

EXPLANATORY MODELS OF AND ATTITUDES TOWARDS ORAL CANCER IN TWO NIGERIAN ETHNIC GROUPS: IMPLICATIONS IN TREATMENT AND PREVENTIVE PROGRAM

*HO OLASOJI, BchD, FMCDS

**BABAGANA AHMAD, MBBS, FWACS

***T LIGALI, BDS, M.Sc (Lond)

****AYAHAYA, MBBS

ABSTRACT

This paper examines, through interview and tape recordings the perceptions of patients with oral cancers from two Nigerian ethnic groups as regard the causes and treatment of cancer. 50% of the participants from the Yoruba ethnic group attributed the cause of cancer to 'hands of others' explaining that they were harmed by supernatural forces (evil spirits and ancestral spirits) while 72% of patients from the Hausa / Fulani ethnic group attributed cancer to the 'will of God'. Majority of participants from both ethnic groups understood cancer as 'an incurable illness that causes suffering and pain'. 20 (77%) of 26 patients from the Yoruba ethnic group consulted the traditional healers for treatment before coming to the hospital. Cultural and religious factors seem to play an important role in the explanations, labels and the treatment of cancer in this environment. There is a need for greater collaboration and information sharing between the modern medical practitioners and traditional healers with regard to cancer. Studies of this nature may provide a solid foundation for the development of culturally appropriate strategies to meet the health need as regards treatment and preventive program for cancers in developing countries.

INTRODUCTION

Cancer is frequently not perceived as a major health problem in developing countries, however, recent epidemiological evidence demonstrates that lifestyles are changing and that cancer is increasing becoming a more significant problem in Asia and sub-Saharan Africa (Ohaeri et al., 1999)¹⁹. Cancer deaths in developing countries are reported to be higher than that in developed countries (Alexander, 1985)².

Nigeria is the largest of the West African coastal nations and its population of about 90 million (Febru-

ary 1999 census) people comprises of more than 250 ethnic groups of which the Hausa/Fulani, Yoruba and the Ibo forms the majority (Adekunle & Olaitan, 2000)¹. The Hausa/Fulani in the north are predominantly muslims and the Yoruba's in the southwest who are predominantly christians constitute about 50% of the population. Although infections and parasitic diseases are the major health problems in Nigeria, concern about the national burden of cancer has heightened in recent times, with the realization that the incidence of cancer in the nation is now estimated at 100,000 per annum (Ohaeri et al, 1999)¹⁹. While cancer was the

* Consultant, Department of Oral and Maxillofacial Surgery, University of Maiduguri Teaching Hospital, Maiduguri, Nigeria.

** Consultant, Department of Otolaryngology, University of Maiduguri Teaching Hospital Maiduguri, Nigeria.

*** Lecturer, Department of Preventive Dentistry, University of Maiduguri, Maiduguri, Nigeria

**** Consultant, Department of Community Medicine, University of Maiduguri Teaching Hospital Maiduguri, Nigeria

Correspondence: Dr. H O Olosoji, Department of Oral and Maxillofacial Surgery, University of Maiduguri Teaching Hospital, PMB 1414, Maiduguri. Nigeria E-mail soji273@yahoo.com

ninth major killer disease in the 1970s in Ibadan, southwestern Nigeria, it has moved to the second position in 1990s (Ohaeri et al, 1999)¹⁹. Cancer, a life threatening disease, has precipitated a wide range of beliefs and images. These beliefs often influence decisions about whether to accept preventive practices, and when to seek medical advice and which treatment to accept (Dein, 2004)⁶. Reports indicated that culture and religion may play a significant role in the different ways patients understand cancer, the ways they explain it and their attitudes towards it (Alexander, 1985²; Powe, 1995)²⁰.

Health beliefs differ across cultural groups, and if health professionals are to provide appropriate health care, they need to be cognizant and sensitive to the diversity of these beliefs (Dein, 2004)⁶. Despite growing research concerning beliefs related to cancer among minorities cultural groups in the developed world, there is scarcity of reports about patient's explanations and beliefs about cancer in developing countries. This study determines the perceptions of Nigerian patients with oral cancers from the Yoruba and the Hausa/Fulani ethnic groups, as regard the etiology and treatment of cancer. The implications of this towards treatment and preventive programs for cancer will be reviewed.

