Perceptions and attitudes of rural women of Matebeleng village - Limpopo Province towards cervical cancer: risk factors, screening tests and the HPV vaccines

By

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DECLARATION

I, Kwakwa Motshidisi Mabel, declare that this study titled: “Perceptions and attitudes of rural women of Matebeleng village - Limpopo Province towards cervical cancer: risk factors, screening tests and the HPV vaccine” is my own work and that all the sources that I have used and quoted have been acknowledged by means of complete references.

Motshidisi Mabel Kwakwa

Date
DEDICATIONS

This study is dedicated to my late grandmothers, Asinah Mabel Mabe and Winnifred Motshwanetse Rakumakoe who succumbed to this pandemic and provided me with the opportunity to raise awareness.
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ABSTRACT

Cancer of the cervix is second type of cancer among women in developing countries, and a common problem among women of low socio-economic status in rural communities. The spiral increase of the problem is aggravated by some socio-economic, structural, cultural and political factors. Understanding the risk factors associated with the disease is a step forward towards effective prevention and treatment. Numerous studies have been conducted on knowledge and perceptions of cervical cancer however the information on cervical cancer is still not reaching the majority of women.

The study explored the perceptions and attitudes of rural women of Matebeleng village towards cervical cancer, the risk factors, screening tests and the HPV vaccines. A qualitative exploratory case study was conducted. Self-reported data was collected from 22 women. Two focus groups of 7 and 9 and 6 face-face individual interviews were conducted using a semi-structured interview guide. Data was analysed thematically.

The research findings revealed that the majority of women in the rural area where the study was conducted never heard of cervical cancer and only few received inadequate information. Few highlighted some of the risk factors but some information was incorrect. Very few participants had only once been screened and the majority have never been tested for cervical cancer. Some became aware of the vaccine through the consent forms from school even though they did not exactly understand the content. The sources of information were the radio, health clinic and random women. The concerns of those who were screened were lack of feedback from the clinic nursing staff after the test, lack of adequate preparation and information before been screened to allay fear and doubt of the unknown and lack of reach out programmes to rural communities. The methods of disseminating information to rural women in their distinct contexts should be examined. Conventional traditional ways of reaching out to rural women could perhaps produce improved results through the integrated approach involving multi-disciplinary teams in educating communities.

Key Words: Perceptions, attitudes, rural-based women, cervical cancer, risk factors, screening tests, HPV vaccine
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CHAPTER 1
GENERAL ORIENTATION OF THE STUDY

1.1 Introduction

Cervical Cancer remains the second common type of cancer among women worldwide and the most common cancer among black African women in South Africa (Kamangar et al., 2006; Ferlay et al., 2010; Jemal et al., 2011). Another study by Parkin and Bray (2006) also confirmed that cervical cancer is the second most common female cancer worldwide, and the most common cancer among women in many less developed countries without adequate access to quality screening programmes. Annually, there are 500 000 cases of Cervical Cancer worldwide of which mortality is about 50% (Moodley, 2009). In South Africa alone 7,700 women are diagnosed with cervical cancer yearly and more than half will ultimately die of this disease (Richter, 2015), supported by Denny (2015) citing 6742 infections yearly and 3681 deaths in South Africa.

Oncogenic human papillomavirus (HPV) is a necessary cause of invasive cervical cancer (ICC) (Bosch, et al., 2002; Walboomers, et al., 1999), with HPV types 16 and 18 being attributable causes in 70% of all cases (Smith et al, 2007). Deaths due to cervical cancer have been seen to outnumber the maternal deaths resulting in affecting not the health of women only but also their children, families, and their communities as a whole (Hoque et al, 2008; Sitas et al., 1998). It is most often diagnosed in middle-aged women, with half of those diagnosed between the ages of 35 and 55 years. It is rarely seen in women less than 20 years of age (WHO, 2014).

Cervical cancer is the most common cancer in South African women and is one of the few cancers, perhaps the only one, where screening can identify pre-cancerous lesions, and where an association between screening and mortality decline has been demonstrated (Miller, 1992; Baron et al., 2010). It was only in 2008 that the South African government adopted a national policy on organised cervical screening in order to offer all asymptomatic women aged 30 years and older three (3) free cervical smears in a lifetime, ten years apart and it is still the case to date (Fonn, 1997). The researcher’s concern is that women who are fifty and above have only
one chance of being screened excluding those who can afford private consultation. While the cost effectiveness of cervical cancer screening has been demonstrated there has nonetheless been debate about whether South African health care services are sufficiently developed to be able to sustain cervical cancer screening (Fonn et al., 1993; McCoy & Barron 1996; Hoffman, 1996; Fonn, 1997; Bloch et al., 1997).

The study’s view is that the South African society would have expected a much more rigorous approach and extensive media coverage on education about cervical cancer especially after the launching of the roll out vaccination to prevent HPV infection in primary schools in all the nine provinces. Moodley (2009:12) asserts that “in reality most patients in developing countries present in advanced stages of cervical cancer when the symptoms of abnormal vaginal bleeding or an offensive discharge become a personal and social problem”.

1.2 Operational Definition of Concepts

1.2.1 Perceptions – This refers to (cognition) that which is detected by the five senses; not necessarily understood; also that which detected within consciousness as a thought, intuition, deduction etc. (Boundless sociology, 2015). This study aligns itself to the following concepts as perception (impression, knowledge, awareness, feelings, insight, opinion, conception, and notion).

1.2.2 Cervical Cancer – This concept refers to cancer on the entrance to the womb (uterus). The cervix is the lower narrow part of the uterus (womb). The uterus, is a hollow pear shaped organ located in the woman’s lower abdomen, between the bladder and the rectum (Martin, 2015). For the purpose of this study, this definition is adopted.

1.2.3 Attitude(s) – An attitude is an everyday judgement, a normative view on a specific matter. They are prescriptive evaluations about what is good or bad, right or wrong and they are formed and manifested through beliefs, feelings and behaviour (Voas, 2014). This definition is adopted as is, for the purpose of this study.
1.2.4 Screening Tests – (Previously known as a smear test/ Pap smear) is a method of detecting abnormal cells on the cervix (Martin, 2015). For the purpose of this study the term papanicolaou will also be used interchangeably with Pap smear.

1.2.5 Rural-based Women – This concept refers to adult females occupying a geographic area with minimal or no infrastructure such as health care facilities, efficient transport, running water, properly constructed roads, proper sanitation, and electricity.

1.3 Background to the Problem
Knowledge of the following risk factors is mentioned as primary prevention strategies to encourage and support women in making positive lifestyle choices and creating environments that will help them in making those healthy choices: Diet and obesity, parity, smoking and oral contraceptives (Garcia-Closas et al., 2005). Infection with certain sexually transmitted infections (STIs) namely; high-risk HPV types 16 and 18, Chlamydia trachomatis, herpes simplex virus (warts), multiple sexual partners, smoking, certain cultural practices, political and socio-economic factors like poverty, early sexual activity, high parity and poor hygiene (Lyimo & Beran, 2011; Maree & Moitse, 2014; S.A. National Department of Health 2000). People with a weaker immune system are at a greater risk of HPV infections due to HIV/AIDS status or immune suppressing drugs after organ transplant (Janicek & Averette, 2001).

These risk factors have been found to increase the chance of women to develop cervical cancer. S.A. National Department of Health (2000) found out that not only age at first intercourse is a risk but also the number of sexual partners, frequency of intercourse and the sexual habits of the victims’ partners or husbands. Saslow et al. (2012) noted that women who were younger than seventeen years when they first conceived their first full term pregnancy were almost twice more likely to get cervical cancer (CC) in life than women who became pregnant at twenty-five years and more.

They further established that the number of sexual partners is a definite risk and that there is a linear relationship between the number of partners a woman has had and the likelihood of her developing cervical changes. He further cited sexually transmitted factors, that certain strains of papilloma or wart virus have been
implicated in causing this cancer. Janicek and Averette (2001) described Human Papilloma Virus (HPV) as a group of more than 150 related viruses with different strains, some of which cause type of growths called papillomas which are more commonly known as warts. The disease spreads from one person to another during skin-to-skin contact through sex, including vaginal, anal and even oral sex.

Saslow et al. (2012) continue to state that women who have had three or more full term pregnancies have an increased risk of developing cervical cancer attributing that to hormonal changes and weaker immune systems as possibly making women more susceptible to HPV infection. The society also cites the long term use of Oral Contraceptives (OC) as increasing the risk of cancer of the cervix. The risk goes up with longer uptake and decreases if the OCs are stopped. The society further states that women who smoke tobacco are twice likely to get cervical cancer than non-smokers. Tobacco by-products have also been found in the mucus of women who smoke, which are believed to damage the DNA of cervix cells and makes the immune system less effective in fighting HPV infections.

Diet and obesity have also been cited as risks, though data supporting this factors is limited. Only three studies concluded that low intake of vegetables and marginally low intake of fruits and juices were associated with HPV persistence. Increased risk is associated with low socio-economic status attributed to lack of screening, failure to treat pre-cancerous conditions and a lack of knowledge about HPV prevention (Garcia-Closas et al., 2005).

All the above factors are a common prevalence in South African communities at large, rural communities being the mostly affected due to lack of basic resources and vital information about general health care. The study’s concern is that it is most likely that women in Matebeleng community are not aware of these risk factors and their association with cervical cancer, let alone the knowledge of the cancer itself. The statistics mentioned under background information, highlight the high mortality rates due to this disease, as proof that little is known about cancer of the cervix whereas efforts to eradicate this disease are still not adequate. Access to basic services in Matebeleng rural village is a challenge because even the mobile clinic service is very irregular and erratic. The question is: does the mobile clinic provide
screening services whenever it is available? Do they disseminate information on cervical cancer during these visits?

1.4 The Rationale of the Study
Cervical cancer is a preventable disease. Numerous studies (Ali et al., 2012; Denny, 2010; Jemal et al., 2011 & Moodley, 2009) on knowledge and awareness continue to report high numbers of women especially in rural contexts who still lack information about this disease. Recommendations have been suggested and some implemented by Denny (2010); Denny (2015); Hoque et al. (2008); Moodley (2009) and Schneider (2004), but the number of women infected with cervical cancer continue to escalate more in developing countries like South Africa. This is an indication that information might not be reaching those it is intended for. The researcher’s opinion and concern is the manner in which information is displayed and disseminated. Her personal experience was the observation of how information on cervical cancer was poorly displayed in local clinics compared to other diseases. It was often on a faint A4 sheet obscured by large colorful posters of other diseases and always in English. In addition, a large cohort of studies focused on women visiting health care facilities. It therefore means, women who cannot access these facilities due to socio-economic and political factors are left out. The use of African languages and material that is user-friendly to the low literacy rural populations is a necessity.

1.5 Theoretical Framework
There are numerous theories that can be used to explain and understand how people act and respond towards health issues (health behaviour). The social cognitive theory, trans-theoretical model, the health belief model and the theory of planned behaviour are some. This study will use the Health Belief Model, and Feminism and patriarchy for that comprehension. Cervical cancer is a women disease and South Africa is pre-dominantly patriarchal (Essof, 2012). This factor influences decisions towards prevention and treatment of cervical cancer as will be demonstrated by the theory of feminism and patriarchy below.
1.5.1 The Health Belief Model

The Health Belief Model tries to predict public attitudes and actions around health behaviors. It seeks to understand general failure of individuals to accept preventive measures against diseases or screening tests so that symptoms could be detected earlier (Glanz, Rimer & Lewis, 2002).

It is one of the first theories of health behaviour based on the understanding that a person will take a health-related action (i.e., go for screening), if s/he feels that a negative health condition (In this case, HPV and CC) can be avoided. It is a framework for motivating people to take positive health actions that uses the desire to avoid negative health results as the main motivation (Janz & Becker, 1984; Rosenstock, Stretcher & Becker, 1988).

![Figure 1: The Health Belief Model Flow (Source Glanz, Rimer & Lewis, 2002)](image)

This model operates from the six constructs:

**Susceptibility**: This is the individual’s opinion of his/her chances of getting the condition and this is influenced by factors such as age, gender, personality, ethnicity, socio-economic and educational factors. In this study, cervical cancer is a women disease and prone to women from age 30 to 55, aggravated by socio-economic and
educational circumstances, also by risky sexual behaviour as indicated earlier in the text (Glanz et al, 2002).

**Seriousness/Severity:** The person’s view of how serious the condition is and its consequences (impact on them). This is usually influenced by pain, its duration and whether it might result in death or disability. Cervical cancer often presents with symptoms such as pain and the offensive odour at an advanced stage, when treatment might not save the patient from dying (Schneider, 2004).

**Benefits:** This is one’s belief of how efficient is the advised action in reducing the risk or seriousness of the condition. According to the researcher, this will also be informed by knowledge and awareness of the condition and its negative impact on the individual’s health (Glanz et al, 2002; Garcés 2006).

**Barriers:** This is the individual’s perception of impediments they would encounter in taking the proposed action including psychological, physical and financial barriers. In the researcher’s opinion this may refer to fear of the unknown, doubt, distance to be travelled, physical well-being, access to transport and financial implications (Glanz et al., 2002).

**Cues to action/ Health motivation:** Prompts/strategies to activate a person into a state of readiness to take action. This may refer to health talks/education through various channels to sensitise the target population (Glanz et al., 2002).

**Self-Efficacy:** This was added in 1988 to the original four beliefs of the HBM (Rosenstock et al., 1988). It refers to the person’s confidence in her ability to take the given action. If for some reason an individual believe she cannot, she will not take the action irrespective of whether the action is absolutely necessary or worthwhile. This may also be perpetuated by fatalistic attitudes and beliefs towards cervical cancer in South African context (the belief that events are decided in advance by some supernatural power often interpreted as a curse) and thus the notion that “nothing could be done” (Mosavel et al., 2009).
In this study, after exploring the women’s level of knowledge and awareness, appropriate educational information on prevention strategies, risk factors and consequences for not taking action will then be provided. They will be encouraged and supported to go for testing for HPV regularly, avoiding health risk lifestyle factors such as smoking, unhealthy diet and practicing unsafe sex and thus allowing and taking their girl children for vaccination against HPV infection. The education will also have to address prioritising or weighing an individual’s value to life against impediments.

