

INFORMATION SEEK BEHAVIOUR OF CANCER PATIENTS IN PALLIATIVE CARE IN NORTHERN NIGERIA

BUSCA DE INFORMAÇÕES DO COMPORTAMENTO DE PACIENTES COM CÂNCER EM CUIDADOS PALIATIVOS NO NORTE DA NIGÉRIA

Lateefat N.G. Imam
Department of Physical and Health
Education, Faculty of Education,
University of Maiduguri, Borno
State, Nigeria
Lateefat@gmail.com

Sheriff Sangari Jen
Department of Physical and Health
Education, Faculty of Education,
University of Maiduguri, Borno State,
Nigeria
SheriffSangari@gmail.com

Abdulsalam, Abdollah
Department of Physical and Health
Education, Faculty of Education,
University of Maiduguri, Borno
State, Nigeria
just2abdul@gmail.com

Ibrahm, M. M. Furfuri, Ph.D
University Librarian Sokoto State
University, Sokoto State, Nigeria
mm.ibrahm@gmail.com

Taiwo, A. Azeez
Department of Physical and Health
Education, Faculty of Education,
University of Maiduguri, Borno State,
Nigeria
Taiwo.azeez@gmail.com

Received: 01/05/21

Accepted: 15/05/21

Published: 19/05/21

Abstract: This study assessed information seek behaviour of cancer patients in palliative care in Northern Nigeria. The study was guided with two hypotheses. Survey research design was used for this study. The population for this study comprise all patients in palliative care attending Usman Danfuduo Teaching Hospital, Sokoto; Ahmadu Bello University Teaching Hospital, Zaria and National Hospital, Abuja the three (3) hospital were purposively selected because they are the only University Teaching Hospital that offer radiotherapy in Northern Nigeria and a total of five hundred and eighty four (584) (University Teaching Hospital). Availability sampling procedure was used for the study. Split half reliability method was employed to test the reliability of the instrument and the reliability index of 0.85 was obtained. Analysis of data was done using descriptive statistics of mean, standard deviation, frequency counts and percentage. t-test and chi-square was used to test hypotheses at 0.05 alpha level of significance. The results indicated that there is significant difference in information seeking behaviour of cancer patients in palliative care in Northern Nigeria ($P < 0.05$) and there is no significant difference between male and female on information seeking behaviour of cancer patients in palliative care in Northern Nigeria ($P > 0.05$). It was recommended that Government and health workers should organise programs for cancer patients in palliative care in Northern Nigeria so as to spread awareness that will make cancer patients acquire correct information on management of cancer.

Keywords: Information seek behaviour. Cancer patients. Palliativecare. Northern Nigeria.

Resumo: Este estudo avaliou informações em busca de comportamento de pacientes com câncer em cuidados paliativos no norte da Nigéria. O estudo foi orientado com duas hipóteses. O desenho da pesquisa foi utilizado para este estudo. A população para este estudo compreende todos os pacientes em cuidados paliativos que freqüentam o Usman Danfuduo Teaching Hospital, Sokoto; Ahmadu Bello University Teaching Hospital, Zaria e National Hospital, Abuja os três (3) hospitais foram selecionados propositalmente porque são o único hospital universitário que oferece radioterapia no norte da Nigéria e um total de quinhentos e oitenta e quatro (584) (University Teaching Hospital). O procedimento de

amostragem de disponibilidade foi utilizado para o estudo. Para testar a confiabilidade do instrumento, foi empregado o método da metade da confiabilidade e o índice de confiabilidade de 0,85 foi obtido. A análise dos dados foi feita usando estatísticas descritivas de média, desvio padrão, contagens de frequência e porcentagem. O teste t e o qui-quadrado foram usados para testar hipóteses em nível 0,05 alfa de significância. Os resultados indicaram que há diferença significativa na busca de informações sobre o comportamento de pacientes com câncer nos cuidados paliativos no norte da Nigéria ($P < 0,05$) e não há diferença significativa entre homens e mulheres na busca de informações sobre o comportamento de pacientes com câncer nos cuidados paliativos no norte da Nigéria ($P > 0,05$). foi recomendado que o governo e os profissionais de saúde organizassem programas para pacientes com câncer nos cuidados paliativos no norte da Nigéria, a fim de difundir a conscientização que fará com que os pacientes com câncer adquiram informações corretas sobre o manejo do câncer.

