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An Assessment of Knowledge of and Attitudes towards Prostate Cancer Screening among Men Aged 40 to 60 Years at Chitungwiza Central Hospital in Zimbabwe

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Abstract:

Objective: to assess the knowledge of prostate cancer and screening practices among males aged 40 to 60 years.

Design: descriptive survey

Setting: The study was carried out at one of the Chitungwiza Central hospital in Harare Zimbabwe a referral hospital and the study participants were drawn from the hospital outpatient departments

Methods: A total of 200(n=200) males aged 40 years to 60 years who attended the central hospital outpatients department and casualty department and had no previous prostate cancer diagnosis were interviewed between March 2014 and December 2014.

A simple random sampling was used and a sample of 200 adult males aged between 40 – 60 who were then interviewed using a structured questionnaire. The Health Belief Model was used based on the assumption that knowledge of prostate cancer will influence men to seek screening early.

Conceptual framework: The Health Belief Model was used.

Results:

The result of the study indicates that men have no adequate knowledge regarding prostate cancer screening. Despite the fact that 68% of the respondents had heard about prostate cancer screening 72% of the participants did not know about the screening methods and 68% did not know where to go for screening. 76% of the participants did not know about self prostate examination.

A total of 52% of the participants got the information from family, friends and the newspapers. Newspapers do not contain detailed information; and family and friends may report inaccurate information. This resulted in men not having adequate knowledge on screening procedure It was recommended that Institutions should have Well Men Clinics, where men can go and get counseling on health issues and be taught about the benefits of prostate cancer screening. Men usually do not frequent health institutes like hospitals and clinics; it is difficult to come into contact with a health men at these institutes, so promotion of prostate cancer screening can be done through the media. Using churches as well as social networks

Health personnel education should be engineered more towards educating the cadres on the benefits of primary prevention of diseases such as prostate cancer. Nurses should be able to initiate programs to promote early detection of diseases. Screening for prostate cancer results in early detection of the disease hence early treatment resulting in reduction of complications and deaths.

Keywords: Prostate cancer, African men, knowledge, attitudes, screening methods

1. Introduction

Knowledge is the basis on which individuals make informed decisions concerning their health and the health of their family. The Health Belief Model states that if an individual has a positive expectation that by taking recommended action, he will avoid negative health condition and can successfully take recommended action. Glanz, Rimer and Lewis (2002). This study therefore is based on the above model, believing that is people know the preventive measures of prostate cancer they will seek the medical advice.

Hoffman (2013) describes prostate cancer as cancer of the prostate gland, a small gland in men that is located below the urinary bladder and above the rectum. The prostate produces fluid that helps carry spermatozoa during ejaculation. Desousa, Sonavane and Mehta (2012), states that prostate cancer is characterized by both physical and psychological symptomatology. Depression, anxiety, stress, fatigue, pain, and psychosocial factors all affect the patient with prostate cancer. Impotence, erectile dysfunction, sexual issues and incontinence are also present in these patients. All men, especially in the Zimbabwe African Culture where manhood is valued by reproduction consider sexual dysfunction seriously.. The National Cancer institute of America (2008), claims that a man's lifetime risk of acquiring prostate cancer is one in six men (1 in 6). The report further states that twenty eight thousand, one hundred and seventy (280,170), deaths from the disease were anticipated in the United States in 2013. This makes prostate cancer the most frequent nondermatological cancer among American males. These anticipated death rates have prompted the researcher to determine whether the respondent were aware of this perceived threat.

The American Cancer Society, (2008) reported that prostate cancer occurs in men between the ages of 40 to 60 years. Bloom, Stewart, Oakley-Girvans, Banks and Chang (2006) in their study in America stated that prostate cancer incidence rates are 50% higher in African-American men as compared to among European-American men. Related mortality rates are twice as high among African American men as compared to among European-American men. African men are at high risk of getting prostate cancer. Chitungwiza city has a population of African men, who due to their ethnicity and age are likely to acquire prostate cancer in their lifetime. The researcher intended to ascertain whether participants in the study had information on their susceptibility to the disease.

1.1. Statement of the Problem

Rebbeck, Zeigler-Johnson, Heyns and Gueye (2011) in a study carried out in Sub-Saharan Africa stated that prostate cancer is reported to be the leading cancer in Sub-Saharan Africa. The number of prostate cancer deaths is expected to double in the next 20 years globally. In Zimbabwe there has been a significant rise in males being diagnosed with prostate cancer. According to Chokunonga, Borok, Chirenje and Nyakabau (2011), there has been a rise from 13.4% to 19.7% since 2010. At the Chitungwiza Central hospital, unpublished records show that 3.5% males have been diagnosed with prostate cancer from January to May 2013 as compared to 0.2% who were diagnosed from October to December 2012. Despite this raised incidence of prostate cancer, there is only one well men clinic in Zimbabwe (Harare), which provides screening services. Chitungwiza Central Hospital does not offer routine screening to undiagnosed men. There are no available studies that have been conducted to assess knowledge regarding prostate cancer screening in Zimbabwe. Therefore, this study seeks to find out if males aged 40 to 60 years have any knowledge regarding prostate cancer screening and fill in the gap.