Garcés (2006) indicates the significance of taking into account the cognitive, emotional and environmental aspects that might influence the decision of these women to take part in the screening programmes which the health belief model tend to neglect, further stating that behaviour is not wholly due to beliefs and attitudes. The researcher consents with the above however believes the model provides a good basis for the practitioners to understand health behaviour and attitudes.

1.5.2 Feminism and patriarchy

The researcher believes women issues are often not highly prioritized because of the patriarchal system which views women as subordinate to men. Women are not represented and are excluded in policy decision making processes in most developing countries including South Africa, “The interests of men and women are different and even conflicting and therefore women are needed in representative institutions to articulate the interests of women” (Lasslop, 2007: 9). Feminism is a theory attempting to give a voice to women and sensitizing the role players mainly men, of women struggles and experiences and the significance of creating a space for them in the country’s governance (Tickner, 2014).

There are different types of feminist theory including liberal, Marxist, socialist, post-colonial and post-structural, however all aim and are dedicated to achieving political, social, cultural and economic equality for women and pointing out other forms of domination of women and their social relations by patriarchy (Payne, 2005; Tickner, 2014). The researcher aligns her ideology with liberal, radical and post-liberal feminism.
• Liberal feminism
Liberal feminists’ position is that there is no essential relationship between sex/biology and gender. They advocate for women to be accorded the same positively valued male roles and experiences which are associated with good health (Annandale & Clark, 1996). It further identifies women’s in institutions and practices of global politics and how their absence or presence affect or is affected by international policy-making (Tickner, 2014).

• Radical feminism
The radical focusses on patriarchy and argue that there is a strong connection between sex and gender however, accentuating and valuing those distinctive female traits rather than the male body thereby undermining patriarchal entitlement (Annandale & Clark, 1996).

• Post liberal feminism
The emphasis is that, gender inequality continue to exist in societies where it is formally and legally abolished, this highlights the challenges of policy making versus implementation. Post liberal/structuralism feminists are more concerned with the relationship between knowledge and power which has been accorded and based on men’s lives experiences at the expense of women (Tickner, 2014).

Patriarchy on the other hand is defined by Payne (2005:251) as “a system of thought and social relations that privileges and empowers man, and creates relationships between the genders that disfranchise, disempower and devalue women’s experience”.

This study conceives that South Africa is still largely patriarchal. It took years before the government recognized the need for rigorous health care system towards women’s health issues and it is somehow still not reaching most of the remote communities of South Africa. Too many black women are struggling without basic services in addition to the failing health care system that does not prioritise sexual and reproductive health needs (Essof, 2012). All feminisms have a fundamental common understanding that patriarchy accentuates the male body as the ‘standard’
and attaches various valued characteristics like good health, mastery and being strong but views women’s bodies as sources of danger, destruction and contamination and threatening to the moral order of society. Patriarchy further associates deficiencies of the female body with their reproductive capacity thus viewing biological sex and social gender as one. The medical discourse is being fingered as the dominating literature that provided the basis for much of the cultural construction of feminity (Annandale & Clark, 1996; Bush, 2000).

Oakley (1998:137) asserts “This demonstrates the existence of practical problems faced by millions of women every day with cultural construction of womanhood through the discourses of medical science”, further arguing that representation of women and their material position as connected to their health by culture is problematic and accuses the health care system as a source of discrimination against women, believing that medical science has put a women’s body under scrutiny and women are labelled as the risk group. Women are main participants in mass screening programmes and become major targets of medical surveillance and in the areas of prevention and child birth, they are subject to various medical and surgical interventions contrary to men. She calls for a matching practical feminism that will deliberate effectively on women’s bodies, minds and lives challenging what is considered scientific knowledge.

The case of cervical cancer screening came under scrutiny here. Oakley (1998) and Murphy (2015) argue that these programmes have undertones of capitalism and exploitation of women, in the process to the benefit of the medical profession dominated by men. Oakley views this processes as unnecessary over-diagnosing, and states that most of the medicalization of women’s health is unjustifiable in terms of scientific evidence about effectiveness and safety and further explains that the balance between risks and benefits is uncertain. Murphy, concentrated on the disparities of the resources between the developed and developing communities in terms of access and inaccessibility to these screening services and the cultural connotations and experiences attached to the entire process such that the feminist health practitioners included pap smear into their practices in an attempt to demystify the technique and remove the connotation of pathology on cervical differences.
However, Murphy (2015), continued to critically view the feminist engagement with the pap and cervical cancer in the politics of care in the US, calling for the feminist science studies to take a critical position and challenge the exercise of power operating through care in many different ways. The concern is how care is still entrenched in the patterns of racism, class, privilege and colonialism to promote capitalism at the expense of women health. The feminist science studies invented practices, manuals and guidelines of female self-help cervical screening at the end of the 20th century during the emergence of forms postcolonial empire. It was some form of lay science to create less oppressive medical experiences that views women bodies as deficient with pathologies.

This group of feminist practitioners aspired to create a liberated form of health care that could provide an alternative to increased violence of population control, the criminalisation of abortion, the sexism of everyday medical practice and the controlling patriarchal moralism around fertility, sex, and sexuality widely. Their mission was to give a positive construct of the genitalia, sexual and reproductive processes and bodily variation to do away with feelings of shame, squeamishness, stigma and shyness among lay people. These sharing of practice knowledge with lay women, challenged the patriarchal and increasingly profit-driven medical profession dominated by males (Murphy, 2015).

Echoing similar concerns, Bush (2000) discusses the discourses entangled within the cervical cancer screening programme that promote the deepening and widening of the length of women reliance on the medical profession. He referred to the call and recall programme that was introduced in the late 1980s by the British National Health in contract with the general practitioners. This move was criticised for what was termed ‘reverse targeting’ as it focused only on women who were already entered into the system because they were once tested for cervical cancer. This translated into focus being mainly on white, middle class and educated women who could afford private care leaving out the older and working class women, and those of ethnic minority who were not in the system.

This was later revised in an attempt to include all groups, however the new system was also viewed as a strategy to put pressure on women to comply, failing which,
they were categorised and labelled as deviant non-attenders who threatened the success of the cervical cancer screening programme and further instilling fear of being at risk to develop cervical cancer (Bush, 2000, citing Mhill, 1994). A further argument was that HPV is sexually transmitted but there are no national screening programmes for male genitalia or lung and bowel cancer which affects both groups largely, but males are generally excluded from surveillance of their sexuality. Therefore, creating arguments that cervical cancer discourses encourage and fuel gender inequalities by minimising men’s responsibility in sexual and reproductive health issues (Oakley, 1998; Bush 2000).

The report of the Expert group meeting, which comprised of the United Nations Division for the Advancement of Women (DAW), Department of Economic and Social Affairs (DESA), Economic Commission For Africa (ECA) and Inter-Parliamentary Union (IPU) gave an account on the Commission on the Status of Women (CSW) of which South Africa is part of, and how it examined the connection between women’s presence in decision-making processes and their impact on the mainstreaming of gender perspective into policies and programmes i.e., gender-sensitive institutional policies, programmes and mechanisms (Lasslop, 2007).

The report further explains that CSW is the principal global intergovernmental body exclusively dedicated to the promotion of gender equality and the empowerment of women. The report cited gaps and strategies to ensure that women have full equal access and participation in power structures and increase their numbers in leadership and decision-making processes at all levels. It emphasises the importance for women to drive and generate the political will to seriously commit to the promotion and advancement of women and goals of gender equality through awareness campaigns. These were informed by the priority theme of 2014 from the 54th session of the CSW.

Kabira et al. (1997); Gerardo and Heath (2010) agree that most African societies are patriarchal in nature and women’s health issues have traditionally been ignored under this system. Kabira et al. (1997) further state that in African tradition, the role of nurturing and ensuring the health of families and the community as a whole has been allocated to women as early as age six, and the status of the health sector has
received less attention due to this attachment because of the low status of women in society. The authors argue that the irony is of entrusting women with the responsibility of health and yet deny them the opportunities to influence policies, and this remain a large obstacle and that the third world countries never addressed the question of women’s participation in influencing national policies, they were marginalised into maintenance roles without power, authority and resources to ensure their health and that of the nation.

Gerardo and Heath (2010) continue to assert that women’s health concerns continue to be dissipated by the medical community through negligence, sexism and plain inertia because of the absence of women in decision-making roles that affect women’s health and well-being and that the medical fraternity is dominated by men in hospitals, pharmaceutical companies and physicians’ specialty groups. They believe women should continue to fight for equal status in health care concerns even in the face of the male dominance, compounded by the inequality rooted at cultural level and these, continue to make the struggle unavoidable.

The feminist perspective argues that research should be committed towards the empowerment of women and changing social inequality. It should represent human diversity including the marginalised voices, and recognise differences between women and men. Research should acknowledge and highlight the power and position of the researcher and the researched identifying numerous subjective and partial truths, and lastly that research is always politically motivated (O’Leary, 2014).

Despite this concerns, this study believes women should be encouraged to test and yes, have adequate information and awareness so that they can make informed decision whether to test or not. An indisputable factor is that, late presentation results often in loss of life.

1.6. Problem statement
The researcher believes that knowledge and awareness of risk factors by women in developing countries especially in remote rural communities, is a crucial departing point in fighting cervical cancer. This will inform their susceptibility and therefore
encourage them to take precautions. The question is, are the women aware and know about these risk factors?

Kent (2009:141) found out that “screening tests show that the seriousness of cervical cancer is recognised and the success of screening programmes is acknowledged and the impact of the disease has decreased”. However, despite being a preventable disease, cancer of the cervix is still the second most common cancer in women worldwide. Furthermore, Menon (2011) argues that prevention of cervical cancer in areas that is highly prevalent, like in developing countries is the result of inadequate national health care infra-structure that cannot establish or sustain comprehensive screening programmes. She further states “the gap is not a technological one but it is a gap of political will and resource management, cervical cancer needs more attention and more funding”. The screening policy has not been widely implemented and the majority of South African women are not screened at all (Snyman & Herbst, 2013:16).

1.6.1 Aim and Objectives of the Study

1.6.2 Aim

The aim of the study was to explore the perceptions and attitudes of rural women of Matebeleng towards cervical cancer: its risk factors, screening tests and the vaccines.

1.6.3 Objectives of the study

These were:

- To assess whether rural women understand the risk factors associated with cervical cancer including HPV (virus causing cc) and that it is contracted through sexual practices (oral, vaginal and anal).
- To determine whether low socio-economic status amongst rural women contribute towards the development of cervical cancer.
- To find out rural women’s awareness of available cervical cancer screening tests and HPV vaccine.
- To investigate women’s awareness of government out-reach programmes on cervical cancer.
1.7 Methodology

O’Leary (2014) explains that understanding methodologies in research requires a distinction of three interrelated concepts, namely methodology, methods and tools which will inform the plan or design to conduct the research project whereas, Babbie and Mouton (2001:49) use the terms methodological approaches and methodological paradigms interchangeably referring to “the actual methods and techniques that social researchers use, as well as the underlying principles and assumptions regarding their use.

O’Leary (2014:15) further defines methodology as the “overarching macro-level frameworks that offer principles of reasoning associated with a particular paradigmatic assumption that legitimate various schools of research”. She further conceives methods as micro-level techniques researchers use to collect and analyse data such as interviewing, surveying, observation and unobtrusive methods and tools as those devices used to collect research data namely, questionnaires, observation checklists and interviewing schedules.

This section of the study explains the design, data collection methods and data analysis procedures. This was a qualitative study. Babbie and Mouton (2001) posits that qualitative research seeks to understand the attitudes and behaviour of actors within their natural environments as opposed to artificial settings like laboratories used in quantitative studies. The environment enables the researcher to observe elements not spoken about that may have an impact in the attitudes and behavior of participants and that in this approach presentation of data is non-numerical.

1.7.1 Research design

This was an exploratory small scale case study with a small homogenous population of 22 women from a small remote village of Matebeleng, an eyesore about 30km south of Polokwane in Limpopo Province. Research is usually conducted for three purposes, to explore, describe and explain phenomenon (Babbie, 2007). Exploratory research therefore seeks to fulfill the researcher’s quest to understand a particular phenomenon in-depth by testing whether it is feasible for an extensive study and
develop new methods to employ in the study or explicate the main theories and concepts to set priorities for future research (Babbie & Mouton, 2001).

This village represents a grim picture of poverty as described by Masombuka (2014), with only about 47 households. Flick (2014) explains that the aim of case studies is the exact description or reconstruction of cases and processes under analysis and that sampling is purposive such that full in-depth needed information is collected from relevant sources. Babbie and Mouton (2010: 280) further state “to understand and interpret case studies, the researchers describe the context in detail”. The Malaysian small scale case studies by Domingo et al. (2008) with very few women, for global health on cervical cancer reveal the significance and contribution of in depth information provided by case studies worldwide especially in low-resourced areas.

1.7.2 Population and sampling technique
The study population comprised of a small sample which may not necessarily be representative of other populations. Gray (2009) explains population as the totality of people, organisations, objects or events from which a sample is drawn. A homogeneous group of rural women, ranging from 35-55 years within the same community with the assistance of the influential active woman in the village identified by the personnel of the only combined school in that community. The participants were selected using a non-probability sampling method, namely, purposive or judgmental sampling based on the researcher’s judgement and motivated by the purpose of the study (Babbie & Mouton, 2001) in that, respondents had certain characteristics in common such as illiteracy, rural-based, low socio-economic status, and unemployment to suit the selection criteria.