Palavras-chave: Informação buscar comportamento. Pacientes com câncer. Cuidados paliativos. Norte da Nigéria.

Introduction

Cancer is an uncontrolled growth of abnormal cells in the body. Cancer develops when the body's normal control mechanism stops working. Old cells do not die and instead grow out of control, forming new abnormal cells. These extra cells may form a mass of tissue, called a tumor. Some cancers, such as leukemia, do not form tumors. Seeking information on diagnose, management and treatment of cancer become necessary, as it is one of the most common deadly diseases now a days. Attempts to acquire information about their disease are very common among cancer patients and survivors (Chen & Sui, 2001; Foltz & Sullivan, 1996) and are considered a common means of coping with cancer (Van Der Molen, 1999). While a desire for information about their disease and its treatment as well as efforts to obtain this information is common among patients and survivors, they are not universal. Research shows that a vast majority (74-98%) of cancer patients desire as much information as possible about cancer (Chen & Sui, 2001; Foltz & Sullivan, 1996)), but that not all patients who desire information actually seek information related to their disease (Rees, & Bath, 2001).

The two most common domains of health information sought are information on health and wellness, including exercise and diet; and information on managing chronic illnesses or disease (Weaver, Mays, Weaver, Hopkins, Eroglu & Bernhardt 2010). Cancer is currently the second leading cause of death in the United States, and it is estimated to surpass heart disease as the leading cause of death in the next few years (American Cancer Society, 2016). In 2015, there were more than 1.6 million new cases of cancer, causing almost 600,000 deaths (American Cancer Society, 2016). There are more than 15.5 million individuals in the United States today

living with a cancer diagnosis and it is expected to increase to 20 million by 2026 (American Cancer Society, 2016). Cancer diagnosis often triggers the need for more information among cancer patients and their relatives (Roach, Lykins, Gochett, Brechting, Graue & Andrykowski, 2009). Thus, there is abundant literature on information seeking among cancer patients, including prevention, lifestyle and risk factors, treatment, prognosis, information needs, physician-patient communication, and new therapies (Rutten, Squiers, & Hesse, 2006; Shim, M, Kelly, B & Hornik, R (2006).). Previous studies, local, state, and nationally representative, have described health information seeking behavior in general.

Furthermore, among those who actively seek information about their disease, variability exists in specific information needs, access to information, and preferred sources of information. For example, both demographic and disease-related factors have been associated with different information needs and preferences (Czaja, Manfredi & Price, 2003; Luker, Beaver & Leinster, 2009). While cancer patients and survivors represent the primary consumers of cancer-related information, any person regardless of personal cancer history is a potential consumer of cancer-related information. Individuals without a personal cancer history might seek information which would enable them to gauge their personal risk for developing cancer or identify strategies for preventing or early detection of cancer. In addition, exposure to a friend or family member with cancer might motivate those without a personal cancer history to seek information regarding treatment options, disease outcomes, available rehabilitation and support resources, or simply how to better cope with cancer and its treatment. Indeed, some cancer patients indicated that their family members and friends are the primary source of medical information (Luker, Beaver & Leinster, 2009; Talosig-Garcia, & Davis, 2005).

