Cancer Awareness and Knowledge among Black South Africans

Mogotlane, SM
SM, PhD (Natal)
Department of Nursing Science
P.O Box 142,
MEDUNSA
0204

Tel: (012) 521 4305
Fax: (012)521 4481
Email: smogotlane@medunsa.ac.za

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Abstract

INTRODUCTION
In the wake of the HIV/AIDS scourge, cancer, with its poor prognosis has emerged as another common and most dreaded disease. The late presentation of sufferers for diagnosis is cause for concern as the disease is curable if diagnosed early. The study was undertaken to explore the awareness and knowledge that black people have about cancer in view of their reported delay in presenting themselves for proper diagnosis and treatment and the high incidence of defaulting even when the diagnosis is made.

METHODOLOGY
An exploratory descriptive survey was done in selected black areas whereupon a systematic random sampling of households was done and interviews with household heads from the selected households conducted.

RESULTS
The majority (88.55%) of black people were reported to be aware of cancer, but very few (31.74%) knew about cancer.

CONCLUSION
Based on the results of the study it was concluded that more campaigns need to be staged to promote the knowledge about cancer building on the existing awareness.

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Introduction

Parallel to HIV/AIDS, the myth about cancer, its extent and poor prognosis continue to make it the most dreaded and stress evoking disease, especially among black South Africans, who, in not knowing what cancer is, tend to perceive it as terminal. The diagnosis of cancer produces high levels of anxiety not only in the patients, but also in their relatives as it brings to mind images of mutilation amidst great pain. Cancer also requires expensive and extensive treatment, which is often painful.

Worldwide the illness has been observed to be on the increase. It is reported that in 1996 more than 10 million people developed cancer and 57% of these were in the developing countries[1]. In South Africa in 1989, 48 477 new histologically confirmed cases were reported compared to 51 517 in 1992[2] and the lifetime risk of developing cancer was reported as 1 for every 7.8 black males and 1 for every 8.8 black females[3]. Specific cancers are also on the increase as evidenced by the registry report (1992). According to this report 1034 males and 1025 females in South Africa are diagnosed with bowel cancer and 519 (males and females) with oral cancer[2].

The number of economically productive people affected by cancer is also increasing as reportedly 39.5% of all cancers in females and 31.3% in males occur between the ages of 15 to 54[3]. Cancer of the liver has been found to affect mainly men younger than 30 years of age and the average length of survival is reported as eleven (11) weeks from the onset of symptoms[3]. The statistics may indicate an awareness or a genuine appearance of the disease based on increasing life expectancy with increasing chronicity of diseases, a change in behavioural pattern in relation to smoking, alcohol consumption, work, eating habits, sexual practices and improved diagnostic and reporting methods in cancer registries.

Issues related to Cancer

More than any other disease, the diagnosis of cancer often arouses fear and anxiety which may be followed by a variety of reactions including grief, panic, hopelessness, depression, withdrawal, sometimes anger and hostility[4]. The reactions are associated with overwhelming fear of loss of loved ones as the belief about cancer is that it kills. In some instances cancer is regarded as a stigma, something shameful, even punishment. The people who hold such views often keep the diagnosis to themselves. In Egypt, for example cancer is stigmatized and physicians avoid the mention of the word, refering to it as a growth, tumuor or flesh[5]. In these communities cancer sufferers tend to be outcasts that are best forgotten. It is this prevailing perception about cancer that is cause for concern as it leads to late presentation for diagnosis.

In South Africa there is a tendency, especially among the black people, for the diagnosis to be made late or if made early, there tends to be non-compliance with the proposed management including follow up[1]. Many traditional black South Africans when diagnosed with cancer seek the cause of such a disease within the framework of their indigenous traditional beliefs such as supernatural powers, life hereafter, importance of ancestors and performance of rituals to appease these ancestors and spirits believed to have an impact especially on causation[6]. In line with the World Health Organization, the majority of black South Africans conceive good health as consisting of a healthy body in a conducive social, emotional and spiritual milieu[7]. The understanding of illness therefore is a result of an imbalance between the individual and the community, the physical environment or the spiritual world.