PATIENTS AND METHODS

This study composed of 58 Nigerian with histologically confirmed oral cancers who attended the maxillo-facial clinics of two Nigerian Teaching Hospitals located in Ile-Ife (Yoruba ethnic group, South West) and Maiduguri (Hausa/Fulani ethnic group, North East) during an 18-months period. This number was based on the fact that qualitative research employs smaller sample sizes than quantitative research because the focus is on obtaining descriptive information (Daggers & Ross 2004)⁵.

A survey scale was developed for the study by a team that included two surgeons, a public health specialist and a community health officer. The survey scale was a modification of the black American cancer beliefs questionnaire based on Kleinman's idea of explanatory models (Kleinman, 1980)¹⁶. This composed of a series of open-ended questions which included ten questions with ethnographic component to allow for collection of information from patients on beliefs about

etiology and treatment of cancer, understanding of cancer and attitudes towards prevention and their perceptions of the role of modern medical practice in cancer management.

Patients who agreed to participate in the study were interviewed separately by the attending surgeons during one of the weekly cancer clinics of the respective hospitals. The interviewer elicited information on demographics (age, place of residence, marital status, religion and occupation). The interviewer thereafter informed patient that the specific causes of cancers were still being investigated, however certain trends had emerged. We are interested, he told the prospective subjects, in your views on the matter. The following ten open-ended questions were then asked. 1) What do you think is wrong? 2) What caused it? 3) What does other members of your family say caused it? 4) What do you think is the treatment for this condition? 5) Did you go for traditional treatment and why? 6) If so what type of treatment did you receive for this problem from traditional healers? 7) Who referred you to this hospital? 8) Were you aware of this condition before you developed it? 9) What was your understanding of this condition before you developed it? 10) How can this be prevented?

The open-ended nature of the interviews provided the opportunity for the patients to direct the communication and to tell their stories in their own cultural style. When a patient incorporated terms used by biomedicine into their stories, attempts were made to determine the meaning they ascribe to them. The interviews were conducted using the respective local language in the community and responses were tape recorded for later analysis.

RESULTS

Naturally, the conclusion drawn from the analysis that follows apply to the sample alone and cannot be generalized in a straight forward manner to the wider Nigerian population. As the study involves small samples, elaborate statistical analysis has not been attempted. Nonetheless, this approach highlights themes and trends that allow for speculations about the wider Nigerian population at large. The article focuses on three key themes: knowledge of cancer, understanding of the causes of cancer, and beliefs about cancer treatment and prevention.

Table 1 shows the demographic information about 58 cancer patients who were interviewed. 26 of the patients were from the Yoruba ethnic group and 32 were from the Hausa/Fulani ethnic group. Majority (48.3%) of the patients were in the fourth decade of life. 28 of the patients were self employed (9 petty traders, 14 farmers and 5 businesswomen), 19 worked in government establishments (13 civil servants and 6 teachers) and 7 were full time housewives. Most of the oral cancers were located on the tongue (16 patients), followed by the palate (12 patients).

The participants opinion about the cause of cancer reflected diverse beliefs regarding how cancer begins in both ethnic groups. These opinions can be grouped into six central domains of traditional attribution of illness (Eisenbruch, Yeo, Meiser, Goldstein, & Barlow-Stewart, 2004; Randhawa & Owens, 2004)^{7,22}. Among the Yoruba's, 50 per cent of the participants attributed cancer to the 'hands of others', explaining that they were harmed by evil spirits, that the illness was as a result of a spell/causes put on them by wicked people or that cancer was a way by which ancestral spirits expressed punishments for a family member wrongdoings. Majority (72%) of the cancer patients from the Hausa/Fulani ethnic group were however of the opinion that their illness was of 'divine nature'; an act of God or destiny, in which they have no control. 4 patients from Yoruba and 3 patients from the Hausa/Fulani ethnic groups believed that the cause of cancer was of a physical nature and centered around 'damage to the mouth'; such as injury to the mouth and tooth extractions. 5 patients out of the 58 in this study linked the development of oral cancer to negative lifestyle factors ('bring it upon yourself) such as cigarette smoking and poor diet.