In recent years, information seeking behaviour has been seen as a way of helping patients with cancer to cope with cancer disease. A diagnosis of cancer may invoke uncertainty, fear, and loss that can be alleviated by information. Research has indicated that the vast majority of cancer patients want to be informed about their illness (Meredith, Symonds, Webster, Lamont, Pyper & Gillis, 2009). However, it is also recognised that patients vary in how much information they want and that this may change during their illness. These attitudes are reflected in the efforts that patient make to obtain further information or to resist information that is offered to them. Moreover, there are cases of cancer complications in Africa. For example, in Nigeria about 80,000 Nigerians lost their precious lives as a result of

cancer complications annually (W.H.O., 2018). In a study conducted by Hamza, Mohammed, Abbas, Makarfi, Sulaiman and Mukhtar (2018), in Kaduna State, Nigeria, it was reported that poor family support was one of the challenges facing cancer patients in Lere local government area of Kaduna state. For example in the words of participant he narrated how difficult he usually found himself as a cancer patient due to absent of family members' supports. Another challenges claimed by cancer patients in their case study was inadequate cancer specialists in their community. This claim was evident when one of the patients stated that they lack cancer specialist in their village that will attend to their cancer complications so he is really suffering. They have to travel from Lere to A.B.U Teaching hospital in Shika Zaria and seriously is not easy at all. It is against this background this study was conducted to investigate information seek behaviour of cancer patients in palliative care in Northern Nigeria.

Hypotheses

1. There is no significant difference in information seek behaviour of cancer patients in palliative care in Northern Nigeria.
2. There is no significant difference between male and female in information seek behaviour of cancer patients in palliative care in Northern Nigeria.

Methodology

Research Design

Survey research design was used for this study. Ofo (1994) stated that the survey research method is used to gather data at a particular point in time with the intention of describing the existing condition or identifying standards against which existing condition can be compared. Survey allows the relative incidence, distribution and interaction of sociological and psychological variables. Survey provide accuracy in that it describes what exists and the frequency with which it occurs, assigns new meaning to phenomenon and add information into categories (Kerlinger, 2000).

Population and Sample

The population for this study comprise all patients in palliative care attending Usman Danfuduo Teaching Hospital, Sokoto; Ahmadu Bello University Teaching Hospital, Zaria and National Hospital, Abuja the three (3) hospital were purposively selected because they are the only University Teaching Hospital that offer radiotherapy in Northern Nigeria and a total of five hundred and eighty four (584) (University Teaching Hospital). The sampling procedure for this study was availability sampling, which all the five hundred and eighty four (584) patients' was used.

Validity and reliability of the instrument

The instrument was validated for face and content validity of the instrument, the researcher supervisor and other experts in the field of Physical and Health Education and information science. The reliability of the instrument was tested in University College Hospital, Ibadan, Oyo State, Split half reliability method was employed to test the reliability of the instrument data collected was subjected to a statistical test using spearman brown formula to determine reliability index and 0.85 was obtained.

Method of Data Analysis

Statistics of mean, standard deviation, standard error, frequency count and percentages will be employed to organized and describe demographic information while inferential statistics of Chi-square and t-test was used to test the formulated hypothesis at 0.05 level of significance

Results

Table 1 Demographic Characteristics n=584

Variables	frequency	Percentages (%)
Sex		
Male	224	38.4
Female	360	61.6
AGE		
Less than 20 years	77	13.2
20 - 29 years	35	6.0
30 - 39 years	73	12.5

40 - 49 years	62	10.6
50 -59 years	130	22.3
60 years above	207	35.4
Marital status		
Single	64	11.0
Married	298	51.0
Divorced	60	10.3
Separated	107	18.3
Widowed	55	9.4
Level of Education		
Non formal education	80	13.7
Primary Education	107	18.3
Secondary Education	262	44.9
BSC/HND	78	13.4
MSC	39	6.7
Ph.D	18	3.0