O’Leary (2014) refers to this sampling method as non-random, namely, hand-picked sampling because respondents are selected according to their suitability to meet a particular criterion such as typicality, expertise or wide variance. In this study the process of selecting respondents was deliberate based on their ability to provide needed information (Royse, 2007:202; Struwig & Stead, 2013:89).
1.7.3 Sample size
The sample, which is the sub-set of the larger population to be analysed (Babbie & Mouton: 2001:166) could not be determined beforehand because the invitation was done indirectly. A total of twenty-two (22) women were interviewed, two focus groups of seven (7) and nine (9) at one of the participants’ home and six individual interviews during the mobile clinic visit just outside the school premises as per invitation.

1.7.4 Data collection methods
The researcher used two techniques of data collection, namely face-to-face personal interviews and the focus groups. The use of open-ended and flexible questions allows interviews to provide rich detailed and in-depth information, development of rapport and trust, verbal and non-verbal data and are structured well to generate standardised, quantifiable data (Flick, 2014; O'Leary 2014). There is a high prevalence of illiteracy in Matebeleng village, therefore a written questionnaire was not a relevant tool of data collection. The interviews were conducted in the participants’ local language, which is Northern Sotho.

A semi-structured interview guide was used (Annexure A). This is a data collection tool with a flexible structure of questions not predetermined in a particular order. It can have a defined questioning plan but allows a shift in order to follow the natural free flow of conversation resulting in emergence of more interesting and unexpected valuable data (O'Leary, 2014). Since the topic related to issues of sexuality and it is largely viewed as sensitive and private, the physical presence of the interviewer combined with a safe environment such as a home had a positive effect on promoting the accuracy of the data obtained. The interview process benefited from the fact that the interviewer and the assistant were of the same gender with the interviewees, a gesture that was hoped to enhance their liberty to express themselves freely (Struwig & Stead, 2013). The researcher investigated different perspectives, knowledge, and understanding of cervical cancer, its screening tests and the HPV vaccine from a group of women within a common rural context. An audio recorder and note books (field notes) were used to record all interview proceedings with the assistance of a moderator.
1.7.5 Data analysis
Qualitative data has been analysed through thematic content analysis technique. The raw data from interview transcripts, field notes and recordings was coded and themes were developed so that meanings can be interpreted and conclusions made. These included knowledge and perceptions. According to O’Leary (2014:300), “the process of reflective qualitative analysis requires researchers to, a) organise their own raw data, b) enter and code that data; c) search for meanings through thematic analysis; d) interpret meaning; and e) draw conclusions.” The constant comparative coding method was also utilised which is merely the manual coding of themes for an audit trail. An audit trail according to Lincoln and Guba cited in Struwig and Stead (2013:181) “allows your co-researchers and, at a later date, researchers to check the process you used to arrive at your findings and conclusions.”

1.8 Quality Criteria/Trustworthiness
Lincoln and Guba’s model as cited in Morse and Field (1995:143) addresses four aspects of trustworthiness: truth value, applicability, consistency and neutrality. They use the terms credibility, transferability, dependability and conformability to establish trustworthiness (Creswell, 1998: 197).

Table 1: Standards, strategies and applied criteria to ensure trustworthiness

<table>
<thead>
<tr>
<th>Epistemological standards</th>
<th>Strategies</th>
<th>Application</th>
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<tbody>
<tr>
<td>Truth Value</td>
<td>Credibility</td>
<td>Credibility is related to internal validity. In qualitative research one recognises multiple realities, hence the researcher must report the perspectives of the informants very clearly as possible. In the study, the researcher ensured credibility through prolonged engagement, member checking and recordings of direct verbal quotes (Morse &amp; Field, 1995:143).</td>
</tr>
<tr>
<td>Consistency</td>
<td>Dependability</td>
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<td></td>
<td>The emphasis with consistency is whether the findings will be consistent if the study was replicated with the same participants and in the same context. Dependability and consistency are established through an auditing of the research process. The researcher in</td>
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this case study has an audit trail in place, namely field
notes, audio records, involved the moderator and
manually recorded data. (Creswell 1998; Morse &
Field, 1995).

<table>
<thead>
<tr>
<th>Applicability</th>
<th>Transferability</th>
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| Applicability and transferability refer the degree to
which findings can be generalised to the larger
population and how the detailed description of the
participants and their setting enables readers to
transfer information to other settings because of
shared characteristics (Creswell, 1998: 203; Morse &
Field, 1995: 143). A detailed description of participants
and their context has been outlined to determine
transferability. This was possible due to the small
sample size. |

<table>
<thead>
<tr>
<th>Neutrality</th>
<th>Conformability</th>
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| Neutrality or conformability is the criterion used to
establish the freedom from bias in the research
procedure and results Morse & Field (1995: 144). The
researcher demonstrated and ensured neutrality and
conformability by making available consent forms,
interview guide and prolonged contact with the
participants. |

1.9 Ethical Considerations

1.9.1 Permission to conduct the study

The researcher was granted permission by the University of Limpopo Research
Ethics Committee to conduct the study.

1.9.2 Other considerations

According to O’ Leary (2014), one of the responsibilities of the researcher is to
ensure that the rights and well-being of those involved in the study are protected at
all times. De Vos et al. (2011:114) define ethics as a set of moral principles which is
suggested by an individual or group. This set of principles should be subsequently
widely accepted and provide rules and behavioral expectations about the most
appropriate conduct towards experimental subjects and respondents, employers, sponsors, other students, assistants, and students. Therefore, researcher identified the following ethical issues:

1.9.3 Avoidance of harm to participants
Participants were informed in advance about the potential impact of the study. It is often thought that in Social Sciences harm may be only of an emotional nature. However, De Vos et al. (2011:115) state that physical injury cannot be ruled out completely. The researcher to a reasonable degree saw to it that participants are protected from any possible physical and emotional harm. In the study, no harm was experienced by the participants hence no referral was made.

1.9.4 Informed consent
Participants were informed about the purpose, aim and objectives of the study, their right not to participate and to discontinue the interview process should they wish to. Written consent forms in the participants’ language and English were distributed. The information in the consent forms were explained verbally to the participants in Sepedi to avoid any misinterpretations. The above steps were observed because, when subjects are involved without their consent, their right to self-determination is impaired; the principle causes a value conflict between the researcher’s assignment to broaden knowledge and his or her responsibility to protect participants (De Vos et al., 2011:117).

1.9.5 Confidentiality or anonymity
The identities of respondents are kept confidential and are not publicly divulged. There is nowhere in the study were participants’ names are mentioned. Bless et al. (2013:32) explains “information provided by participants, particularly sensitive and personal information, should be protected and not made available to anyone other than the researchers”.

1.9.6 Beneficence
The study aims to benefit both the researcher and the respondents, in that after the study the former will resume the role of an educator in partnership with other relevant
stakeholders in raising awareness about cervical cancer in the Matebeleng village and other South African communities in need.

1.10 Limitations of the Study
The current research study had its own limitations and the researcher was mindful of the following:
☐ This is a case study which may not be generalised but often transferable;
☐ Case studies provide in-depth interviews and information; and
☐ This case study provided rich information on lack of knowledge and awareness of cervical cancer and this may not be remotely different from similar settings in South African rural communities.

1.11 Conclusion
The study benefited from the methodology that the researcher employed including the triangulation of the methods of data collection to promote validation of data. All ethical considerations were observed to the benefit of all respondents. The subsequent chapter gives an in-depth account of the seriousness of cervical cancer globally and views and experiences of other women population groups on the topic.
CHAPTER 2
EXPOSITION OF PERCEPTIONS AND ATTITUDES TOWARDS CERVICAL CANCER: RISK FACTORS, SCREENING TESTS AND THE HPV VACCINES

2.1 Introduction
Cervical cancer is a global problem affecting women. Developing countries experience high numbers of those affected compared to developed countries. Denny (2015) reported 6742 infections yearly and 3681 deaths in South Africa alone. The pandemic requires the representation of women in policy-making and political structures to drive the will to manage and channel resources towards its prevention and treatment especially in low and middle-income countries.

2.2 Background Information on Cervical Cancer
Numerous studies on health issues (Kamangar et al., 2006; Parkin & Bray 2006; Harries et al., 2009) all concur that cancer of the cervix is the most prevalent among women in developing countries and it affects largely women in rural settings and in low or under resourced areas. The concern is that it is a preventable disease when detected early. Knowledge and awareness of cervical cancer and its risk factors and the importance of regular screening for HPV could be key factors in reducing the development of CC, especially in developing countries (Moodley, 2009; Denny, 2010; Ali, Kuelker & Wassie, 2012).

Cervical cancer is the most common cancer in South African women, and is one of the few cancers, perhaps the only one, where screening can identify pre-cancerous lesions, and where an association between screening and mortality decline has been demonstrated (Miller, 1992; Baron et al., 2010). In the year 2000, the South African government released a national policy on organised cervical screening in order to offer all asymptomatic women aged 30 years and older three (3) free cervical smears in a lifetime, ten years apart to detect the disease at its early stages (S.A. National Department of Health, 2000; Moodley et al., 2006). This means that women who are fifty years and above and had never tested before have only one chance of being tested for cervical cancer. This still applies currently.
While the cost effectiveness of cervical cancer screening has been demonstrated, there has, nonetheless, been debate about whether South African health care services are sufficiently developed to be able to sustain cervical cancer screening (McCoy & Barron 1996; Fonn, 1997; Bloch et al., 1997). Reproductive health programme managers were then accused of not adequately carrying out the national policy into action at provincial, district and local levels. This resulted in the development of the cervical Health Implementation project (CHIP) in 2001, whose main goal was to identify community and service delivery challenges to best screening and treatment for cervical cancer, and to develop, evaluate and replicate relevant interventions in order to improve public sector cervical cancer screening services in three districts namely, Johannesburg-urban, Cape Town-urban and Limpopo-rural (Moodley et al, 2009).

The South African national health department supports the notion that prevention is better than cure, hence the promotion of screening for cervical cancer as a solution. However, effective screening requires infrastructure, human resources, quality assurance, monitoring and evaluation of screening programmes and financial capital in general (Ali et al, 2012).

2.3 The Development of Cervical Cancer
Cervical cancer forms in the interior lining of the cervix, the junction of the vagina and uterus. The development of cancer of the cervix typically slows and occurs over a period of years. Its progression begins with the development of precancerous changes (Cervical Intraepithelial Neoplasia=CIN)) also called cervical dysplasia low grade lesions, of which most of them will not progress to cancer even if left untreated. They typically resolve spontaneously (60%), especially in women with strong immune systems (Kumar et al., 2007).

Progression moves in stages of CIN 1, which is the least risky type (HPV 6 and HPV 11) that affects only 1/3 of the basal of the epithelium. It corresponds to infection with HPV, though these genotypes can also cause genital warts. CIN 2 is a moderate dysplasia that affects 2/3 of the epithelium. CIN 3 is a high risk infection with oncogenic HPV like 16, 18, 45 and 31. Types 16 and 18 together account for 70% of
cervical cancer, and types 31 and 45 together cause another 15% (Castellsague, 2008; Chikandiwa, 2010).

HPV infection is transmitted sexually, and both men and women are involved in spreading it as they are at the same time able to be asymptomatic carriers, transmitters and victims of the HPV infection. Apart from vaccination as a strategy to primary prevention of cancers and other diseases caused by HPV, strict condom uses and circumcision in males can reduce the infection rate (Castellsague, 2008). HPV is also responsible for cancers of the vulva, vagina, penis, anus and cancers of the oropharynx (throat, base of the tongue and tonsils). Symptoms and signs of these cancers show at advanced stages and become hard to treat (Magawa, 2012).

The impact of the HIV/Aids on progression of cervical cancer cannot be ignored. The majority of HIV uninfected women in South Africa are mostly diagnosed with cervical cancer from their late thirties and fifties with high mortality rate as they become older. HIV positive women, on the other hand, present with cervical cancer and pre-cancer earlier and are often infected with multiple HPV types. Presentation is usually in their late twenties to early thirties onwards. This results in younger women losing their lives earlier, leaving female grandparents and other elders becoming primary care givers, who are also at risk of cervical cancer (Maree & Moitse, 2014; Richter, 2015).

2.4 Risk Factors Associated with Cancer of the Cervix
Persistent infection with HPV is the most critical risk factor in the development of cervical cancer (Denny, 2010; Magawa, 2012). HPV infection is the most prevalent sexually transmitted infection (STI) world-wide but also through skin-skin contact and by means of any sexual activity involving contact with body fluids. Almost 80% of sexually active women are at risk of contracting the virus in their lifetime (Maree & Moitse, 2014; Peltzer & Phaswana-Mafuya; 2014).

Knowledge of the following risk factors is mentioned as a primary prevention strategy to encourage and support women in making positive lifestyle choices, and to create environments that will help them in making those healthy choices: diet and obesity, parity, smoking and oral contraceptives (Garcia-Closas et al, 2005), infection with certain sexually transmitted infections (STIs) namely, high-risk HPV types 16 and 18,
Chlamydia trachomatis, herpes simplex virus (warts), multiple sexual partners, smoking, certain cultural practices, political and socio-economic factors like poverty, early sexual activity, high parity and poor hygiene (S.A. National Department of Health 2000; Lyimo & Beran, 2011; Maree & Moitse, 2014). People with a weaker immune system are at a greater risk of HPV infections due to their HIV/AIDS status or immune suppressing drugs after organ transplant (Herbst, 2015).