On the basis of cultural beliefs, a study conducted by Hacking, Gudgeon and Lubelwana (1988) in the Western Cape revealed that black Xhosa women often presented with advanced breast cancer, having first sought assistance from traditional healers who would in turn have offered herbal remedies or performed cultural rituals deemed necessary to address the problem[6,7]. The multiple investigations undertaken in western institutions prior to making a diagnosis only serve to strengthen the trend to consult traditional healers, who, very often have a diagnosis available on the first visit. There is also the problem of being vague in informing the patient of the diagnosis. In one instance a patient was told that she had a "touch of cancer"[8] This is usually an attempt to make the condition as trivial as is possible regardless of the patient's concern.

In a study conducted in Mamelodi, a black residential township outside Pretoria, South Africa, 41% of the respondents did not know anything about cancer; 32% knew about cancer because they knew of a person who had died from cancer; 24% indicated that cancer was a dangerous incurable disease, and 13% stated cancer as contagious[7]. In the same study 61% could not indicate a single warning sign for cancer. In relation to the causes of cancer 54% of the respondents mentioned smoking, and 19% alcohol as contributing factors.

The purpose of this study was to explore the awareness and knowledge that black people in South Africa have about cancer.

Methodology

A descriptive survey was conducted in selected black areas that represented all settings (i.e. urban, peri-urban and rural) in the Northern Province, Gauteng, North West, and Mpumalanga provinces. A sample of this descriptive survey consisted of 1500 households with 3000 household heads as respondents. To avoid bias and logistical problems the sample size was determined by the number of cancer-case referrals to Garankuwa Hospital and population density in the provinces as indicated in the Census data on population in 1996. According to the data the largest populations are in Gauteng and Mpumalanga Provinces and the smallest in the North West Province. Consequently 500 households were selected each from the Mpumalanga and Gauteng Provinces, 300 from the Northern Province and 200 from the North West Province making up a total of 1500 households. Respondents consisted of household heads (i.e mother and father or their representatives) in each household who were not suffering from cancer and who were willing to participate.

A random systematic sample of households was drawn from the selected areas in each province whereupon, in the urban and peri-urban areas a township map/design was obtained and the first household was selected randomly[9]. From this starting point every twentieth household was selected as part of the sample. In the rural areas a household list was compiled and, similarly, the first household was selected randomly and thereafter followed by every twentieth household. No power analyses were done to determine the size of the sample. However, the investigator was sensitive to the need to obtain a sample large enough to avoid error when testing the hypothesis.

Data was collected through interviews conducted by trained field workers residing in the selected areas. A significance level of 0.05 was set for tests of significance.

Results

From the 1500 households a total of 2426 questionnaires were received and analysed. Table I shows the socio-demographic layout of the sample[10]. Non-response to particular questions means that the frequency total for that question will be less than 2426. Some questionnaires did not indicate province and/or resident status, others were rejected completely based on the non-response to pertinent questions on knowledge.

Table 1: Socio-Demographic Characteristics of the Sample

Parameter	Value	Frequency	(%)	95% conf limits LCL	UCL	Multiplicative Constant
Province n = 2180	Gauteng	786	36.06%	33.29%	38.82%	2.80
	Mpumalanga	762	34.95%	32.21%	37.70%	
	Northern Pr	436	20.00%	17.70%	22.30%	
	North West	196	8.99%	7.34%	10.64%	
Residence n = 2399	Urban	1074	44.77%	42.26%	47.27%	2.45
	Rural	389	16.22%	14.36%	18.07%	
	Peri-urban	936	39.02%	36.56%	41.47%	
Sex n = 2402	Males	987	41.09%	39.11%	43.07%	1.96
	Females	1415	58.91%	56.93%	60.89%	
Education n = 2373	No school	249	10.49%	8.55%	12.43%	3.08
	Grade 1 – 4	152	6.41%	4.86%	7.96%	
	Grade 5 – 8	392	16.52%	14.17%	18.87%	
	Grade 9 – 12	1076	45.34%	42.19%	48.50%	
Employment n = 2369	Tertiary	504	21.24%	18.65%	23.83%	1.96
	Employed	1082	45.67%	43.67%	47.68%	
	unemployed	1287	54.33%	52.32%	56.33%	
Age n = 2390	Mean	37				
	Std. Deviation	13.9				