Table 1 which is on demographic characteristic of the respondents showed that 224(38.4%) of the respondents were female, while 360(61.6%) were male. The table also indicated that 77(13.2%) of the participants were less than 20years of age, 35(6.0%) of the respondents were between the ages of 20 - 29 years, 73(12.5%) were between the ages of 30 - 39 years, 62(10.6%) were between the ages of 40 - 49 years, 130(22.3%) were between the ages of 50 - 59 years, while 207(35.4%) of the participants were 60 years and above. In addition, the table revealed that 64(11.0%) of the participants were married, 298(51.0%) were single, 60(10.3%) were divorced, 107(18.3%) were separated, while 55(9.4) of the participants were widowed. Furthermore, the table showed that 107(18.3%) of the participants had primary education, 262(44.9%) had secondary education, 78(13.4%) had BSC/HND, 39(6.7%) had M.sc, while 18(3.0%) of the participants had Ph.D

Table 2: Chi-square summary on information seek behaviour of cancer patients in palliative care in Northern Nigeria

Variable	F _O	F _E	Total	X ² -value	df	Prob.
Agree	534	292.0	584	401.123 ^a	1	0.000
Disagree	50	292.0				

$$X^2 = 401.123; df = 1; P < 0.05$$

Table 2 indicates that there is significant difference in information seeking behaviour of cancer patients in palliative care in Northern Nigeria. The chi-square calculated is 401.123 which are greater than the table value of 3.841 at the significant level of 0.05. Therefore the null hypothesis was rejected, this indicates that there was significant difference in information seek behaviour of cancer patients in palliative care in Northern Nigeria.

Table 3: t-test summary on difference between male and female information seek behaviour of cancer patients in palliative care in Northern Nigeria

Sex	N	Mean	S.D	S.E	df	t-test	Prob
Male	224	18.43	7.90	0.634	582	0.732	0.464
Female	360	19.02	7.61	0.521			

$$(t=0.732, df = 375; P < 0.464)$$

A t-test presented that there is no significant difference between male and female on information seeking behaviour of cancer patients in palliative care in Northern Nigeria. Therefore the null hypothesis was retained, meaning that there is no significant difference between male and female in information seek behaviour of cancer patients in palliative care in Northern Nigeria.

Discussion

This study investigate information seeking behaviour of cancer patients in palliative care in Northern Nigeria. We found that that there was significant difference in information seeking behaviour of cancer patients in palliative care in Northern Nigeria; that is the respondents got information from different sources such as internet, health care providers, friends and family. The result of this study is consistent with the previous study of Roach, Lykins, Gochett, Brechting, Graue and Andrykowsk (2012). They found that there was a significant difference between the cancer survivor (CS) and non cancer control (NCC) groups in cancer information seeking behavior. The CS group was more likely to report they had looked for information about cancer and was more likely to report others, excluding healthcare providers, had looked for

information about cancer for them. The authors explained further that there were no significant differences between the CS and NCC groups regarding the type of information source they had consulted during the most recent time they had looked for cancer information. The most common sources of cancer information recently consulted were the internet and traditional print media and the least common information sources were traditional broadcast media (i.e., radio and television) and specialized cancer information resources (i.e., cancer organizations or research/treatment facilities or cancer telephone hotlines). There were no significant differences between the CS and NCC groups in where they would first go to seek cancer information if they had a need to get such information. The majority of respondents in both the CS and NCC groups indicated they would consult a health care provider first with another large proportion of both the CS and NCC groups indicating they would consult the internet first while traditional broadcast media and specialized cancer information resources were least likely to be consulted first.

This result is not supported by Adjei Boakye, Mohammed, Geneus, Tobo, Wirth, Yang and Osazuwa-Peters (2018), they explained that respondents showed no statistically significant difference in health information seeking behavior based on cancer diagnosis, but age, gender, education, and having a regular healthcare provider predicted health information seeking among respondents with cancer diagnosis, these same predictors were found among patients without cancer diagnosis as well.