2.4.1 Socio-economic factors and nutrition (Diet and Obesity)
This is more linked with low socio-economic status. Women with low socio-economic status have limited income, restricted care services, poor nutrition and a low level of awareness about health issues and preventive behaviour (Chikandiwa, 2010:8). These factors can make them susceptible to illnesses, including cervical cancer. A study in South Africa by Cooper et al. (2007) claims that lower socio-economic status, alcohol intake and lower education levels expose women to the risk of developing CC. They also add the historical socio-political inequalities, which resulted from the apartheid migratory practices. This factor will be highlighted further in the discussion below.

- Dietary intake (Vitamins)
On the other hand, Ali et al. (2012) and Garcia-Closas et al. (2005) posit that no research to date has absolutely proved that there is any causal relationship between food and dietary intake with cervical cancer. They further state that epidemiological investigations suggest that women who eat more fruits and vegetables are somehow protected. Vitamin A and E are seen to regulate cell differentiation and proliferation, and vitamin C, E carotenoids and other dietary constituents could act as efficient scavengers of free oxidants. Garcia-Closas et al. (2005) based their conclusions on the reviewed studies made, that there is no concrete association between nutritional factors and the development and advancement of CC due to HPV, and that the studies could not prove control of HPV whether nutrition is good or bad.

A recent study in the United States by Shim et al. (2016) is the only investigation that concludes that there is an association between vitamin D (serum 25 hydroxyvitamin D= serum 25 (OH) D) and cervical-vaginal HPV infection. They conclude that lower levels of vitamin D are generally associated with increased odds of high risk HPV and vaccine-type HPV infection. They established that sufficient vitamin D may
interfere with HPV penetration into the basal layer by making the mucosal barriers stronger. However, they found that levels of serum 25 (OH) D vary in individuals in terms of age, race/ethnicity, diet, duration and quantity of sun exposure, and that older people and those with darker skin tend to have lower serum 25 (OH) D levels.

The researcher acknowledges that vitamin D is mainly from exposure to the sun, and South Africa is largely a sunny country. However, it can be derived from certain foods which are often costly to the low income population. Consider fortified milk, fish (tuna, mackerel, salmon, and sardines), Swiss cheese, cod liver oil, to name a few, and whether women in low resourced areas are aware of this dietary information. A positive aspect is that fruits and vegetables are mainly affordable and accessible and grow naturally in most parts of South Africa, including in rural communities. Green tea, on the other hand, can be costly too.

- Green tea intake
  Another case-control study in China (Jia et al, 2012) suggests that green tea intake was a protective factor against cervical cancer, and that women who drink green tea have lower risk of developing cervical cancer. There is no other study on the association between green tea and HPV persistence.

2.5 Understanding HPV Transmission in Relation to Certain Sexual Practices Perpetuated by Social, Cultural and Behavioral Factors, also in Terms of Socio-Economic, Structural and Political Factors

2.5.1 Risky sexual behaviour and socio-cultural practices
Matjila et al. (2008) highlight that social, economic and behavioral factors have a bearing on the prevalence and incidents of STI’s and the quality and type of health care provided to infected and affected persons.

Risky sexual behaviours are explained as behaviours that increase the risk of sexually transmitted infections (STIs) and HIV. These behaviours include early age at sexual debut, having multiple partners, unprotected sex with strangers and sex
with partners of unknown STI status. These behaviours have been found to be widespread in South Africa and Sub-Saharan Africa (Osuafor & Ayiga, 2016; Chialepeh & Susuman, 2015).

HPV is transmitted by direct contact, usually sexually with an infected person. It is contracted through sexual intercourse (vaginal and anal) also following nonpenetrative sexual activities, including oral sex (Winer et al., 2003; Magawa, 2012).

The researcher's opinion is that the role of certain socio-cultural practices and socio-economic factors cannot be ignored as driving forces towards women being exposed to HPV and other STIs in addition to limited awareness of cervical cancer and its relationship to HPV. This notion is shared by Maree et al. (2011), reporting that even if women are themselves not engaging in risky sexual behaviour, their husbands and partners’ sexual behaviour perpetuated by certain cultural practices put women’s health at risk. Some of these practices include: early marriages and polygamous marriages coupled with high parity. Polygamy is accepted in many societies in sub-Saharan Africa.

2.5.2 Women being at risk due to certain cultural practices
In some cultures, very young girls (usually virgins) are given out to marriage to much older men, most of whom already have more than one wife. This has been reported to increase the risk of cervical cancer two-fold and the risk increases with increasing number of wives (Anorlu, 2008; Chikandiwa, 2010). In South Africa there are a number of sex-related cultural beliefs and behavioural practices such as rites of passage to manhood (young males sent to mountain schools), virginity testing just before marriage, arranged marriages, prohibition of post-partum sex especially during breastfeeding period and sororate that are seen as contributing to the spread of STIs (Mabasa, 2012).

A study in South Africa established that men have more power in sexual matters in marriage than women, and this originates from the cultural beliefs, norms and values attaching bride price (lobola) to ownership, thus giving men unlimited sexual rights over their wives, resulting in women being afraid to negotiate safer sex methods to
avoid risky sex as these may be construed by their husbands as infringement on their conjugal rights, mistrust or infidelity (Ayiga, 2012; Chikandiwa, 2010 & Hargreaves et al., 2009).

Cooper et al. (2007) found that factors which were strongly associated with having multiple partners were being black, single, more educated, the use of alcohol and young age at first sex. These are more apparent in urban than in rural communities. In support of these findings are an epidemiological study by Hargreaves and Glynn (2002), which reveals that people with higher education, coupled with higher income are likely to engage in risky sexual behaviours and risky lifestyles because they can afford it.

On the other hand, observation by the researcher is that monogamous marriages also do not necessarily protect women from HPV and cervical cancer. In fact, the African culture condones and tolerates men’s infidelity, thus exposing their wives and partners to sexually transmitted infections. Knowledge and awareness of HPV and cervical cancer should be extended to the male population, who play a significant role in the spread of this epidemic. The downside is that they may be unmotivated to take precautions since this does not affect their health status and wellness, considering also that the screening programme does not include men.

This fact is supported by a South African study by Maree et al., (2011:663), reporting that men’s lack of knowledge of cervical cancer adds to the countries burden of the disease. They further, citing (Castellsague et al, cited in Maree, 2011), who reported that “Men add to women’s risk for developing cervical cancer, as men act as both ‘vectors’ and ‘carriers’ of oncogenic HPVs”. In South Africa it was found that culture also plays a role in how the disease is defined and perceived: ‘some black women consider cervical cancer to be a secret disease as the culture forbids them to talk about anything that has to do with reproductive organs’. Similarly, another survey of rural South African women established that women associate feeling ill with taking action, if they do not feel ill, then why go for screening. They associate cervical cancer with “cleaning of the womb” (Lartey et al., 2003; Van Schalkwyk et al., 2008:10).
This view is further supported by another South African study by Mabena and Moodley (2012), indicating that for gynecological cancer, the self and sexuality come into question because genitals are not just viewed as physiological organs but with social stigma. The reconstructed perceptions about femininity, reproduction and sexual relationships may bring the gendered, moral and stigmatised meaning to the already disempowered women population.

2.5.3 Low-socio-economic factors

It is important to understand cervical cancer and its prevention in South Africa and other developing countries contextually, referring to the entire socio-economic conditions, competing health needs and health care infrastructure. A number of studies have shown that differences in health care in general are attributed to a number of contextual-level factors beyond individual control (Denny 2010; Zhan & Lin, 2014).

In Sub-Saharan Africa 60-75% of women who develop and die of cervical cancer are in the rural areas, and mortality is very high. These women die in their productive years, robbing them of the opportunity to contribute to their families' social and economic stability, resulting in their children school going and nutritional status being negatively affected. Globally, women of low social-economic status have a greater risk of cervical cancer (Anorlu, 2008; Magawa, 2012). The same findings in South Africa by Hoque et al. (2008), reporting that women in poorer communities are mostly affected by this condition which affects not only their health and lives, but also the lives of their children, families and their communities.

This factor puts into perspective the researcher's belief that cancer of the cervix is not just a medical issue, but also a social one wherein Social Work has a role to play. It is a necessary call for a collaboration of a multi-disciplinary team to address this problem from a community work approach. Denny (2012), Ferlay (2006), Magawa (2012), Sankaranayananan, Zhan and Lin (2014) concur that health systems and structural factors contribute to the HPV prevalence in poorer communities due to poor quality care provided by most health services, accessibility to facilities for screening and treatment being a challenge due to poverty. Often these facilities are limited, resulting in women not completing treatment and the late presentation of
Cervical cancer is likened with poverty, and is viewed as a disease of poor women because poverty is endemic and a huge problem in Africa. Due to poverty and lack of education, prevention, treatment and care are a challenge (Ali et al, 2012). The researcher agrees with Schneider (2004) that South Africa has a glaringly disproportionate allocation of resources. Most resources are concentrated in urban areas of metropolitan cities. Though one would note that some urban, peri-urban and rural areas are not so far apart geographically. The researcher believes that the South African political history and the legacy of apartheid contributed to these disparities.

Rahman and Rahman (2001) reiterate factors that contribute to late presentation and underutilisation of preventative health care services by rural residents compared to urban ones. They explain that generally, rural populations are less educated with low incomes and do not have medical insurance to cover preventative services. They have to travel distances spending much time on the road to access health care services than urban populations. The shortage of primary health care providers is also a challenge as people prefer working in major cities in the urban areas.

2.5.4 Structural factors
Some studies (Smith et al., 2003; Moodley et al., 2006; Francis et al., 2013; Goyal et al., 2013) on the adequacy of health care systems, including health care personnel in implementing cervical cancer screening programmes, three in South Africa and one in India, highlight challenges in these sectors. These studies look at the role and challenges of the health care system itself, including clinicians, reproductive health professionals, educators, infectious disease control experts and managers in non-governmental organisations in promoting cervical cancer awareness, including knowledge of screening policy and vaccine.

They found that there was a need to train nurses who perform cervical smears in sampling techniques to address limited Pap smear adequacy. The nurses misunderstood the screening policy and did not agree with it, and they were not familiar with the natural history of the disease. They did not receive summary
feedback of the results or quality of screening that they performed, yet they are the ones to implement the programme. The success of the South African study is that knowledge of staff on screening policies, cytology processing times and number of screenings was improved through education and training (Moodley et al, 2006).

In Limpopo, three districts were targeted for intervention, and only one district was located in a rural area. The study covered only five clinics in improving community awareness through posters and pamphlets in local languages, which is a very small fraction of rural communities in Limpopo Province, meaning the larger population is still left out. Similarly, in India, it was established that the nursing personnel knowledge of cancer of the cervix was incomplete though satisfactory, but they are expected to have better knowledge. The recommendation was for the nursing staff to receive brief training sessions and to be sensitised to play an educational role in the community about cervical cancer screening tests and their availability (Goyal et al, 2013).

These recommendations and actions are in line with the objectives of the CHIP project. These are: (1.) To improve knowledge and skills of health care workers regarding cervical screening, (2.) To ensure that appropriate equipment and supplies are available; (3.) To make sure that the required referral system is in place, to refer clients for treatment and follow-up mechanisms, and to ensure that materials for reading and reporting the screening are available; and (4.) To apply and evaluate education, information and communication.

A study in Malawi on health systems challenges also established more or less the same findings, and the focus of previous studies was on the exploration of individual and community factors, but there are many health system challenges that impede effective screening (Maseko et al., 2015). This study believes that most of these challenges in South Africa are the result of the legacy of the socio-political structure prior to 1994 where allocation of more resources was directed to other racial groups than the black Africans even when those groups were a minority.
2.6 Awareness and Perceptions of Cervical Cancer and Attitudes towards Screening Tests

Cross sectional studies on perceptions, awareness, knowledge, attitudes and beliefs established that about 70-75% of women in developed countries (industrialised) have been screened for cervical cancer in the last few years, and have, to a certain extent, knowledge and awareness of cervical cancer than in developing and underdeveloped communities worldwide. In Sub-Saharan Africa few women have ever been screened for cervical cancer compared to those in the USA and European countries. In the year 2000, in Sub-Saharan Africa, only 21% of those diagnosed with cancer of the cervix survived, compared with 70% in the USA and Western Europe, respectively (Sawadogo et al., 2014; Wright et al., 2014). These figures highlight disparities in the developed and developing/under-developed countries.

South African studies in rural Eastern Cape and KwaZulu-Natal established that very few women have knowledge and awareness of cervical cancer. Notably, they had a significant amount of incorrect information whereas the majority of them knew very little about cervical cancer. Many never went for any screening due to lack of information and knowledge (Ndlovu, 2011; Schneider, 2004). Studies in South Africa, Malawi and India established that there is a relationship between literacy, age, religion, husband’s opinion, and socio-economic factors (poverty, long distances to clinics, communication and social isolation) in relation to knowledge, awareness and availing themselves to screening facilities.

These studies observe that literate, younger and older women have significant information about cancer although some had been screened before. The older and illiterate women were less likely to avail themselves for screening due to insufficient information and financial constraints (Kamphinda-Banda, 2010; Aswath et al., 2012; Asthana & Labani, 2013). A study in Ibadan, Nigeria established that women are not aware of cervical cancer and not are utilising any screening services (Ndikom & Ofi, 2012).

Factors identified as influencing the utilisation of screening services are ignorance, illiteracy, beliefs in not being at risk, multiple other issues to deal with, financial constraints, casual attitude to their health and fear of positive results. Another South
African study in a peri-urban area highlighted the difference in knowledge between the coloured and black female population, which is attributed to the legacy of apartheid in terms of access to resources and differential knowledge levels. They found that fewer black women knew what Pap smear was, where to obtain it and had a pap smear compared to the coloured women (Mosavel et al, 2009).