1.2. Purpose of the Study

The purpose of the study was to assess whether African males aged between 40 to 60 years have knowledge regarding prostate cancer screening since they are more susceptible to the condition.

1.3. Conceptual Framework

The Health Belief Model is the conceptual framework that was used by the researcher. The Health Belief model is a psychological model that attempts to explain and predict health behaviours. This is done by focusing on the attitudes and beliefs of individuals. The health believes model is based on the assumption that a person will take health related action if that person, feels that a negative health condition can be avoided. The individual has a positive expectation that by taking a recommended action, he will avoid negative health condition, believes that he can successfully take recommended action. Glanz, Rimer and Lewis (2002).

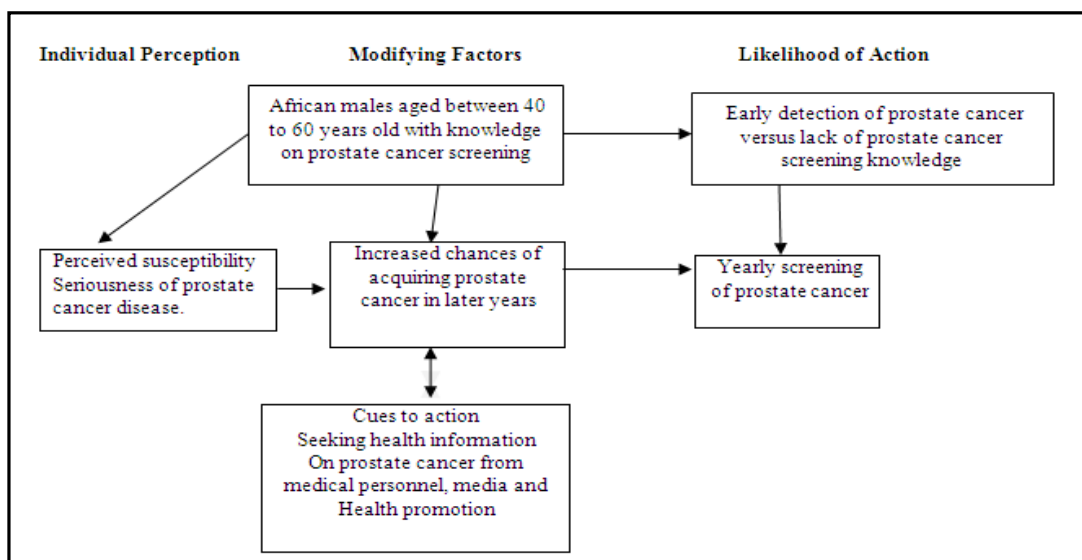


Figure 1: Diagram of the health believe model, Adapted from Glanz, Rimer and Lewis (2002)

2. Review of Literature

Several studies have been carried out elsewhere on knowledge of prostate cancer screening but such studies are minimal in Zimbabwe. Bloom, Stewart, Oakley-Girvans, Banks and Chang, (2006) carried out a study to determine the extent to which African-American men were aware of prostate cancer as well as ascertain whether the men were aware of prostate cancer screening by either digital rectal examination or prostate specific antigen test. The study was done on men aged between the ages of 40 and 74 years, with a family history of prostate cancer. The results revealed that the men had poor knowledge of prostate cancer with an average percentage of 61.9% and 68.4% having correct screening information respectively. Chitungwiza has a 100% male population of Africans who by their ethnicity alone are at high risk of having prostate cancer. The researcher required to establish whether the male population aged between 40 to 60 years were aware of their risk and whether they have knowledge regarding annual screening of prostate cancer.

Villarreal Garza et al (2010) in a study to explore the level of knowledge about cancer screening among medical students in Mexico City, using a questionnaire came to the conclusion that further efforts should target towards an increase in educational and training programs in Mexico City. In Zimbabwe, literature is minimal with regards to prostate cancer and prostate cancer screening. Therefore the researcher wanted to establish whether men had access to the literature in order to make informed decisions.

Forrester-Anderson (2005) conducted a study on African American men aged between 40 to 80 years from the metropolitan area of Maryland in the United States of America using an open ended questionnaire and noted that only 42% of the men were screened for prostate cancer. Most were not screened on an annual basis and he concluded that, overly, knowledge of prostate cancer screening tests was low. The majority of the participants reported that they knew little or nothing about either the digital rectal examination or the prostate specific antigen test. The men expressed a need for more information on prostate cancer. Since African-American had low knowledge levels regarding prostate cancer screening and were requesting for more information. This influenced the researcher to investigate whether males in Chitungwiza were aware that they can be screened against prostate cancer using prostate specific antigen test and digital rectal examination.

Pereira de Pavia (2011) in their study in Brazil, using a questionnaire inferred that while not the sole determinant, the dissemination of adequate knowledge regarding the examination of the prostate gland can constitute a key strategy for the formation of a positive attitude in relation to early detection of prostate cancer. Examination can be through self prostate cancer examination or blood for prostate specific antigen and digital rectal examination. Knowledge is disseminated by medical personnel, including nurses. This prompted the researcher to investigate whether men were discussing screening issues with their medical practitioners.

