. Exposure to and experiences of violence among adolescents in lower socio-economic groups in Johannesburg, South Africa. *BMC Public Health*, 15(1): 450.
- Parliament of South Africa. *National Environmental Management Act, Act No 107, 1998, No. 19519 (1998)*. Cape Town, South Africa: South African Parliament.
- Rehm J, Shield KD, Joharchi N, Shuper PA 2012. Alcohol consumption and the intention to engage in unprotected sex: Systematic review and meta-anal-

- ysis of experimental studies. *Addiction*, 107(1): 51–59.
- Sharer M, Cluver L, Shields J 2015. Mental health of youth orphaned due to AIDS in South Africa: Biological and supportive links to caregivers. *Vulnerable Children and Youth Studies*, 10(2): 141–152.
- Smit S, Musango JK, Brent AC 2019. Understanding electricity legitimacy dynamics in an urban informal settlement in South Africa: A community based system dynamics approach. *Energy for Sustainable Development*, 49: 39–52.
- Steenkamp L, Venter D, Walsh C, Dana P 2014. Socio-economic and demographic factors related to HIV status in urban informal settlements in the Eastern Cape, South Africa. *African Journal of AIDS Research*, 13(3): 271–279.
- Stoebenau K, Heise L, Wamoyi J, Bobrova N 2016. Revisiting the understanding of “transactional sex” in sub-Saharan Africa: A review and synthesis of the literature. *Social Science & Medicine*, 168: 186–197.
- Tenkorang EY, Maticka-Tyndale E, Rajulton F 2011. A multi-level analysis of risk perception, poverty and sexual risk-taking among young people in Cape Town, South Africa. 17(2): 525–535.
- United Nations Human Settlements Programme 2003. *The Challenge of Slums: Global Report on Human Settlements, 2003*. UN-HABITAT.
- Verreault N, Da Costa D, Marchand A, Ireland K, Dritsa M, Khalife S 2014. Rates and risk factors associated with depressive symptoms during pregnancy and with postpartum onset. *Journal of Psychosomatic Obstetrics & Gynecology*, 35(3): 84–91.
- Walker M, Mkwanzani F 2015. Challenges in accessing higher education: A case study of marginalised young people in one South African informal settlement. *International Journal of Educational Development*, 40: 40–49.
- Wang K, Tomaras GD, Jegaskanda S, Moody MA, Liao HX, Goodman KN, Kaewkungwal J 2017. Monoclonal antibodies, derived from humans vaccinated with the RV144 HIV vaccine containing the HVEM binding domain of herpes simplex virus (HSV) glycoprotein D, neutralize HSV infection, mediate antibody-dependent cellular cytotoxicity, and protect mice from ocular challenge with HSV-1. *Journal of Virology*, 91(19): e00411–417.
- Weimann A, Oni T 2019. A systematised review of the health impact of urban informal settlements and implications for upgrading interventions in South Africa, a rapidly urbanising middle-income country. *International Journal of Environmental Research and Public Health*, 16(19): 3608.
- Willan S, Ntini N, Gibbs A, Jewkes R 2019. Exploring young women's constructions of love and strategies to navigate violent relationships in South African informal settlements. *Culture, Health & Sexuality*, 1–15.
- Wilson E, Reeve J, Pitt A 2014. Education Period: Developing an acceptable and replicable menstrual hygiene intervention. *Development in Practice*, 24(1): 63–80.
- Winter S, Obara LM, McMahon S 2020. Intimate partner violence: A key correlate of women's physical and mental health in informal settlements in Nairobi, Kenya. *Plus ONE*, 15(4): 1–18. e0230894. <https://doi.org/10.1371/journal.pone.0230894>.
- World Health Organization 2016. *Global Report on Urban Health: Equitable, Healthier Cities for Sustainable Development*. World Health Organization, Geneva, Switzerland.

**Paper received for publication in February, 2020**  
**Paper accepted for publication in April, 2020**