In Kenya 71% of those surveyed were not aware of what cancer of the cervix is, 91% have heard of it but the knowledge was so minimal that it could not influence motivation for screening. The barriers to knowledge and screening were low public awareness, cost and access to services (Ndikom & Ofi, 2012; Sudenga et al, 2013). On the other hand, by 2012 statistics in Tanzania indicated that yearly, 6241 women were diagnosed with cervical cancer and 4355 die from the disease. Barriers to screening were found to be poor awareness of services, husband's approval of the screening, the sex of the health worker who performs the Pap test and educational levels (Lyimo & Beran, 2012).

Similarly, a study in Qatar, an Arab nation, established that women who were fifty and above had poor knowledge about cervical cancer and screening, and they are the most illiterate group in Qatar. Of interest was the discovery of lack of knowledge among 20-29 year olds who are educated (Al-Meer et al, 2011). This is consistent with a study by Hogue and Hogue (2009) of the university students in Kwa-Zulu Natal who lacked information on cervical cancer.

### 2.7 Factors influencing uptake of screening tests

Other factors such as accessibility, costs, waiting time, quality of services, discomfort associated with procedure, distrust of the medical system, characteristics of health providers and negative attitudes were found to be barriers to screening (Mosavel et al, 2009). In Burkina Faso screening coverage is low at 5.5% due to inaccessibility of the Pap test, which is offered in one national hospital and two private ones. Not much is known about attitudes and beliefs of women towards cervical cancer and screening (Sawadogo et al, 2014).

However, in Uganda, the major finding was the very low proportion of women who never screened for cervical cancer due to influence from the spouse, fear of positive
results and health system challenges (Twinomujuni, et al. 2015). One notes that in all of the above studies, poor knowledge and awareness of cancer of the cervix and screening services are common major underlying challenges in addition to many other contributory factors mentioned.

2.7.1 Accessing information and material on cervical cancer

The researcher observed that most studies on rural women focused on participants who were already attending medical settings for one reason or another or cancer day events. This often excluded women in the rural areas with low or non-existent resources, who hardly go to the clinic or hospital unless a mobile is dispatched to the area. It has also been noted that the most common types of cancers that are often given media coverage are breast and skin cancers. This observation is supported by Maree and Wright’s (2011 & 2012) findings, that even with limited knowledge and awareness, cancer is mostly associated with the breast. In their former study (2011) and Pillay (2002), combining breast and cervical cancer screening in trying to increase cervical screening uptake, the women were more aware of breast cancer than cancer of the cervix.

This often leaves out cervical cancer, arguably because it is a reproductive health issue. On the plus is an observation that a local South African soapy on SABC 2, with high viewer rating, is currently (2016-2017) covering an issue of cervical cancer and again on the 4/03/2017, a health programme also on SABC 2 (Bonita’s house call) dedicated a full hour, wherein specialist medical practitioners informed the public about cervical cancer except that it was aired 90% of the time in English, which is a challenge to many women in rural disadvantaged settings. This is line with the recommendation by some studies in the text to use media in promoting screening and vaccine intake (Francis et al, 2013).

Another observation was made on how cervical cancer information is displayed in local clinics. Large colorful posters on diarrhea, breastfeeding and HIV are displayed. Somewhere right at the bottom of the notice board one finds an A4 faint sheet written often in English about HPV and cervical cancer. This observation is supported by a study in the Western Cape and Gauteng, which found that clinics had adequate supplies to test the smears, but there were no posters or other media promoting
materials on cervical cancer screening (Smith et al, 2003; Moodley et al, 2006). The researcher believes that for as long as knowledge and awareness of cervical cancer is a challenge and not only in rural communities, how is it expected of women to go for screening and understand the reason behind their girl children getting vaccinated as a preventative measure?

They will continuously be exposed to risks due to ignorance and lack of vital information to protect themselves. Asnatha and Labani (2013) recommend and emphasise the need for education for illiterate older women about screening and possibilities for treatment to facilitate screening acceptance. The study’s opinion and concern is the manner in which information is displayed and disseminated. Focus should be on how information on cervical cancer can be contextualised to benefit the rural recipients. However, evidence has demonstrated that it is not only a problem in rural communities but also in urban areas of low- middle income countries like South Africa.

2.7.2 Alternative means to disseminate information on cervical cancer

This study believes certain conventional and practical methods of disseminating information on cervical cancer are necessary to necessitate cues for action. These include the use of a vehicle and an announcer with a loud micro-phone driving around the chosen rural community. This method is often used by political parties to campaign for votes and it does attract people’s attention and this case, using community health professionals, social workers, community development officers and community based organisations (an integrated public health care intervention strategy) targeting particular remote rural areas of South Africa. Another could be the old traditional way of gathering women through traditional leaders “dikgosi ka mesate” as they have leadership power and influence in the rural communities. Denny (2010) also indicates the importance of increasing coverage by targeting appropriate groups for screening as learned from countries that successfully implemented mass organised screening programmes.

The study in South Africa (Hoque et al, 2008) also suggested the use of community health workers to educate rural communities, hence the researcher believes that it should not only be left in the hands of community health workers due to a large
population that still needs to be accessed on education about cervical cancer. Mayosi et al. (2009) state that “We urge the launching of a national initiative to establish sites of service excellence in urban and rural settings throughout South Africa to trial, assess and implement integrated care interventions for chronic infectious and non-communicable diseases”.

A study in Limpopo by Mamahlodi et al. (2013) report an increase in the number of smears that were submitted for cytology between 2007 and 2010. However, only about 13.7% screening programme coverage was achieved, indicating a shortfall to meet the goal that was initially set in 2001 to increase coverage incrementally to 70% within the 10 years of the start of the programme. The plan was for the health department in collaboration with other stakeholders to promote regular media campaigns to inform, educate and invite women at community level for screening. It seems like most communities like Matebeleng have not yet benefited from this effort. Policy makers and clinical researchers do acknowledge this challenge but cannot ignore the reality that the health care system is already overburdened with other health care needs that are highly prioritised than HPV and cervical cancer (Richter, 2015).

The study believes the screening policy needs a review. A ten-year period is long enough for the virus to progress to further stages before intervention. But Denny (2010) highlights the significance of coverage than frequency in that if more women screened, even if it is just once in a ten-year period, two-thirds coverage reduction from the set goal can be anticipated. The prevention and treatment of some communicable and non-communicable diseases is marginalised in South Africa due to the high prevalence of HIV/AIDS and tuberculosis. The burden of non-communicable diseases is increasing. This is indicated by the increasing mortality rate from diabetes, cancer of the prostate and cervix and chronic kidney diseases, among others (Harries et al, 2009; Mayosi et al, 2009).

Richter (2015) further reports that the prevention of cervical cancer is still not a priority under the millennium development goals and new sustainable development goals due to other competing diseases like HIV/AIDS and tuberculosis co-epidemics,
and calls for the addressing of cervical cancer prevention to be part of the aims of the sustainable development goals for 2030 to 2035 period.

2.8 Knowledge and Awareness of the Vaccine to Prevent HPV

2.8.1 Background information on HPV vaccines

The introduction of the two vaccines, cervarix and Gardasil as approved by the Medicines Control Council of South Africa in 2008, forming part of the primary prevention of cervical cancer in South Africa was a positive development. However, the vaccine was available only in the private sector, and because it was not yet endorsed by the Department of Health to the general public, its uptake was very low due to inadequate knowledge and awareness of the vaccines and their implementation by health care workers, limited knowledge and awareness by the public in general and the high cost of the vaccines (Richter, 2015). The two vaccines are effective when used as prophylaxis and administered before a female is sexually active, hence it was approved to be administered to girls from the age of nine. The vaccines can be stored for more than five years when good safety profiles are followed, and it has been approved to be administered in three divided doses over a six month’s period (Harries et al., 2009; Richter, 2015).

During the launch of the vaccines in 2014 in The Free State Province, the Minister of Health, Dr. A. Motsoaledi emphasised the commitment of the South African government in fighting cervical cancer, and acknowledged the seriousness of the disease and ensured a long and healthy life of women in South Africa. Prof Denny and Dr. Adams of the Department of Obstetrics and Gynecology of the Groote Schuur highlighted that cervical cancer in South Africa affects 6000 women annually, of which 80% are African women, and between 3000 and 3500 of these women die annually as a result of this cancer (Motsoaledi, 2014).

South Africa being part and donor to the global alliance for vaccination and immunisation (GAVI), became one of the developing countries in Sub-Saharan and Southern Africa to take part in a pilot project to roll out cervarix and Gardasil to public primary schools in South Africa in 2014. Even though the roll-out is still at its early stages, some lessons have been learned through monitoring and evaluation reports. The cost of the vaccines and the delivery is high, low awareness of cervical cancer is
coupled with low cervical cancer screening levels, and an ailing health system and failure to recognise cancer of the cervix as a major health concern have been highlighted (Perlman et al., 2014).

Harries et al. (2009) and Noakes et al. (2006) established that before the registration of the vaccine in developed countries, most parents and girls eligible to receive the vaccine had poor levels of knowledge about cancer of the cervix, HPV and the importance of regular screening. However, the health care personnel were willing to recommend vaccination and parents were found to be interested in having their daughters vaccinated. This fact proves that lack of adequate knowledge on cervical cancer is not exclusive to developing countries only. Although countries like South Africa will highly benefit from the vaccination programme, where HPV prevalence is high, screening compliance is low, and there are still challenges to follow up on women after testing and limited resources to monitor women with HPV associated with cancer (Richter, 2015).

2.8.2 Progress on school health vaccination projects in South Africa
Studies on the school health vaccination projects (SHP) conducted in South Africa by (Moodley et al., 2013; Botha et al., 2015) in low socio-economic primary schools in KwaZulu Natal, Western Cape and Gauteng Provinces, the former assessed the uptake of Gardasil vaccine and the capacity of school health teams to carry out vaccinations, and the latter assessed the acceptability of the HPV vaccination within the school environment. The findings demonstrated that there was a high uptake of the vaccine in KwaZulu Natal with an average of 98.4% in 31 schools that participated. In Gauteng 56.9% and 50.7% in the Western Cape were sufficiently vaccinated. The challenges in Gauteng and Western Cape that resulted in moderate coverage were associated with parents’ failure to consent and failure to attend information sessions. The implementation had some challenges. However, lessons were learned in the process to guide further implementation.

2.8.3 HPV vaccination in other low and middle-income countries
Ladner et al. (2014) and Perlman et al (2014) report on studies supported by the Gavi alliance in low and middle-income countries. Perlman et al. (2014) reveal challenges in Rwanda and Cameroon that could have affected the uptake of the
vaccines. There were unproven rumours about side effects which may have threatened the HPV roll-out. But despite the rumours, Rwanda achieved a 93% coverage of HPV vaccination of all grade 6 adolescents in 2011, which made it the highest world-wide.

The Gavi alliance indicated that in 2014 it will support HPV demonstrations projects in Tanzania, Sierra Leone, Malawi, Niger, Madagascar, Ghana, Mozambique and Zimbabwe. The pilot initiatives on HPV vaccinations in Rwanda, South Africa, Cameroon, Lesotho, Tanzania and Uganda were reported as successful, and therefore providing useful guidelines and lessons for other countries. Ladner et al. (2014) study focused on the impact and success of school and health clinic based models for HPV vaccination, and established that tailor made vaccination campaigns may be a necessity to meet the needs of communities.

In Kenya, Watson-Jones et al. (2015) report that HPV vaccination amongst the hard-to-reach populations was made difficult at schools by high rates of school absenteeism and drop out, early age of sex and marriage, and non-consent of parents. Their findings revealed that in communities, even with little knowledge of cervical cancer and HPV, there was interest in receiving vaccination.

This chapter highlighted the significance of education through awareness campaigns aimed at hard to reach communities in developing and under-developed countries. More strides in the area of cervical cancer are evident but more still has to be done in relation to basic needs namely, information, education and training tailor-made for specific communities especially, the hard to access ones. School based HPV vaccination facilitated by the Department of health seem to be moving at a slow pace especially in the rural areas of South Africa.

2.9 Health policy and Legislation in South Africa; Implications for Social Work in/and Public Health
2.9.1 Brief history of the South African health system
The history of the South African health system is embedded in the apartheid and colonial policies wherein wealth and resources were allocated to the white minority
despite the black population being in the majority. The country’s infrastructure was shaped by oppressive laws, land and resources allocated to the white minority. Black people were unjustly subjected to low paying jobs to generate wealth to the white people. It was only in 1994 that South Africa finally achieved its democracy, giving birth to the new constitution based on democratic laws that promote a wide range of human rights. This legacy has had a great negative effect on the health of South Africans, the health policy and services to date. The post-apartheid and post-colonial era has given birth to more burdensome socio-economic, political, cultural and structural problems. As the country is struggling with redressing disparities of the past, the health sector is also experiencing extensive transitions (Coovadia et al., 2009).

Chopra et al. (2009) report that the new political era in South Africa has brought the hope of reducing inequities marred with fragmented allocation of resources in the health and health-care system aimed at one integrated South African health-care sector. Positive strides have been made in primary health care (PHC), especially with the maternal, pre and postnatal services by removing user fees. Benatar (2013) in support state that to produce a healthy nation, focus should be on the maternal care system. Women should be supported physically, mentally and nutritionally throughout the stages of motherhood, from pregnancy to childbirth. Children have also to be cared for from infancy and continue right into adolescence by providing maternal literacy and relevant programmes to ensure opportunities for work and employment for the youth.

Harrison (2009) and Benatar (2013) further report on the areas that still require attention for the achievement of admirable national health insurance (NHI) goals. The public health infrastructures that are dilapidated need to be re-built and extended for effective service. Resources should be equitably distributed between the public and private health care sectors in order to improve the management practices for the achievement of effective and efficient service delivery. The South African constitution compels the state to work towards the just and equitable right to health. It is 23 years into democracy, but the country is still grappling with massive health inequities. There are significant differences in rates of disease and mortality between races and provinces, which reflect racial differences in access to basic
household living conditions and other determinants of health. Differences in health between men and women are also more visible. Mortality is 1.38 times higher in men due to alcohol related incidents than in women despite the fact that women have a higher rate of HIV infection (Coovadia et al., 2009).