Woods et al (2010) in their study in America, Chicago reported that there is lack of knowledge centered on blacks not having basic information about the prostate gland, prostate problems and recognition of the need to have the prostate checked by health care providers, and that lack of participation in screening for prostate cancer by black men is influenced by several cultural factors, including knowledge. Reed-Arnold et al (2008) conducted a study in Western Australia, and concluded that there is a deficit in knowledge about prostate cancer among men in the at risk group. The deficit in knowledge encompasses areas that could delay diagnosis and treatment such as screening. With basic information about the prostate gland, prostate problems and the need to have the prostate checked annually males will participate more in prostate cancer. Lewis (2002).

McNaught and McGrowderin (2011) in Jamaica asserted that 41% of the participants in their study had never had a digital rectal examination and concluded that knowledge of prostate cancer is not enough to result in screening behavior of men in Jamaica. Kleir (2010) conducted a study on Haitian-America men and concluded that individuals who are capable of understanding health information are able to make an informed decision regarding screening for prostate cancer. Providing appropriate, culturally respectful education can reduce the devastating consequences of prostate cancer for this population and reduce the health care disparity. There is a need for health care materials to be developed in both written and oral Haitian Creole. These materials should be available at community locations frequented by men. The presentational design of such materials should be reflective of the private and personal nature of the problem. This study, therefore, investigated whether such materials are available to the study population.

Gigerenzer, Mata and Frank (2009) in a study carried out in Germany stated that making informed decisions about prostate cancer screening requires knowledge of its benefit, however country specific information on public knowledge of the benefits of screening is lacking. Ferguson (2012), in a study carried out in the United Kingdom concluded that there is lack of information and support for men from lower income group, men from these backgrounds receive less information on prostate cancer. Knowledge on the benefits of prostate cancer screening is an important factor in influencing males to make an informed decision to be screened. According to Glanz, Rimer and Lewis (2002), perceived benefits of the action taken to prevent a disease will result in a positive behavioral change. The investigator was stimulated to establish whether the participants had required information.

Arafa, Mostafa, Rabah, Danny, Wahdah and Iman, (2012) in their study in Saudi-Arabia, Egypt and Jordan noted that the percentage of participants who practiced regular prostate checkups ranged from 8 to 30% and claimed that, participants' attitudes, depends mainly on level of knowledge and quantity of information provided to the patients and their families. Such attitudes should rely on a solid background of proper information and motivation from physicians to enhance and empower behaviors towards prostate cancer screening practices. The study is being conducted on clients who are visiting Chitungwiza hospital for other medical concerns, not particularly to do with the prostate gland the researcher wants to establish whether the healthcare providers at the institution are routinely discussing prostate cancer screening with their clients.

Several studies were carried out in Nigeria regarding knowledge, attitudes and screening behaviours among Nigerian men. These studies helped to assist the researcher with insight on the knowledge gap among African men. Ajape, Babata and Abiola (2006) conducted a study on native Nigerians and found out that 78.8% have never had any information on cancer of the prostate and only

5,8% had heard about prostate cancer screening and none had ever had a prostate antigen test. He came to the conclusion that there is a remarkable lack of awareness of prostate cancer among the Nigerian native African urban populace.

Asuzu and Obeke (2012) in a Nigerian study concluded, that education has a role to play in prostate cancer knowledge, there is a need to organize enlightenment programs that will encourage men to go for screening as the majority believed that screening would be beneficial. Since education has a major role to play in prostate cancer screening, and Nigeria's urban populace was said to be lacking knowledge on prostate cancer screening.

Another study carried out by Ebuehi and Otumu (2008), in Lagos, Nigeria, 32,4% of the respondent were not aware of the prostate antigen test. They recommended that informed decision making should guide decisions to obtain screening for prostate cancer. This means that men should discuss with their doctors the nature and risk of prostate cancer, understand the benefit and risk of screening and decide whether prostate cancer screening is right for them. Researchers in Nigeria recommended that men should discuss with their doctors about prostate cancer screening in order for them to make an informed decision.

Oranusi, Mbieri, Oranusi and Nwofor in Anambra state in Nigeria (2012), noted that 92% of the respondents expressed interest in having a prostate antigen test, if recommended and only 6,4% had undergone the test in the preceding years and also came to the same conclusion that, to achieve a stage migration in prostate cancer detection in Nigeria, early detection using Prostate Specific Antigen screening should be actively driven by health personnel using the media. Prostate cancer screening and serum PSA test for screening is globally unknown among men. In Zimbabwe the media is used in various health campaigns to promote health behaviours among Zimbabwean citizens. The investigator wanted to determine if the media has had participatory role in dissemination of information on screening..