Moreover, the test of Hypothesis two showed that that there was no significant difference between male and female in information seek behaviour of cancer patients in palliative care in Northern Nigeria. The result of this study corroborate the study of Jacobs, Amuta & Jeon (2017), they found that there is no significant different between male and female in information seek behaviour of cancer patients, but there is significant difference in information seeking behaviour of cancer patients based on age, race or ethnicity, and socioeconomic. Contrary to the result of this finding, the study conducted by Nangsangna & Vroom (2019), reported that Sex, education and average monthly income were significant factors associated with online health information seeking. The study also showed that, computer and internet experience factors increased the probability of using internet for health information. After adjusting for confounding factors;

being employed, earning higher income and owning a computer were positive predictors of online health information seeking.

Conclusion and Recommendations

This study concluded that there is significant difference in information seeking behaviour of cancer patients in palliative care in Northern Nigeria and there is no significant difference between male and female in information seek behaviour of cancer patients in palliative care in Northern Nigeria. Base on this, it was recommended that Government and health workers should organise programs for cancer patients in palliative care in Northern Nigeria so as to spread awareness that will make cancer patients acquire correct information on management of cancer.

References

- Adjei Boakye E, Mohammed KA, Geneus CJ, Tobo BB, Wirth LS, Yang, L & Osazuwa-Peters, N (2018). Correlates of health information seeking between adults diagnosed with and without cancer. *PLoS ONE* 13(5): e0196446. <https://doi.org/10.1371/journal.pone.0196446>.
- American Cancer Society (2016). *Cancer Facts & Figures 2016*
- Carlsson, M(2000). Cancer patients seeking information from sources outside the health care system. *Support Care Cancer*. 8:453-457.
- Chen, X & Sui, L (2001). Impact of media and the Internet on oncology: Survey of cancer patients and oncologists in Canada. *Journal of Clinical Oncology*. 19:4291-4297.
- Czaja, R , Manfredi, C & Price, J(2003). The determinants and consequences of information seeking among cancer patients. *Journal of Health Communication*. 8:529-562.
- Deridan, A(1987). Informational needs of recently diagnosed cancer patients part 2: Method and description. *Cancer Nursing*. 10:156163.
- Foltz, A & Sullivan, J(1996). Reading level, learning presentation preference, and desire for information among cancer patients. *Journal of Cancer Education*. 11:32-38.
- Hamza, J., H, Mohammed, A , Abbas, M, Makarfi, A., Y, Sulaiman, I & Mukhtar, U (2018). Challenges and Information Seeking Behaviors of Cancer Patients: A Qualitative Case Study of Cancer Patients in Lere Local Government Area of Kaduna State, Nigeria. *International Journal of Academic Library and Information Science*; Vol. 6(8), pp. 265-269, December 2018 DOI: 10.14662/IJALIS2018.071 article ISSN:<http://www.academicresearchjournals.org/IJALIS/Index.htm>
- Jacobs, W, Amuta, A., O & Jeon, K.,C (2017). Health information seeking in the digital age: An analysis of health information seeking behavior among US adults. *Cogent Social Sciences*, 3: 1302785 <http://dx.doi.org/10.1080/23311886.2017.1302785>
- Kerlinger, F. (2000). *Introduction to research method in Education*. London. University press. 33-39.
- Lee, Y., J, Boden-Albala, B, Quarles, L, Wilcox, A & Bakken, S (2012). Predictors of health information-seeking behaviors in hispanics. *Nurs Inform* 2012: e243.
- Luker, K., A, Beaver, K & Leinster, S., J (2009). The information needs of women newly diagnosed with breast cancer. *Journal of Advanced Nursing*. 22:134-141.