The National Health Insurance
It is every country’s mission and goal to attain universal access to health and coverage for its citizens. Gray and Vawda (2016) document that South Africa has this goal enshrined in their 2020 Sustainable Development Goals. One of the options to achieve this goal was through the proposal to introduce the National Health Insurance (NHI) under the control of the Department of Health. The white paper on NHI reports that the implementation will be rolled-out in a three phase process over a period of 14 years. Phase 1, targeted for 2012/2013 to 2016/2017, focused on capacitating the health care sector and involved the office of Health Standards Compliance. Phase 2, targeted for 2017/2018 to 2020/2021 looked into population registration created a transitional NHI fund to buy non-specialist PHC services from accredited and certified private and public providers. It also makes some changes to the Medical Schemes Act. Finally, Phase 3 was targeted for the last 4 years (2021/2022 to 2024/2025) to look into the full operation of the insurance fund as a buyer and single payer of comprehensive health services, coupled with a number of legislation reforms. However, already there are serious challenges facing the implementation of NHI. Five years from the proposed implementation date, the bill has not yet been tabled in parliament together with other related legislative instruments.

The fundamental aim of the NHI is to redress the existing fragmentation between the public and private sectors, vying for the universal health care. Gray and Vawda (2016) state that “population coverage under NHI will ensure that all South Africans have access to comprehensive quality health care services. The cardinal features of NHI summarised as, universal access, mandatory prepayment of health care, comprehensive services, financial risk protection, a single fund using a strategic purchaser and a single payer”.

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Challenges and barriers to universal health care in South Africa

Harris et al. (2011) report that for the UHC notion to work effectively, South Africa is required to take into cognisance the varied needs of disadvantaged communities and their financial position. Accessibility, the necessary quality health services, information and education are of paramount importance in order to have an informed nation to exercise choice within the health system. Chopra et al. (2009) and Harrison (2009) acknowledge the accomplishments by the National Health, such as free primary health care, crucial drugs programme, choice on termination of pregnancy, community service for graduating health professionals and better health systems management but also report challenges, inadequate prevention and control of epidemics, inequities in resource allocation between public and private sectors and lack of monitoring and evaluation systems in health management. They further state that this scenario threatens the achievement of Sustainable and Millennium Development Goals (MDG’S).

A report by Chopra et al. (2009) highlight the role of social factors in health and the need for collaboration of different sectors for interventions. They emphasise the need to preserve and empower families, and reduce domestic violence by changing the perpetual culture of men’s behaviour towards women and children, relief of poverty and address of migratory labour practices for the prevention and treatment of the HIV/Aids pandemic, and further to develop effective policies and actions to address sexual violence and inequality, alcohol sanctions, diet and exercise and sustainable development. The study conceives all these social ills as the niche areas of social work intervention.

The study acknowledges that it is not only the HIV/Aids pandemic which is at an alarming rate, but also a cohort of other communicable diseases. Harrison (2009) continues to explain that negative social forces cannot be ignored to be adding to the prevalence of non-communicable lifestyle diseases such as obesity and diabetes. Mayosi et al. (2009) further add type 2 diabetes, cancer, chronic lung disease and depression and that these diseases are marginalised in South Africa due to the widespread of communicable diseases like HIV/Aids and tuberculosis. These factors highlight the reasons that makes cervical cancer not a priority in the millennium and sustainable development goals for the 2030 themes.
The recent structure of the South African health sector is in this pattern: the National Department of Health responsible for national health policy, nine provincial departments of health responsible for developing provincial policy within the framework of national policy and public health service delivery, three tiers of hospital; tertiary, regional, and district, the primary health-care system—a mainly nurse-driven service in clinics—includes the district hospital and community health centres, local government is responsible for preventive and promotive services. The private health system consists of general practitioners and private hospitals with care in private hospitals mostly funded through medical schemes and the public sector still struggling for funds and resources (Coovadia et al., 2009).

2.10 Conclusion
This study argues that these social, health and structural factors create a significant place and role for Social Work, including other disciplines like psychology, nutrition, safety and security in the health sector. Pockett and Beddoe (2017:131) assert that “the changing fields identified in the Global Burden of Disease study including ageing, disabilities/physical impairments, mental health and violence and the gender disparities encountered in reproductive health are key areas for social work practice in health”. South Africa has still not acknowledged the role of Social Work in public health, hence no institutions in higher education offers this curriculum, yet in many other developed and some developing countries, it is a recognised significant sector, including School Social Work.
3.1 Introduction
The political transitions in South Africa have necessitated the national health to reform a number of policies and legislations to include and accommodate all groups that were initially excluded from quality care because of apartheid. The burden has become more complex and heavier for only one sector to carry. South Africa needs co-operation of human resources to address the vast health problems existing today.
In America, though more advanced in this area, the US’s Patient Protection and Affordable Care Act (ACA), a national health reform implementation has introduced dramatic changes in the USA’s health system which Ziperstein et al. (2015) believe will extensively impact social work profession and question their educational preparation for the new health scenario. In support is a report by Pockett and Beddoe (2017) pointing out that policies that are needed to address major health inequities should be implemented within the welfare and social provision programmes, clearly endorsing that the social work practice is the core to these factors.

3.2 Background information on social work in public health
Ruth, as quoted in Van Pelt (2009), states: “Social Work has forgotten its roots. Social Work has originated and grew up alongside public health in the early 20th century, when social workers partnered with doctors to combat sexually transmitted diseases and other infectious diseases and to improve maternal/child health in settlement houses”. Chandrika (2015) continue to explain that social workers today provide services across the continuum of care in different health care settings.

Ruth et al. (2015) posit that it is an ethical obligation for any society to engage in actions that can alleviate suffering, disease and death among its vulnerable citizens, and thus prevention and health promotion are a hope in the US for improving the health of its people. The Social Work profession has continuously emphasised a commitment to prevention and the general well-being of populations, but subsequently focused mainly on therapy and case management of individuals, giving dominance to the medical model, resulting in the prevention, and the obscurity and
neglect of public social work practice within social work. The practice of social work earlier emphasised “persons in environment” approaches working with communities and applying public health approaches.

In the US, social work faculties developed health concentrations and MSW/MPH programmes, which included epidemiology, prevention and public health in the integrated curriculum of MSW programmes. However, in the 1980’s, the introduction of market driven changes and managed care to hike profits resulted in the slow progress of prevention efforts in social work. The profession had to redefine and prove its role as a fundamental health profession (Ruth et al., 2015) amid ongoing strain between academics and managers in the health sectors questioning the readiness of social work graduates for health practice.

3.3 The role and functions of public health social workers

Beddoe et al. (2015) explains that public health approaches in a broader sense direct efforts on community-based populations to promote and maintain healthy communities and environments, including prevention, health promotion, health advocacy and the integration of health into all policies and systems. The practice of social work then in prevention, advocacy, community health empowerment and public health social work are the strong indication of continuous application of broader lens approaches and a basis to strengthen health social work in the ACA period. This position is not remotely different from the South African situation. Mayosi et al. (2009) report on the call for South Africa to develop areas of service excellence in urban and rural settings nationally to test, assess and implement integrated care interventions for communicable and non-communicable diseases burdening the country since the democratic transition which brought various policy changes in the health care system.

The key areas of public health social work include the HIV/AIDS disease and transmission prevention, child and elder maltreatment prevention and intervention, acute and chronic health care services, services to persons with disabilities, mental health and substance abuse prevention and interventions, services to older persons, disaster preparedness and response, and maternal and child health. The benefit of public health social workers is the dual approach to their work, namely
epidemiological and social. They also become trained in both prevention and intervention, applying prevention at the community level and looking at the varied significance of health issues and intervention at the individual level as caseworkers. Trained public health social workers have a wider knowledge and skill set that emphasise community health, safety and welfare (Ruth et al., 2008; Van Pelt, 2009).

Within the multiple areas of public health research, are studies specific to public health social work practice, which is an area of practice that has strong historical roots in the social work profession. Public health social work practice applies a research-based epidemiologic approach to identify and intervene in social problems that affect the health status and social functioning of communities. Public health social work thus focuses on primary prevention, and includes practice at multiple levels, including individuals, groups, communities and populations (Ruth et al., 2008).

3.4 The progression of Public Health Social Work

In the U.S., the Department of Health and Human Services (HHS) Health Services Resources Administration’s Bureau of Maternal and Child Health (MCH) oversees several programmes that support public health social work leadership, training and research. The reports cite more than 20 dual social work programmes in MSW and Masters of Public Health (MPH) degrees, including those specialising in maternal and child health, which were established in the mid-late 20th century and others still in development. These programmes include the current MCH social work grantees: University of North Carolina, University of Maryland and University of Pittsburgh (Poole, 1997; Ruth et al., 2006).

However, over time social work scholars questioned the structure and outcomes of dual-degree programmes, MSW/MPH programmes included. They cited lack of evidence to support the value of an additional degree, possible tensions of dual-professionalism and fear of dissociation with the social work profession despite calls that were made for a collaborative (cross-disciplinary) partnership from all sectors of public health even though social work is often left out in the literature as a promising or core partner despite their role and involvement in the prevention and promotion of public health (Ruth, et al., 2006; Ziperstein et al., 20015).
Despite these concerns, a promising picture is painted in a report by Ruth et al. (2008), explaining that new partnerships between public health and social work have increased into public housing, tobacco control and environmental justice. There is evidently more research in PHSW that is influencing social work’s understanding of risk, protection, resilience and prevention. Growing interest in the professional literature in PHSW has increased. Articles in Social Work journals on prevention, health promotion and education have doubled since 1982 and a working definition, standards and competencies for public health have been formulated. PHSW is therefore, defined as “social work practice that uses an epidemiologic approach to preventing, addressing, and solving health problems…. By emphasising prevention and health promotion, PHSW is multimethod and transdisciplinary, making it especially relevant to contemporary practice” (Ruth et al, 2008:72).

Ruth et al. (2015) and Ziperstein, et al. (2015) highlight the increase of the MSW/MPH programmes and that it is an indication and reflection of continuous collaboration between the two fields. They continue to emphasise that “Social work has deep roots in public health and that it shares a history and natural overlap with public health on many issues of mutual concern, such as improving quality life, achieving social justice and engaging in interventions aimed at addressing the social determinants of national and global health”. Ziperstein et al. (2015) further establish that public universities are in the majority in offering the dual programme, and rate it highly as a valuable course that attracts high-quality, dedicated and motivated students intrigued by the trans-disciplinary health practice.

In another work by Ruth, et al. (2015), it was explained that most of the graduates in MSW/MPH were satisfied with their careers and that the work place seems to be employing more of them in many varied settings and roles. It was also reported, based on the work of (McClelland, cited in Ruth et al., 2006), that this move could have been encouraged by higher salaries, more opportunities for a wide-lens preventive social work and discontentment with the normal clinical practice. They established that more engagement of the graduates in this dual-programme was in community mobilisation, programme evaluation, health promotion, policy planning
and analysis but were also actively involved in all other aspects of public health such as surveillance, research and new health problem identification.

Chandrika (2015) reports on the positive developments of public health in India, but calls for the recognition, role and intervention of social workers in public health. He further emphasises their presence in public health, in severe and chronic care facilities and the provision of services in health education, crisis intervention, counselling and case management. He reports that social workers play a significant role in organising, building awareness and mobilising communities and continuous involvement in assessing social factors that add to the promotion of good health and disease control by providing social determinants of health and wellbeing.

Another positive development was the merger of three units in Malawi, namely, the office of Public Health Studies at the University of Hawai'i at Manoa, the Department of Social Work and the Center on Aging under the Myron B. School of Social Work. The merger was informed by the long collaboration between the three units and formed one of the university’s strategic goals in promoting more experiential learning opportunities across the curriculum to increase transdisciplinary opportunities, student success and research that will develop policies and practices that will enhance lives in communities and expand collaborations and sharing of expertise with community organisations (Braun et al., 2017).

Ruth again cited in Van Pelt (2009) explains how social workers in public health contribute immensely in bridging the gap between research and practice, individual and community and services and policies. They contribute in the development of policies and legislation that impact on services for individuals and the community. Chandrika (2009) further highlights knowledge and skills of public health social workers in organisational culture and change, characteristics of health systems, dimensions, use and access to health care, identifying public laws, regulations and policies related to specific programmes, principles and theories of population-based health and empowerment.
3.5 Conclusion
This study asserts that the significance of public health social work worldwide cannot be over-emphasised. Developing countries are likely to benefit more because of the more burdensome health challenges experienced in these settings. South Africa still lags behind in this area even though social workers in this country have long been engaged in public health promotion activities. The efforts of the profession are not given the acknowledgement deserved due to the competing needs of various health sectors. The challenge for the future for this profession is vigorous marketing by relevant bodies. Already the American Public Health Association and the Association of State and Territorial Public Health Social Workers have developed standards and competencies for public health social work in America (Ruth et al., 2008). Countries like Australia, New Zealand and Malawi are already expanding in this dual profession. The hope is for these strides to be copied and emulated in other developing countries, including South Africa.
CHAPTER 4
DATA PRESENTATION, ANALYSIS AND INTERPRETATION

4.1. Introduction
This chapter addresses the presentation, analysis and interpretation of data collected among the women of Matebeleng village through semi structured face-to-face individual interviews with six participants and the focus groups of nine and seven participants respectively. The findings will be presented according to the following themes: Knowledge and awareness of cervical cancer in general, ways in which women can contract cervical cancer/ risk factors, awareness of the available vaccine to prevent HPV, perceptions about cervical cancer screening, the views on the process and procedure involved and lastly, awareness of screening programmes offered by the government.