Asuzu and Omeremma (2012), in another study carried out in Nigeria, 56% of the men did not know where to go for prostate cancer screening and concluded that it is recommended that prostate cancer related public health enlightenment should be organized, especially for the males and their spouses in order to enable them to make informed decisions about going for prostate cancer screening. This highlights the low levels of knowledge that males have on prostate cancer screening, resulting in males not seeking screening annually to detect the disease early hence seek treatment early. According to the Health Belief Model one is likely to act if one is provided with information resulting in behavior change.

According to Rosenstock (1974), the earliest characteristics of the model indicate that in order for an individual to act on avoiding a disease he or she needs to believe that the occurrence of the disease would at least have some severity on some components of his or her life, that he is personally susceptible to it and that taking a particular action would be beneficial in reducing the susceptibility to that disease. In her study to determine cancer screening intention among African-American men Baker (2008) using the Health believe Model conferred that it is the seriousness the men perceive prostate cancer that will determine whether to be screened or not. Woods et al (2004), also argued that the lack of information is a barrier to appropriate communication with black men. In her study on African-American men she concluded that credible information is an important determinant for black men when making decisions about screening.

3. Methodology

The study used a quantitative descriptive design, which is a nonexperimental research design in which information regarding the knowledge of prostate cancer screening was obtained using a questionnaire. The quantitative research design enabled the researcher to collect and analyze data in numerical form. It is simple to use, cost effective and time economic. A structured questionnaire was used to collect the data and the Statistical Package for Social Sciences (16) was used to analyze the data which was then presented in graphs, pie charts and tables.

The study was carried out at Chitungwiza Central hospital, which is a referral hospital catering for people from the surrounding urban and rural set up of Chitungwiza town, Seke district as well as Epworth district.

. In this research, all males aged 40 years to 60 years who attended Chitungwiza central hospital outpatients department and casualty department were the target population. They had no previous prostate cancer diagnosis and were blacks. A sample of 200 men was selected by convenience sampling.

4. Data presentation, analysis and discussion

4.1. Demographic Data of Respondents

Figure 2 illustrates the demographic data of participants, that is age, marital status. Academic qualifications and employment status. In the study, 148 that is (74%) of the participants were between the age of 40 to 50 while 52 (26%) were between the age of 51 to 60 years old. Twelve that is (6%) of the participants were single while 140 (70%) were married and 48 (24%) were either divorced or widowed. Eight that is 4% of the participants had primary education while 84 (42%) had secondary education and (108 (54%) had tertiary education. 116 that is (58%) of the participants were employed while 12 (24%) were unemployed and 9 (18%) were self employed.

The American cancer association (2008) reported that prostate cancer occurs in men between the ages of 40 to 60 years old. The Canadian cancer institute of Health (2013) reported that prostate cancer is rarely seen in men younger than 40 years. This concurs with this study were 74% of the participant were between the age of 40 to 50 years and 13 (26%) of the participants were between the age of 51 to 60 years old. These are the ages recommended for prostate cancer screening. Most of the participants 35 that is 70% are married.

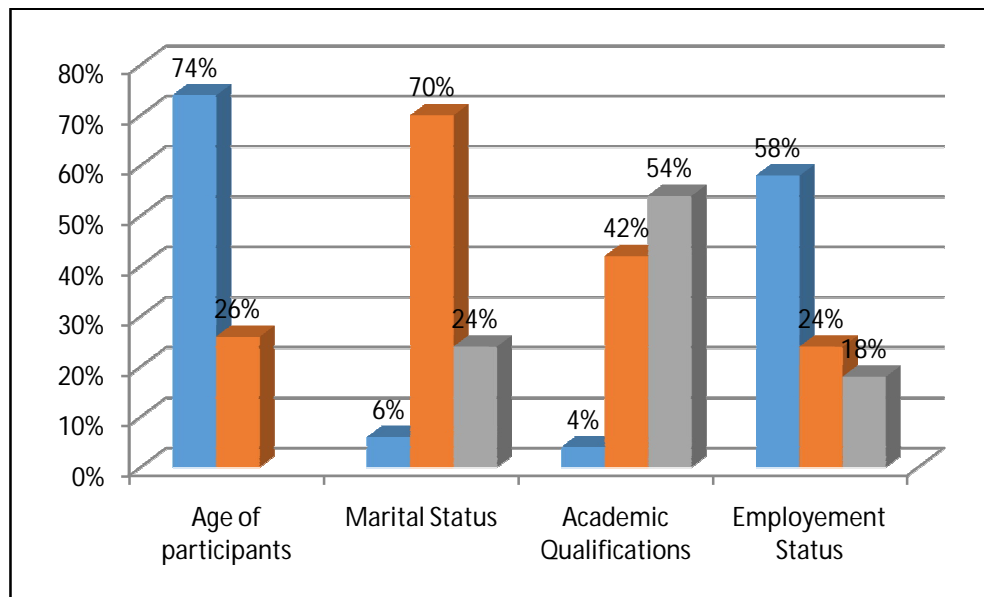


Figure 2

Key:
 Age of participants: 40 to 50 years (blue), 51 to 60 years old (orange)
 Marital status of participants: Single (blue), Married (orange), Divorced and widowed (grey)
 Academic qualifications of participants: Primary level (blue), Secondary level (orange), Tertiary Level (grey)
 Employment status of the participants: Employed (blue), Unemployed (orange), Self employed (grey)