- McInnes, D., K, Gifford, A., L, Kazis, L.,E & Wagner, T.,H (2010) Disparities in health-related internet use by US veterans: results from a national survey. *Inform Prim Care* 18: 59-68. PMID: 20429979
- McPartland, T.,S, Weaver, B.,A, Lee S-K & Koutsky, L., A (2005). Men's perceptions and knowledge of human papillomavirus (HPV) infection and cervical cancer. *Journal of American College Health* 53: 225-230. <https://doi.org/10.3200/JACH.53.5.225-230> PMID: 15813233
- Meredith, C, Symonds, P, Webster L, Lamont D, Pyper E & Gillis C.,R (2009). Information needs of cancer patients in West Scotland: cross sectional survey of patients' views. *BMJ* ; 313: 724-726.
- Nagler RH, Gray SW, Romantan A, Kelly BJ, DeMichele A& Armstrong, K (2010). Differences in information seeking among breast, prostate, and colorectal cancer patients: results from a populationbased survey. *Patient Educ Couns* 81 Suppl: S54-62.
- Nangsangna, R.,D & Vroom, F (2019). Factors influencing online health information seeking behaviour among patients in Kwahu West Municipal, Nkawkaw, Ghana. *Online Journal of Public Health Informatics* * ISSN 1947-2579 * <http://ojphi.org> * 11(2)
- Ofo, J.E. (1994). *Research Methods and Statistics in Education and Social Sciences*. Joja Educational publisher Ltd, Lagos.
- Rees, C & Bath, P(2001). Information-seeking behaviors of women with breast cancer. *Oncology Nursing Forum*. 28:691-698.
- Roach, A., R, Lykins, E., L, Gochett, C., G, Brechting, E., H, Graue, L., O & Andrykowski, M.,A (2009). Differences in cancer information-seeking behavior, preferences, and awareness between cancer survivors and healthy controls: a national, population-based survey. *J Cancer Educ* 24: 73-79. <https://doi.org/10.1080/08858190802664784> PMID: 19259869
- Roach, A.,R, Lykins, E., L., B, Gochett, C.,G, Brechting, E., H, Graue, L., O & Andrykowski, M.,A(2012). Differences in Cancer Information Seeking Behavior, Preferences, and Awareness between Cancer Survivors and Healthy Controls: A National, Population-Based Survey. *NIH Public Access Author Manuscript J Cancer Educ*. Author manuscript; available in PMC.

- Rutten, L., J, Squiers, L & Hesse, B (2006). Cancer-related information seeking: hints from the 2003 Health Information National Trends Survey (HINTS). *J Health Commun* 11 Suppl 1: 147-156.
- Shim, M, Kelly, B & Hornik, R (2006). Cancer information scanning and seeking behavior is associated with knowledge, lifestyle choices, and screening. *J Health Commun* 11 Suppl 1: 157-172.
- Talosi-Garcia, M & Davis, S.W (2005). Information-seeking behavior of minority breast cancer patients: An exploratory study. *Journal of Health Communication*. 10:53-64. [PubMed: 16377600]
- Van Der Molen, B (1999). Relating information needs to the cancer experience: 1. Information as a key coping strategy. *European Journal of Cancer Care*. 8:238-244.
- Volkman, J.,E, Luger, T.M, Harvey, K.,L, Hogan, T.,P, Shimada, S.,L & Amante, D, (2014). The National Cancer Institute's Health Information National Trends Survey [HINTS]: a national cross-sectional analysis of talking to your doctor and other healthcare providers for health information. *BMC Fam Pract* 15: 111. <https://doi.org/10.1186/1471-2296-15-111> PMID: 24906558
- Weaver, J., B 3rd, Mays, D, Weaver, S.,S, Hopkins, G., L, Eroglu, D & Bernhardt, J.,M (2010). Health information seeking behaviors, health indicators, and health risks. *Am J Public Health* 100: 1520-1525. <https://doi.org/10.2105/AJPH.2009.180521> PMID: 20558794
- World Health Organization (2018). Cancer Country Profile (Nigeria). Retrieved From https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=2&cad=rja&uact=8&ved=2ahUKEwiy_sG48oXdAhUHhxoKHS5XCwAQFjABegQICRAC&url=http%3A%2F%2Fwww.who.int%2Fcancer%2Fcountryprofiles%2Fnga_en.pdf&usg=AOvVaw0aeNPN7dmU5U5YZ-zOOygo accessed 23 August 2018