4.2. Demographic characteristics of participants
4.2.1 Age
Table 2: Age of Participants

<table>
<thead>
<tr>
<th>Age of participants</th>
<th>Number of respondents</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>35 – 40</td>
<td>7</td>
<td>31.8</td>
</tr>
<tr>
<td>41- 50</td>
<td>6</td>
<td>27.2</td>
</tr>
<tr>
<td>51- 55</td>
<td>9</td>
<td>40.9</td>
</tr>
</tbody>
</table>

The racial makeup of participants is black. The age of participants ranged from 35 to 55 with an average age of 46. This age group was selected because of its susceptibility to the disease as supported by the (WHO, 2014) stating that cervical cancer is rarely seen in women less than 20 years of age. It is mostly diagnosed in the middle-aged women with half of those between 35-55 years of age.
4.2.2 Educational status

Table 3: Educational status of participants

<table>
<thead>
<tr>
<th>Level of education</th>
<th>Number of respondents</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade 1 – 4</td>
<td>9</td>
<td>40.9</td>
</tr>
<tr>
<td>Grade 5 - 8</td>
<td>9</td>
<td>40.9</td>
</tr>
<tr>
<td>Grade 9 - 12</td>
<td>2</td>
<td>9.0</td>
</tr>
<tr>
<td>Other/no formal education</td>
<td>2</td>
<td>9.0</td>
</tr>
</tbody>
</table>

The above table shows that the majority of women, eighteen of them have lower educational status (lack of high school education), only two have high school education and the other two have no formal education at all. Ali et al. (2012) assert that due to poverty and lack of education, prevention and treatment of cervical cancer are a challenge especially in rural communities. Women who cannot read and write are likely not to benefit from media information which is usually displayed and disseminated in English as indicated in the text but the majority of the women in this village do not have that opportunity.

4.2.3 Years residing at Matebeleng village

Table 4: Participant’s years of residence at Matebeleng village

<table>
<thead>
<tr>
<th>Years of residence</th>
<th>Number of participants</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 5 years</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Between 5 – 10 years</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Between 10 – 15 years</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Between 15 – 20 years</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>More than 20 years</td>
<td>22</td>
<td>100</td>
</tr>
</tbody>
</table>

All the participants (100%) were born and bred in Matebeleng village. A small rural poor community just outside Mokopane. A community that lacks the basics of the basic needs like water, toilet system of any kind. This factor assisted the study in determining the authenticity of the baseline information and the uniqueness of the experiences of women in this remote village over a long period of time.
4.2.4 Marital status

Table 5: Marital status of participants

<table>
<thead>
<tr>
<th>Marital Status</th>
<th>Number of participants</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single</td>
<td>12</td>
<td>54.5</td>
</tr>
<tr>
<td>Married</td>
<td>7</td>
<td>31.8</td>
</tr>
<tr>
<td>Divorced</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Widowed</td>
<td>3</td>
<td>13.6</td>
</tr>
</tbody>
</table>

Some studies that attempted to establish how women became affected with HPV and their susceptibility used marital status as a variable. This study was exploring their knowledge and attitudes towards the disease irrespective of their marital status because earlier in the text it was explained that marriage does not necessarily protect women from sexually transmitted infections.

4.2.5 Employment status

Table 6: Employment status of participants

<table>
<thead>
<tr>
<th>Employment status</th>
<th>Number</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employed</td>
<td>2</td>
<td>9.0</td>
</tr>
<tr>
<td>Unemployed</td>
<td>19</td>
<td>88.3</td>
</tr>
<tr>
<td>Self-employed</td>
<td>1</td>
<td>4.5</td>
</tr>
</tbody>
</table>

The figure above indicates that there is high unemployment rate of women in this community. Only three participants out of twenty-two are employed and this is coupled with lack of education and poverty, factors that have been proven to affect knowledge and awareness of cancer of the cervix in that the older and illiterate women were less likely to avail themselves for screening due to insufficient information and/or financial constraints (Kamphinda-Banda, 2010; Aswath et al, 2012; Asthana & Labani, 2013). The women in this community have a narrow opportunity to engage with other women elsewhere, their movement is restricted by lack of transport, financial constraints and being secluded from development in general.
Section B: Qualitative Responses of the Study

The following are the findings that will be discussed in the study; incomplete information about cervical cancer, sources of information, risk factors, vaccine to prevent HPV, perceptions about cervical cancer screening: procedure involved in screening for cervical cancer, views on how the process is conducted and programmes offered by the government to prevent HPV.

4.3 Theme 1: Level of Awareness and Understanding of Cervical Cancer and Associated Risk Factors

3.3.1 Subtheme: Cervical cancer information and source

Seven participants indicated that they did not have full information about cervical cancer but had heard about it, twice as many (fifteen), said they had no knowledge of the disease. Only three had heard about it from the nurses at the local clinic or mobile clinic. Two heard about it on the radio and another two had heard about it on an encounter with other women as they were queuing for child grant. One of those who had heard from the radio indicated that the information was far from comprehensive:

“I was busy with household chores and I slightly heard on the radio about cervical cancer. I cannot remember fully what they said, but that it is a women’s disease”.

Another participant said...

“If I remember well, they just mentioned it but they were focusing on cancer of the womb (uterus), and that women should get tested to check if they have it or not”.

This comments indicated that the radio is a useful method of disseminating information to most rural communities where there is no electricity and access to other forms of media material. Perng et al. (2013) have reported the radio as the main source of cervical cancer information for underserved populations in Tanzania and further that there was a strong association between listening regularly to the radio and screening attendance. Similarly, the battery operated radio can serve as a
significant source of information in this community due to lack of electricity but the radio stations have to be sensitised and be bought in to the idea.

One of those whose information came from the clinic said that though the reasons that persuaded her to attend the clinic were the pain that she felt on her reproductive organs, the clinic sister advised her also to screen for cervical cancer:

“That is when and where I learned that feeling pain during intercourse, painful feet and menstruation in older women can be symptoms of cervical cancer.”

These findings support the value of opportunistic education about cervical cancer to clients by the health care workers in health settings and emphasise that this could be a significant strategy. Media information was found inadequately designed for women of low literacy levels in such settings (Hoque et al, 2008). This supports the researcher’s observation and concern of information that is often invisible, displayed and illustrated in English in health settings, which is often a disadvantage to the low literacy groups.

4.4 Theme: 2 Risk Factors

4.4.1 Subtheme: Multiple partners
Three participants responded that a woman with multiple partners is at risk of having cervical cancer.

Another participant reported:

“This thing is like HIV/Aids then, because one also gets it by sleeping with many people.”

4.4.2 Subtheme: Early sexual debut
Two participants indicated that having sexual intercourse at a young age, can put a woman at risk of having cervical cancer.
4.4.3 Subtheme: Chemicals
One participant indicated that the use of bath soaps can aggravate the risk of getting cervical cancer

“...because these soaps contain chemicals which put women at risk of getting the disease, especially these perfumed ones”.

4.4.4 Subtheme: Inflammation in the uterus
One participant indicated that (Sekgalaka) inflammation and allergies in the womb can cause cervical cancer.

The above views are supported by findings that noted that majority of women from under-developed communities had a significant amount of incorrect information whereas the majority of them knew very little about cervical cancer. Many never went for any screening due to lack of information and knowledge (Schneider, 2004; Ndlovu, 2011; Aswath et al, 2012; Asthana & Labani, 2013).

4.5 Theme 3: Vaccine to Prevent HPV
Three participants (N=3) indicated that they had heard about HPV vaccine, from their daughters who were given consent forms at school:

“They were told that the forms were about the prevention of cervical cancer...... I tried to read, even though some parts of the text were difficult to understand”.

One participant further reported:

“I remember seeing those letters, HPV. I did not know what they really meant, I just signed for compliance because I trust the school.”

The rest of the nineteen participants, said that they had never heard about the vaccination for the prevention of cervical cancer. An earlier study by Botha et al. (2015) reported that interactive communication (verbal interactive information
sessions) rather than written one especially in low literacy level areas may be a key strategy to improve parents’ consent and understanding of HPV virus. In this study, the parents were not invited to any pre-vaccination information session, only the learners were given some explanation and consent forms for parents to sign.

4.6 Theme 4: Perceptions about Cervical Cancer Screening

Only three of the participants indicated that they have been examined and received some explanation about the importance of being examined even though they never received the results. All three participants were tested by chance as they visited the clinic for other concerns and did not receive any feedback. All other nineteen participants highlighted that they have never been tested for cervical cancer, however this discussion enlightened them to realise the importance.

One participant reported:

“I was never given the results, I did not ask for them, I expected them to give them to me during my next visit…… the nurses should provide results as soon as they are available”

In support of this finding, Moodley (2009) highlights that in African countries it seems like women are not counselled about this important disease by the health personnel and those who get screened never return for results perpetuated by lack of follow up mechanisms that are in place.

4.6.1 Subtheme: The process

One participant reported that:

“I was scared and uncomfortable, I did not know what had to happen, but I knew it was the right thing to do for my health’s sake”.

Two others further indicated that the health professionals did not prepare and give them full relevant information prior to being screened hence they were ambivalent. The findings by Ali et al. (2012) emphasise the communication of the nursing staff
with women, indicating the value of counselling before and after the test and that in most cases there is poor communication, poor feedback system and coordination between screening centre and treatment centres. In addition is, Ndeijjo et al. (2016) reporting that discussion of cervical cancer should form part of the routine between the health workers and women whenever they visit health care settings. The challenge is that women in this village hardly visit the hospital or clinic because of the distance, lack of transport and financial constraints. They simply await the scheduled mobile clinic which is very erratic.

Another participant felt that health professionals should visit villages that do not have clinics to perform screening about three times in a year to reach out to more women. The researcher is of the opinion that once a year rather than three times is more doable due to the burden of other diseases on the health care system and lack of other resources as mentioned earlier in the text. Denny (2010) emphasises the significance of coverage than frequency, explaining that if more women are screened, even if it is just once in a ten-year period, two thirds reduction in cervical cancer from the set goal, can be anticipated. Mamahlodi et al. (2013) further recommend that focus should be on factors that contribute to low coverage rates and follow up treatments for women with abnormal diagnoses to strengthen the screening programme in Limpopo.

### 4.4.2 Subtheme: The procedure

Three participants explained that the discharge from the vagina is taken and then examined. The other two participants further reported they had heard that screening for cervical cancer is painful, while another four had heard that the process is painful and walking becomes slightly difficult, as they were informed by those who were screened before.

The other participant who had screened before added:

“I would rather say it is a discomfort than pain”.

### 4.7 Theme 4: Screening Programmes Offered by the Government

The five participants indicated that they had heard of these programmes on the radio, however they believe that the programmes are not always accessible because
they have never observed any offered in their community. The rest of the seventeen other participants reported that they are not aware of any government operated programmes that deal with cervical cancer examination, these findings are supported by the study of Snyman and Herbst (2013) reporting that the absence of the effective cervical cancer screening programme in South Africa is another reason for low coverage and majority of women not reporting for cervical cancer screening.

4.8 Subtheme 5: Willingness to avail oneself for screening

Nineteen, being the majority of the participants indicated that should the opportunity to be tested prevail, they would gladly present for screening even though they had heard that it is painful. They further reported their readiness to be examined so that the cancer could be diagnosed earlier and give opportunity for treatment should they present with the signs of the disease. The three previously screened participants mentioned that they would still present for another screening should it be made available.

4.9 Conclusion

Data collected and interpreted, shows that there are gaps in education and training of cervical cancer especially in hard to access communities of South Africa. Health workers should use the opportunistic visits by rural women in health settings for education and training of reproductive health whilst strategies to reach to them are still being sought.
CHAPTER 5
SUMMARY OF THE MAJOR FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction
The researcher has conducted a thorough investigation and observed all ethical considerations on Perceptions and attitudes of rural-based women of Matebeleng village- Limpopo Province towards cervical cancer: risk factors, screening tests and the HPV vaccines. This is the final chapter and the aim and objectives are restated. The major findings are drawn from an interview guide as well as focus groups conducted with the rural women of Matebeleng village. This chapter has been concluded with recommendations drawn from the major findings.

5.2. Restatement of the Aim and Objectives of the Study
5.2.1 Aim of the study
The aim of the study was to explore the perceptions and attitudes of rural women of Matebeleng towards cervical cancer: its risk factors, screening tests and the vaccines. The study has met the objectives, though more could still be followed up with the second part of the first objective relating to sexual practices.

5.2.2 Objectives of the study
These were:
- To assess whether rural women understand the risk factors associated with cervical cancer including HPV (virus causing cc) and that it is contracted through sexual practices (oral, vaginal and anal).
- To find out rural women’s awareness of available cervical cancer screening tests and HPV vaccine
- To determine whether low socio-economic status amongst rural women contribute towards the development of cervical cancer.
- To investigate women’s awareness of government out-reach programmes on cervical cancer
5.3 Major Findings of the study

 Level of awareness and understanding of cervical cancer and associated risk factors.

The research findings show that the majority of women in this rural area never heard of cervical cancer and only a few received inadequate information. A few had some but inadequate information of the risk factors and some information was incorrect. The sources of information were the radio, health clinic and random women. Potential sources of information in focus groups described the erratic visits of the mobile clinic scheduled to visit monthly and lack of information on cervical cancer even when it is available. Lack of information, knowledge and awareness of cervical cancer among women in rural areas is still a cause for concern. The women in this village lack knowledge and awareness of cervical cancer and have no idea of its relationship with HPV. These women subsequently could not avail themselves for screening due to lack of awareness of the disease itself, how to prevent it and its treatment.