4.2. Religion of Participants

Table 1.illustrates the religion of the participants and 196 (98%) participants were Christians while 4 (2%) of the participant were of the traditional African

Respondents	Frequency	Percent	Valid percent	Cumulative percent
Christianity	196	98	98	98
Traditional African	4	2	2	100
Total	200	100	100	

Table 1

4.3. Knowledge of the Prostate and Prostate Cancer

Tables 2 to 4 illustrate the knowledge displayed by the participants the prostate gland and prostate cancer. Table 1 illustrate that 160 (80%) participants knew that the prostate gland is male organ while 40(20%) exhibited lack of knowledge. Table 3 shows that 160 participants knew that the prostate produces fluid that carry spermatozoa and 10 lacked the knowledge. 36 (18%) participants thought prostate cancer causes impotence while 28 (14%) alleged that it caused erectile dysfunction 8 (4%) said it causes incontinence and 128 (64%) knew that it caused all of the above symptoms.

Although 80% of the participants had knowledge on the prostate and its function only 64% of the participants had information on prostate cancer. This echoes a study carried out by Bloom, Stewart, Oakley-Girvans, Banks and Chang, (2006) to determine the extent African-American men were aware of prostate cancer, as well as ascertain whether the men were aware of prostate cancer screening by either digital rectal examination or prostate specific antigen test. The study was done on men aged between the ages of 40 and 74 years, with a family history of prostate cancer. They argued that the men had poor knowledge of prostate cancer with average percentage of correct screening information being 61.9% and 68.4% respectively.

4.3.1. Knowledge on the Prostate: as Part of the Male Reproductive Organ

Respondents	Frequency	Percent	Valid percent	Cumulative Percent
True	160	80	80	80
False	40	20	20	100
Total	200	100	100	

Table 2

4.3.2. Knowledge on the Function of the Prostate: Contains Fluid that Carry Spermatozoa

Respondents	Frequency	Percent	Percent Valid	Cumulative percent
True	160	80	80	80
False	40	20	20	100
Total	200	100	100	

Table 3

4.3.3. Knowledge on the Signs and Symptoms of Prostate Cancer

Respondents	Frequency	Percent	Valid percent	Cumulative Percent
Impotence	1	36	18	18
Erectile Dysfunction	2	28	14	32
Incontinence	3	8	4	36
All the above	4	128	64	100
Total	200	100	100	

Table 4

5. Knowledge on Prostate Cancer Screening

5.1. Heard of Prostate Cancer Screening

Table 5 shows that 128 (68%) of the participants indicated that they had heard about prostate cancer screening and 16 (32%) of the participants did not know what prostate cancer screening was. This is comparable to a study conducted by Bloom, Stewart, Oakley-Girvans, Banks and Chang, (2006) to determine the extent African-American men aged between 40 and 74 years awareness of prostate cancer and prostate cancer screening by either digital rectal examination or prostate specific antigen test. They noted that the men had poor knowledge of prostate cancer with average percentage of correct screening information being 61.9% and 68.4% respectively. This differs from Nigeria where Ajape, Babata and Abiola (2006) in their study on native Nigerians found out that 78.8% have never heard any information on cancer of the prostate and only 5,8% had heard about prostate cancer screening and none had ever heard of the prostate antigen test.

Respondents	Frequency	Percent	Valid percent	Cumulative percent
Yes	128	68	68	68
No	72	32	32	100
Total	200	100	100	

Table 5

6. Source of Information on Prostate Cancer Screening

Figure 3 illustrates that Of the 68% who had the knowledge regarding prostate cancer 38 (30%) of the participants got the knowledge regarding screening from the doctors, while 23 (18%) got it from nurses and 15 (12%) got it from family and friend and the majority 52 (40%) of them got the information from the newspaper. Woods et al (2004), in a study carried out on African -American men surmises that lack of discussion about the decision to screen for prostate cancer and general lack of culturally appropriate communication with healthcare providers has created distrust, fear, fostered disconnect, and increased the likelihood of nonparticipation in prostate cancer screening among black men. Pereira de Paiva (2011) in a study in Brazil, using a questionnaire inferred that while not the sole determinant, the dissemination of adequate knowledge regarding the examination of the prostate gland can constitute a key strategy for the formation of a positive attitude in relation to early detection of prostate cancer.