Awareness about Cancer

Black people use different names for cancer. These names depend on the language and residential area. In this study the commonest names were kankere as cited by 37.70%, mdlavuza by 31.67% while the rest (32.10%) stated other names including sesipidi, mofetshe and idliso. To elicit awareness, the question "have you heard about cancer"? was asked. Almost all the respondents (88.55%) indicated that they had heard about cancer. The sources of information were mainly radio and television as 1990 respondents had access to radio and 1394 to television. The result about health personnel being the source of information was disappointing as only 24.39% cited doctors, 21.55% nurses and 5.89% other health workers.

Table II: Presentation of People with Cancer (n=761)

Presentation	Frequency N	n=761 (%)	95% conf limits LCL	UCL	Multiplicative Constant
Thin	356	46.78%	42.39%	51.17%	4.278671
Pain	245	32.19%	28.08%	36.31%	
Unable to swallow	170	22.34%	18.67%	26.00%	
Unable to eat	227	29.83%	25.80%	33.85%	
Unable to pass stool	156	20.50%	16.95%	24.05%	
Unable to pass urine	142	18.66%	15.23%	22.09%	
Bleeding	144	18.92%	15.48%	22.37%	
Unhealing sore	160	21.02%	17.44%	24.61%	
Hoarse voice	144	18.92%	15.48%	22.37%	
Lump on breast	193	25.36%	21.53%	29.19%	
Other signs	88	11.56%	8.75%	14.38%	

To explore the awareness even further, the question "do you know someone with cancer"? was asked. 761 respondents knew someone with cancer; but even among the 1665 respondents who did not know someone with cancer, 84.71% of these had heard about cancer.

Knowledge about Cancer

To explore knowledge, the question "would you know if you had cancer?" was used. There was a total of 2391 responses to this question whereupon (761) 31.83% responded positively and (1630) 68.17% negatively.

From those who responded positively the knowledge of the warning signs was not so good as 25.36% mentioned a lump, especially in the breast, 21.02% a sore that does not heal, 18.92% unusual discharge including bleeding from body openings like the vagina, rectum or urethra. A large number, 46.78%, mentioned loss of weight.

The respondents were further asked about the presentation of people with cancer, that is "how did these people with cancer look like, what did they complain of, what did they have"?. Here again loss of weight was indicated by many as one of the signs, with pain being second. Inability to eat correlated with loss of weight (see table II)[10] (in this table the cell percentages do not form a multinomial distribution because a single person may fall into more than one category and thus the cell percentages do not sum to 100, as they should in the multinomial distribution. However, the multinomial confidence limits have nonetheless still been applied).

Table III: Possible causes of Cancer (n=2366)

Causes	Frequency N	n=2366 (%)	95% confi. limits LCL	UCL	Multiplicative Constant
Smoking	1409	59.55%	54.64%	64.47%	4.87
Alcohol	839	35.46%	30.67%	40.25%	
Certain foods	261	11.03%	7.89%	14.17%	
Trauma	117	4.95%	2.77%	7.12%	
Sun	368	15.55%	11.93%	19.18%	
Chemicals	319	13.48%	10.06%	16.90%	
x-ray	78	3.30%	1.51%	5.08%	
Radiation	105	4.44%	2.38%	6.50%	
Sex	369	15.60%	11.96%	19.23%	
Cultural practices	80	3.38%	1.57%	5.19%	
Genetics	341	14.41%	10.90%	17.93%	
Age related	198	8.37%	5.60%	11.14%	
Witchcraft	139	5.87%	3.52%	8.23%	
God	45	1.90%	0.53%	3.27%	
Other	139	5.87%	3.52%	8.23%	