 Perceptions about cervical cancer screening

Very few participants had only once been screened and the majority had never previously been tested for cervical cancer. They heard for the first time about screening in the focus group. The concerns of those who were screened were lack of feedback from the clinic nursing staff after the test (never got results), lack of adequate preparation and information before been screened to allay fear and doubt of the unknown. The screening of the very few participants occurred by chance and their screening experiences did not motivate re-screening. This highlights the necessity and significance for prescreening counselling for women by the nursing personnel. The significant finding is the women’s positive attitude and willingness to screen despite the experiences of those who have screened and the idea that it might be a painful procedure.

 Vaccine to prevent HPV

A few became aware of the vaccine when their children brought the consent forms from school even though they did not exactly understand the content, the rest did not
know anything about HPV vaccines. The school health committees could take the opportunity of pre-vaccination awareness sessions with learners to include parents and provide education about cancer of the cervix.

Screening programmes offered by the Government
An insignificant number of women heard of cervical cancer out-reach programmes for rural communities on the radio but had never seen any in their community. Mamahlodi et al. (2013) in their study revealed that the Limpopo health Department’s plan was to promote regular media campaigns to inform, educate and invite women at community level for screening. Little is known whether the plan was ever implemented elsewhere. This community has never benefited from the government out-reach programmes to promote screening and vaccination for prevention of cervical cancer.

Socio-economic factors contributing towards the development of cervical cancer
As shown by the demographics, lack of education and unemployment restrict the women of this village to access information and health care. In addition, and a challenge is that, generally women in this village hardly visit the hospital or clinic because of the distance, lack of transport and financial constraints, they rely on the scheduled mobile clinic which is very erratic. This factors could lead to late presentation should the women be infected with HPV and result in loss of life.

5.4 Conclusions
The challenge of cervical cancer is perhaps too massive to be solely attended to by one sector of health personnel due to a large population in the remote rural areas that still need to be accessed on education of cervical cancer. The modes of disseminating information, capacity to carry out the task and the means of collaborating with other sectors using a multisectoral approach could perhaps be examined in Limpopo. It seems like the accessible communities continue to benefit whilst the remote hard to reach continue to be left behind in health care coverage.
5.5 Recommendations

The methods of disseminating information to rural women in their distinct contexts should be examined. Conventional traditional ways of reaching out to rural women could perhaps produce improved results through the integrated approach involving multi-disciplinary teams in educating under-resourced rural communities.

- The use of African languages and material that is user-friendly to the low literacy rural populations should be considered.
- Explore the buy-in of traditional leaders who are still influential in rural communities to gather and motivate women to receive health education at the “Dikgoro/mesate”.
- Application of an integrated approach by the National Department of health: Collaboration with other stakeholders such as Department of Social Development (targeting social workers in health settings and promotion of public health social work), Community Development practitioners, Community-based Organizations and/or religious groups.
- It is therefore recommended that MSW/MPH dual programme be implemented in South Africa.
References


Schneider, J. (2004). Cervical Cancer Screening in Rural South Africa: An analysis of the awareness, attitudes, and practices of women served by the Masincedane Clinic. *ISP Collection, 500.*


Ziperstein, D., Ruth, B. J., Clement, A., Marshall, J. W., Wachman, M., & Velasquez, Health: Results From a National Survey. *Advances in social work*, 16 (2), 406.
Annexure A: Consent Form

CONSENT OF THE SOCIAL WORK RESEARCHER
I am Motshidisi Kwakwa, an MA student from the University of Limpopo researching on perceptions of rural women of Matebeleng village towards cervical cancer and their attitudes towards screening tests. My study leader is Prof JC Makhubele. The following is information about the study so that you can make an informed decision.

1. PURPOSE OF THE STUDY
To explore the perceptions of rural women of Matebeleng village towards cervical cancer and their attitudes towards screening tests.

2. PROCEDURE
Participation in this study is voluntary, you have the choice to discontinue with the interview at any stage should you feel uncomfortable without providing any reason.
- You have the right to choose the place of the interview within the village where confidentiality will be possible.
- With your permission, the interview will take 45-60 minutes long.
- The interview will be audio-recorded.

3. CONFIDENTIALITY
All the information including your identity and responses in this interview will be kept confidential and only used for research. All audio-recorded materials, transcripts of the interview and completed interview schedules will be safely stored in a locked cabinet in the researcher’s office and in her computer which is password protected. All material will then be stored in a store room at the Department of Social Work at the University of Limpopo, prohibiting all people, including the researcher and study leader form having access to the material. The focus interviews will be held prior to individual interviews in a quiet place to avoid interruptions. The researcher will maintain anonymity as far as possible during the research process.
4. DECEPTION OF RESPONDENTS
You as the participant will be briefed about the aim of the research and no information will be withheld from you in order to allow you to make an informed decision regarding your participation in the research and to ensure no deception.

5. BENEFITS AND RISKS
- The information gained from the research can assist Social workers in health care settings and the health professionals identify gaps in knowledge of cervical cancer in rural communities and encourage development of relevant programmes.
- It can also add on the existing body of knowledge regarding the role of Social Workers in promoting women public health issues highlighting how social factors can impact on the reception of good intended services.
- It is a low risk case study however in case of any harm, participants will be referred to appropriate service providers.

6. COSTS
There will be no cost to you as a result of your participation in this study.

7. PAYMENT
You will receive no payment for participation. You are welcome to ask any questions to the researcher before you decide to give consent. You are also welcome to contact me as the student or my study leader if you have any further questions concerning your participation in the study.

8. VOLUNTEER STATEMENT
I agree that the procedures and process of the interview have been clearly explained to me and that my identity and responses will be kept private and confidential and that I may choose to discontinue with the interview at any stage should I feel uncomfortable without providing any reason. I also consent that the interview be audio recorded digitally and electronically so that data provided be analysed and findings of the study reported for research purposes. This is the only place where your name will appear otherwise you can mark with an “X”.

76
Name of Participant__________________________

Signature of Participant______________________

I, Motshidisi Kwakwa as the interviewer have explained all procedures to be followed with the interview, the risks and the benefits involved and my ethical obligations.

Signature of Interviewer_____________________
Cell no: Mrs. MM Kwakwa (0824377017)
Cell no: Prof JC Makhubele: 084 712 2913/015 268 2291

9. FEEDBACK OF FINDINGS
The findings of the research will be shared with you as soon as it is available if you are interested.

We want to thank you for participating in this study.

........................
Mrs. MM kwakwa:
MA student in Social Work

........................
Prof JC Makhubele
Study Leader
Annexure B: Interview Guide

Perceptions of rural women of Matebeleng village - Limpopo Province towards cervical cancer and screening tests

1. Information on participant's demographics

1.1 **Age in years**

<table>
<thead>
<tr>
<th>Age Range</th>
<th>Count</th>
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</thead>
<tbody>
<tr>
<td>35 – 40</td>
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</tr>
<tr>
<td>41 – 50</td>
<td></td>
</tr>
<tr>
<td>51 – 55</td>
<td></td>
</tr>
</tbody>
</table>

1.2 **Level of education**

<table>
<thead>
<tr>
<th>Education Level</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade 1 – 4</td>
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<td>Grade 5 – 8</td>
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<tr>
<td>Grade 9 – 12</td>
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<tr>
<td>College</td>
<td></td>
</tr>
<tr>
<td>University</td>
<td></td>
</tr>
<tr>
<td>Other (No formal education)</td>
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</tr>
</tbody>
</table>

1.3 **Years residing at Matebeleng**

<table>
<thead>
<tr>
<th>Residence</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 5 years</td>
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<td>Between 5-10 years</td>
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</tr>
<tr>
<td>Between 11-14 years</td>
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</tr>
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<td>Between 15-20 years</td>
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</tr>
<tr>
<td>More than 20 years</td>
<td></td>
</tr>
<tr>
<td>Other (Specify)</td>
<td></td>
</tr>
</tbody>
</table>
1.4 Marital status

<table>
<thead>
<tr>
<th>Single</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Married</td>
<td></td>
</tr>
<tr>
<td>Divorced</td>
<td></td>
</tr>
<tr>
<td>Widowed</td>
<td></td>
</tr>
<tr>
<td>Other (Specify)</td>
<td></td>
</tr>
</tbody>
</table>

1.5 Employment status

<table>
<thead>
<tr>
<th>Employed</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Unemployed</td>
<td></td>
</tr>
<tr>
<td>Self-employed</td>
<td></td>
</tr>
<tr>
<td>Other (Specify)</td>
<td></td>
</tr>
</tbody>
</table>

2. Level of awareness and understanding of cervical cancer and associated risk factors

2.1 Tell us what you know about cervical cancer (use follow up questions (probe) for further clarity)

2.2 Explain how a women contracts cervical cancer

2.3 What are the causes or risk factors associated with cervical cancer? (Probe)

2.4 Have you ever heard of the available vaccine to prevent HPV which is believed to cause the development of cervical cancer? (Probe)

3. Attitudes towards screening

3.1 Have you ever been screened for cervical cancer? Probe for frequency and where the testing took place

3.2 Do you know what actually happens during the screening process/procedure?

3.3 What do you think of the screening process?

3.4 Are you aware of any cervical cancer screening programmes offered by the government? (Probe)

3.5 Would you go for screening should the opportunity avail itself?
Annexure C: Tlhahlo ya dipoleidišano

1. Tshedimošo ka ga maemo a tša taodišophelo a mokgathatema.

1.1 Mengwaga

<table>
<thead>
<tr>
<th>Range</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>35 – 40 mengwaga</td>
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<tr>
<td>41 – 50 mengwaga</td>
<td></td>
</tr>
<tr>
<td>51 – 55 mengwaga</td>
<td></td>
</tr>
</tbody>
</table>

1.2. Maemo a tša Thuto

<table>
<thead>
<tr>
<th>Grade</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade 1 – 4</td>
<td></td>
</tr>
<tr>
<td>Grade 5- 8</td>
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<tr>
<td>Grade 9 – 12</td>
<td></td>
</tr>
<tr>
<td>Kholetšhe</td>
<td></td>
</tr>
<tr>
<td>Yunibesithi</td>
<td></td>
</tr>
<tr>
<td>Tše dingwe</td>
<td></td>
</tr>
</tbody>
</table>

1.3. Mengwaga yeo o dutšeng Matebeleng

<table>
<thead>
<tr>
<th>Description</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mengwaga ya ka fase</td>
<td>ga 5</td>
</tr>
<tr>
<td>Mengwaga ya magareng</td>
<td>ga 5-10</td>
</tr>
<tr>
<td>Mengwaga ya magareng</td>
<td>ga 11- 14</td>
</tr>
<tr>
<td>Mengwaga ya magareng</td>
<td>ga 15-20</td>
</tr>
<tr>
<td>Mengwaga ya go feta 20</td>
<td></td>
</tr>
<tr>
<td>Yenngwe (Laodiša)</td>
<td></td>
</tr>
</tbody>
</table>

1.4. Maemo a Lenyalo
Ga se ke nyalwe
Ke nyetšwe
Ke hladile
Ke hlokofaletšwe ke molekane
Yenngwe (Laodiša)

1.5. Maemo a tša Mošomo

Ke a šoma
Ga ke šome
Ke moipereki
Yenngwe (Laodiša)

2. Maemo a tsebo le kwešišo ka ga kankere ya molomo wa popelo le mabaka ao a ka beago mosadi kotsing ya bolwetši bjo

2.1 Re botše seo o se tsebago ka kankere ya molomo wa popelo (šomiša/diriša dipotšišo tšeo di filwego, go hwetša hlahollo yeo e kwešišegago (Hlotlo)
2.2 Laodiša ka fao mosadi a ka swarwago ke kankere ya molomo wa popelo.
2.3 Naa kankere ya molomo wa popelo e hloiswa ke eng, gona ke mabaka afe ao a ka beago mosadi kotsing ya go swarwa ke bolwetši bjo? (Hlotlo)
2.4 Naa o ile wa kwa ka moento oo o lego gona wa go thibela HPV yeo go dumelwago gore e hlola kankere ya molomo wa popelo? (Hlotlo)

3. Maikutlo mabapi le go hlahlobiwa

3.1 Naa o ile wa hlahlobiwa ge eba o na le kankere ya molomo ya molomo wa popelo? Botšišiša ka ga bontši bja mabaka ao diteko di dirilweng.
3.2 Naa o tseba seo se diragalago nakong ya ge mosadi a hlahlobiwa?
3.3 O nagana eng ka tshepedišo ya go hlahlobiwa?
3.4 Naa go na le mananeo a go hlahloba kankere ya molomo wa popelo ao a tsebago gomme a sepetša ke mmušo? (Hlotlo)
3.5 Naa ge o ka fiwa sebaka sa go hlahlobiwa o ka dira bjalo?
Annexure D: Ethical Clearance

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TURFLOOP RESEARCH ETHICS COMMITTEE CLEARANCE CERTIFICATE

MEETING: 05 July 2016
PROJECT NUMBER: TREC/66/2016: PG
PROJECT:
Title: Perceptions of rural women of Matebeleng Village – Limpopo Province towards cervical cancer and their attitudes towards screening tests
Researcher: Ms WMM Kwakwa
Supervisor: Prof JC Makhubele
Co-Supervisor: N/A
School: Social Sciences
Degree: Masters in Social Work

PROF TAB MASHEGO
CHAIRPERSON: TURFLOOP RESEARCH ETHICS COMMITTEE

The Turfloop Research Ethics Committee (TREC) is registered with the National Health Research Ethics Council, Registration Number: REC-0310111-031

Note:
i) Should any departure be contemplated from the research procedure as approved, the researcher(s) must re-submit the protocol to the committee.
ii) The budget for the research will be considered separately from the protocol. PLEASE QUOTE THE PROTOCOL NUMBER IN ALL ENQUIRIES.