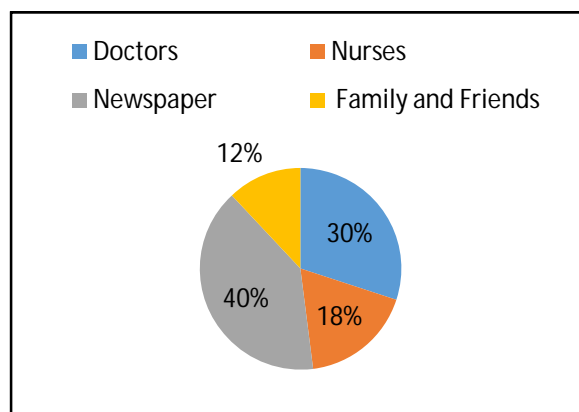


Figure 3

7. Knowledge of Screening Methods

Fig 4 illustrates Knowledge of Screening Methods. 32 (16%) of the participant knew that screening is done with digital examination as well as blood test, 72(36) said screening is done with semen, 8 (4%) saliva, 16 (8%) urine while 48 (24%) said blood and 24 (12%) said all the above.. This is echoed by Forrester-Anderson (2005) who conducted a study on African- American men aged between 40 to 80 years from the metropolitan area of Maryland in the United States of America , he noted that only 42% of the men were screened for prostate cancer. Most were not screened on annual basis and he claimed that, overly, knowledge of prostate cancer screening tests was low. The majority of the participants reported that they knew little or nothing about either the digital rectal examination or the prostate specific antigen test. The men expressed a need for more information on prostate cancer. 48% of the respondents said screening includes salivary test, semen test and urine test. The result is similar to the results obtained in Jamaica by McNaught and McGrowderin (2011), where 41% of the participants had never had a digital rectal examination and concluded that knowledge of prostate cancer is not enough to result in screening behavior of men in Jamaica. In the study the majority participants had no information regarding the screening methods used.

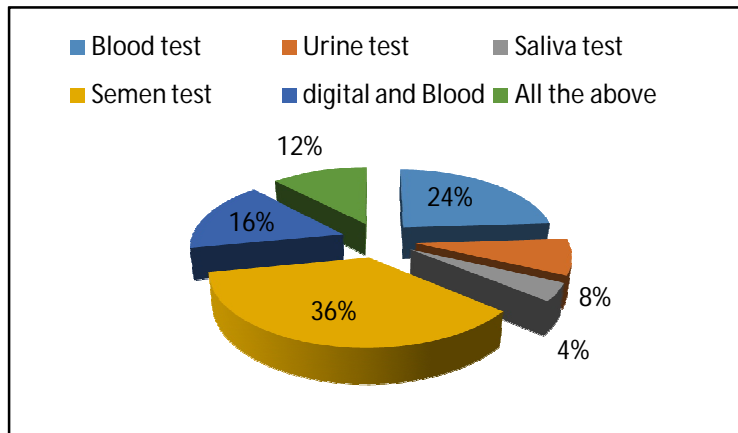


Figure 4

7.1. Knowledge on Self Prostate Examination

Figure 5 shows that 40 (20%) of the participants knew about self prostate examination while 128 (64%) did not know about self prostate examination.32 (16%) had no information on self prostate examination and prostate cancer.

Pereira de Paiva (2011) in his study in Brazil, using a questionnaire had urged that while not the sole determinant, the dissemination of adequate knowledge regarding the examination of the prostate gland can constitute a key strategy for the formation of a positive attitude in relation to early detection of prostate cancer. Examination can be through self prostate cancer examination. This also supports the Health Believe model which assumes that with the acquisition of adequate knowledge on a particular disease an individual is likely to take health related action.

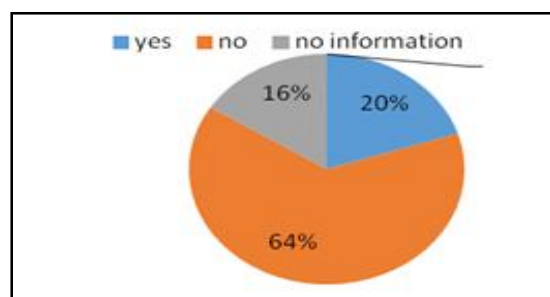


Figure 5

7.2. Knowledge on Frequency of Screening

Table 6 indicates that 36 (18%) participants indicated that one can be screened twice a year, 64(32%) once a year and 48(24%) after every two years as well as 52 (26%) said after every five years.

Respondents	Frequency	Percent	Valid Percent	Cumulative Percent
Twice a year	36	18	18	18
Once a year	64	32	32	50
After every two years	48	24	24	74
After every five years	52	26	26	100
Total	200	100	100	

Table 6

7.3. Knowledge on Screening Sites

Table 7 shows that 24 (12%) of the participants indicated that one can be screened at local clinic, while 8 (4%) said at private doctors surgery, 80 (40%) at the government hospital, 8 (4%) at private hospitals and 56 (28%) indicated that screening can be done at all the institutions. This shows that 68% of the participants did not have knowledge on how often they should be screened. 72% did not know where to go for screening purposes. As compared to 56% of the men in a study carried out in Nigeria by Asuzu and Omeremma (2012), who did not know where to go for prostate cancer screening.