Table IV: Multivariate Logistic Regression model for the causes of Cancer

Parameter	Odds Ratio	Std. Err	Z	P>Z	95% conf. Interval
Knowledge of someone with ca					
No vs Yes	0.45	0.10	-5.22	0.000	(0.33, 0.60)
Source of information					
No radio vs radio	0.47	0.10	-3.89	0.000	(0.32, 0.69)
No Tv vs Tv	0.50	0.10	-5.68	0.000	(0.40, 0.63)
No magazine vs magazine	1.00	0.17	-0.13	0.897	(0.70, 1.36)
No newspaper vs newspaper	0.63	0.10	-3.06	0.002	(0.45, 0.85)

Causes of Cancer

The knowledge relating to the causes of cancer was fair. A variety of aspects were indicated by 68.93% as the possible causes of cancer (see table III)[10] (similarly the cell percentages do not form a multinomial distribution because a single person may fall into more than one category and thus the cell percentages do not sum to 100, as they should in the multinomial distribution. However, the multinomial confidence limits have nonetheless still been applied).

From the responses in table III, smoking and alcohol were rated high with the sun, sexual intercourse, genetics and chemicals also being indicated as significant causes. The percentage of those believing that cancer is caused by witchcraft although low, is a concern because it is this aspect that promotes consultation with traditional healers, thereby delaying the commencement of treatment. The knowledge of someone with cancer together with access to radio, magazines and newspapers also contributed to the improvement of knowledge of causes of cancer as outlined in the multivariate logistic regression model in table IV. Those with no access to radio or television or newsprint were less likely to know the causes of cancer.

It was the perception of many, (75.52%), especially from the peri-urban area (80.45%) that cancer is a very serious or fatal condition. At the same time more than half (57.33%), reported that the disease is curable if treated early.

Discussion of the Results

The results from the study showed that there was a need to enhance

knowledge about cancer in black communities. People who have heard about cancer do not necessarily have knowledge about it. Whereas 88.55% were aware of cancer only 31.83% would know if a person had cancer. These results are supported by the findings in a study conducted in Mamelodi, Pretoria where only 32% of the respondents knew about cancer[7]. This is not satisfactory, especially in relation to the incidence and prevalence of cancer. Whereas the knowledge of the warning signs was not so good it is important to bear in mind that these were the responses of the 31,83% who had stated that they knew about cancer and even these people did not regard it important to act on the warning signs. The reaction of many was to go the long route of traditional healers first before consulting western physicians. More than half, 68.93%, had knowledge of the possible causes of cancer.

Smoking and alcohol were rated high as causes, 59.55% and 35.46% respectively. Certain foods, 11.03% and sexual intercourse 15.60%, were also cited as causes. The admission of the aforementioned aspects as causes of cancer correlates with those reports that relate cancer to lifestyle, stating that 40% of all adult male cancers and 15% of all female adult cancers are associated with tobacco smoking[3,11,12]. The reports also support the issue of diet as a cause of cancer as the authors view dietary lifestyle as an indication of the socio-economic status as well as the culture of the people. In this regard certain foods like those that do not have adequate fibre or have a high content of fat or spice have been related to specific cancers like colorectal, breast and prostate cancers respectively[3,11,12,13,14].

Conclusion

From the literature reviewed and the findings of the study it can be concluded that the awareness about cancer is substantial. However, the knowledge about cancer, its causes and presentation is low among black people in South Africa as only 31.83% would know if a person had cancer. This finding relating to low knowledge about cancer however, compares with that of Conradie et al (1995)[7] where only 32% of the respondents had knowledge about cancer. Many more people need to know the warning signs, how to identify these, the action to take should the signs be identified and the benefit of such action. It is important too to provide information relating to healthy lifestyle as most forms of cancer can be reduced or prevented by; not smoking, consuming reasonable amounts of alcohol, eating food high in fibre and low in fat and engaging in moderate exercise[12,15].

The stigma that is associated with cancer needs to be removed so that those diagnosed with cancer can talk about it and share their coping skills with others and take away the mystery that usually engulfs the disease. Although the exact causes of cancer are still not known, some predisposing factors have been identified. Of importance is the lifestyle that people lead, which results in unhealthy practices as well as an environment that is not conducive to health that results in a variety of cancers. Knowledge of this information could help towards changing people's mind-set especially in relation to dietary habits, exercise, alcohol consumption and cigarette smoking.

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