Respondents	Frequency	Percent	Valid percent	Cumulative percent
Local clinic	24	12	12	12
Private surgery	32	16	16	28
Government Hospital	80	40	40	68
Private hospital	8	4	4	72
All the above	56	28	28	100
Total	200	100	100	

Table 7

7.4. Knowledge on Benefits of Prostate Screening

Figure 6 shows that 176 (88%) participants knew that prostate cancer screening reduces death from prostate cancer 24(12%) did not know, 176 (88%) knew that screening leads to early diagnosis and 24 (12%) did not know while 180 (90%) knew that it results i20 (10%) had no knowledge. Gigerenzer, Mata and Frank (2009) in a study in Germany argued that making informed decisions about prostate cancer screening requires knowledge of its benefit. This implies that with the provision of detailed information on prostate cancer screening, males in the country are likely to embrace screening. Rosenstock (1974) also believed that taking action (cues to action) to prevent the occurrence of a particular disease results from the knowledge on the perceived benefits of taking that particular action.

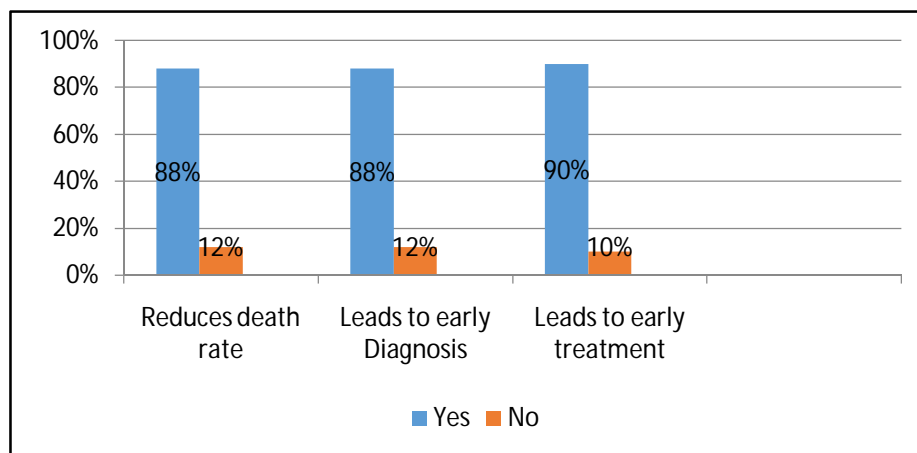


Figure 6

7.5. Knowledge on when to Start Screening

Table 8 shows that 24 (12) of the participants thought that screened can be started between the ages of 20 to 30 years old, 144 (72%) knew that screening should be started between the ages of 40 to 59 years while 24 (12%) thought at 60 to 79 years and 8 (4%) said at above 80 years old. This therefore indicates that 72% of the respondent in the study had knowledge regarding the age to start screening and 28% had no knowledge. Males need the information on when to start screening as Howrich, Parker, Bangma and Kataja (2009) claimed that population based screening of healthy men between 55 and 60 years old reduces prostate cancer mortality by an estimated 20%. This is echoed by Ma, Shives, Gao, Tan and Wang (2012), in a study carried out on Chinese American men who reported that the American cancer society, recommends offering a prostate specific antigen test and digital rectal examination annually for men at the age of 50 years old. Age is an important factor when considering screening as men below 40 years old are less susceptible to the disease.

Respondents	Frequency	Percent	Valid percent	Cumulative Percent
20 to 30 years old	24	12	12	12
40 to 59 years old	144	72	72	84
60 to 79 years old	24	12	12	96
80years and above	8	4	4	100
Total	200	100	100	

Table 8

8. Attitude towards Wanting to Have Prostate Cancer Screening

Figure 7 shows that 192 (96%) of the participants expressed a need to be screened annually if they obtained adequate information on screening while 8 (4%) were not willing. This is similar to the results that were obtained by Oranusi, Mbieri, Oranusi and Nwofor in Anambra State in Nigeria (2012), who pointed out that 92% of the respondents expressed interest in having a prostate antigen test, if recommended, so does the 96% of the respondent in this study, who indicated that they are willing to be screened if provided with adequate information on screening.

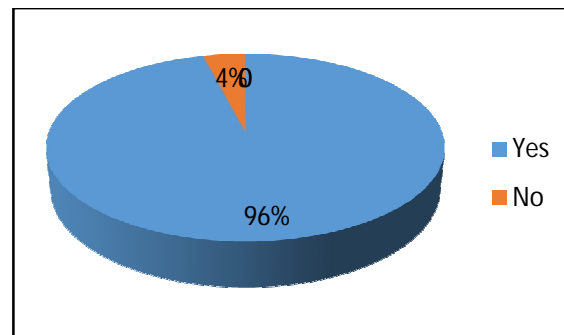


Figure 7

9. Summary, Conclusion, Implications and Recommendations

9.1. Summary and Implications

Men become more at risk of developing prostate cancer as they get older. It has been noted that the risk starts at the age of 40 years and Africans are more susceptible especially those who have had first degree relative who had the disease. According to Bloom, Stewart, Oakley-Girvans, Banks and Chang (2006) in a study carried out in America prostate cancer incidence rates are 50% higher in African-American men as compared to among European-American men. These males need to be screened annually as this reduces mortality from the disease by an estimated 20% as Howrich, Parker, Bangma and Kataja (2009) stated. The aim of the research was to ascertain whether the males in Chitungwiza had knowledge regarding prostate cancer screening. The results indicated that males in Chitungwiza did not have adequate information regarding prostate cancer screening. Although 68% of the participants insinuated that they knew about prostate cancer screening, 76% of the same participants did not know about the methods used for screening and 68% did not know how often they should be screened. 72% did not know where to go for screening the rate is higher than that in Nigeria where 56% of male teachers did not know where to go for screening. Asuzu and Omeremma (2012). In this study most the respondent indicated that they obtained most of the information from the newspapers as such newspapers do not provide detailed information resulting in the participants having inadequate information.

The results in the study indicate that only 10% of the participants had heard about prostate antigen test as well as digital rectal examination so 90% of the participants had not heard about the screening methods, This echoes findings by Ajape, Babata and Abiola (2006) in Nigerian in their study of the Urban populace who found out that 78.8% of the participants had no information on cancer of the prostate and only 5.8% had heard about prostate cancer screening and none had ever had prostate antigen test.

Therefore this supports the argument by Pereira de Paiva (2011) in a study conducted in Brazil, that the dissemination of adequate knowledge regarding the examination of the prostate gland can constitute a key strategy for the formation of a positive attitude in relation to early detection of prostate cancer. 76% of the participants in the study had never heard about self prostate examination meaning that no information was ever given about it. This indicates that the majority of men are not doing self examination resulting in late detection of any abnormalities on the gland.

According to Glanz, Rimer and Lewis (2002), a person will take a health related action if that person feels that a negative health condition can be avoided. Therefore providing adequate information on prostate cancer screening will assist the men in making informed decision that will influence their action of being screened annually so as to reduce perceived threats of the disease and it will also assist in highlighting their susceptibility as they are increased chances of acquiring the prostate cancer in later years. This concurs with the findings in the present research as participants did not have adequate knowledge about prostate cancer screening hence did not seek screening services. This is supported by the Health Belief Model which states that if people have enough knowledge about a condition, they will perceive the dangers and take action. In this situation will be prostate cancer screening.

9.2. Conclusion

The result of the study indicates that men have no adequate knowledge regarding prostate cancer screening. Despite the fact that 68% of the respondents had heard about prostate cancer screening 72% of the participants did not know about the screening methods and 68% did not know where to go for screening. 76% of the participants did not know about self prostate examination. 52% of the participants got the information from family, friends and the newspapers. Newspapers do not contain detailed information, this resulted in men not having adequate knowledge on screening procedures. This was also established by Arafa, Mostafa, Rabah, Danny, Wahdah and Iman, (2012) in their study in Saudi-Arabia, Egypt and Jordan who noted that the percentage of participants who practiced regular prostate check-ups ranged from 8 to 30% and argued that, participants' attitudes, depends mainly on level of

knowledge and quantity of information provided to the patients and their families. Such attitudes should rely on a solid background of proper information and motivation from physicians to enhance and empower behaviors towards prostate cancer screening practices..

Implications

The study revealed the levels of knowledge men at the at risk groups have in regards to prostate cancer screening. Knowledge must be disseminated as a first step towards improving the quality and length of life. The information gained can be used to plan implement and develop programs on promoting screening behaviors among men.

With the emergence of prostate cancer as a public health problem, the perception of men on the threats of the disease and the benefits of being screened will help researchers, health professionals, and policymakers to prioritize needs and allocate resources to reduce the burden of prostate cancer in Zimbabwean men.

9.3. Recommendation

The result obtained indicates that more should be done to promote prostate cancer screening, targeting males at the at risk age group. There is need therefore to increase male counseling on prostate cancer screening in all institutions in the country. Teaching of self prostate examination should be made mandatory at all health institutes in the country especially on males aged 40 years and below, so that it becomes routine in their life. There should be provision of culturally respectful education as well as develop health care materials in languages used in Zimbabwe.

Institutions should have Well Men Clinics, where men can go and get counseling on health issues and be taught about the benefits of prostate cancer screening. Men usually do not frequent health institutes like hospitals and clinics, it is difficult to come into contact with a health men at these institutes, so promotion of prostate cancer screening can be done through the media. Using churches as well as social networks

Women can be taught as they attend Antenatal Clinics so as to assist in dissemination of information to their male counterparts..

Health personnel education should be engineered more towards educating the cadres on the benefits of primary prevention of diseases such as prostate cancer. Nurses should be able to initiate programs to promote early detection of diseases. Screening for prostate cancer results in early detection of the disease hence early treatment resulting in reduction of complications and deaths.

The results of the study have indicated that more should be done in order to ensure that men obtain enough knowledge regarding prostate cancer screening so that they realize the need to be screened regularly. More researches should be done to assess the knowledge levels of healthcare givers on the benefits of prostate cancer screening. Lack of knowledge regarding prostate cancer screening and self prostate examination maybe hindering healthcare givers from encouraging men to be screened. Researches should also be done on knowledge and attitudes of males with low levels of education as well as from rural areas. Researches should be done in other institutions such as Universities, teachers colleges, provincial and district hospitals so that results can be compared and a sound body of knowledge on prostate cancer screening can be founded.

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