One of the objectives of this study was to establish a baseline of knowledge concerning the understanding of cancer among patients with oral cancers in Nigeria. The participants were asked whether they knew what cancer was and to illustrate this by explaining what they understood cancer to be. In both ethnic groups, majority of the participants (Yoruba's = 73%; Hausa/Fulani's = 78%) understood cancer as 'an incurable illness that causes suffering and pain' and 69% of patients from the Yoruba ethnic group and 66% from the Hausa/Fulani ethnic group mentioned that there is no 'medicine for cancer' (Table 3). Almost half of the

participants in this study were of the opinion that surgical treatment can cause cancer to spread to other parts of the body. Only 5 of the 58 patients had not heard of cancer. For some patients the understanding of cancer was limited to a description of obvious symptoms that would suggest that cancer was present, for example persistent 'tasting' of blood in the mouth, many teeth 'shaking at the same time', a wound that 'refused' to heal on the tongue or pain.

20 (77%) out of the 26 participants from the Yoruba ethnic group and 7 (22%) from the Hausa/Fulani ethnic group consulted traditional healers for treatment of cancer before attending the hospital. Table 4 highlighted the reasons for seeking treatment from the traditional healers. Among the Yoruba's, more than one reason were given in some cases. 15 of the 20 Yoruba patients who consulted the traditional healers did so because traditional healers treat supernatural causes, 14 patients consulted the traditional healers in order to collect medication for the illness while 5

Demographic factor	Subgroup	Number
Age, yrs	10-20	4
	21-30	8
	31-40	8
	41-50	28
	>50	10
Sex	Male	43
	Female	15
Ethnic group	Yoruba	26
	Hausa/Fulani	32
Site of cancer	Tongue	16
	Lip	6
	Buccal mucosa	3
	Floor of the mouth	10
	Palate	12
	Antral floor	6
	Gingiva	5
Occupation	Civil servant	13
	Petty Trader	9
	Farmer	14
	Teacher	6
	Full Housewife	7
	Businessman/woman	5
	Unemployed	4

TABLE 1: DESCRIPTION OF PARTICIPANTS
(n = 58)

Patient view of the cause of oral cancer		Yoruba Ethnic group (N=26)		Hausa/Fulani ethnic group (N=32)	
		Number	Percent	Number	Percent
Groups of Domain of Beliefs					
In the Hands of Others	Evil	7	27	0	0
	Curses from wicked people	1	3.8	0	0
	Ancestors punishment related to family members wrongdoing	5	19.4	0	0
	Giving 'Poison' to it	3	11.6	1	3.1
Divine Power	Act of God	0	0	19	59.4
	Destiny	1	3.8	4	12.6
Damage to the mouth	Injury to the mouth	1	3.8	0	0
	Infection, worms or germs	1	3.8	2	6.3
	Tooth extraction	2	7.7	1	3.1
Can catch it	Sharing personal items with cancer patient	1	3.8	0	0
	Being close to cancer patient	0	0	1	3.1
Bring it upon yourself	Smoking	2	7.7	1	3.1
	Poor Diet	1	3.8	0	0
	Oral Sex	0	0	1	3.1
Can pass it down	It is in the Family	1	3.8	1	3.1
	Genetics	0	0	1	3.1

TABLE 2: PATIENTS VIEW OF THE CAUSE OF ORAL CANCER

Perceived understanding of cancer	Yoruba Ethnic group (N=26)		Hausa/Fulani ethnic group (N=32)	
	Number	Percent	Number	Percent
An incurable illness that causes suffering and pain	19	73	25	78
'Touching cancer' (Surgery) can cause it to spread	9	25	18	56
Cancer is 'alive' in the body	12	46	2	6
There is no medicine for cancer	18	69	21	66
It is being passed down in the family	1	3.8	2	6.3
Cancer have roots and spread through the blood	9	35	5	16
In both ethnic groups; percentage does not add up to 100% because some patients provided more than one view about cancer				

TABLE 3: PATIENT UNDERSTANDING OF ORAL CANCER

mentioned cultural reasons. 71.4% of the Hausa/Fulani patients consulted traditional healers to collect medications. 8 of the 20 patients from the Yoruba ethnic group that consulted the traditional healers were later referred to the hospital for further treatment by the traditional healers.

Table 5 shows the different treatments received for oral cancer from the traditional healers by the patients from both ethnic groups. Some of the cancer cases were treated with more than one method. Among the Yoruba's; in 16 cases spiritual cleansing was carried out as a treatment for cancer, herbal treatment was

Common Reasons	Yoruba Ethnic group (N=20)		Hausa/Fulani ethnic group (N=7)	
	Number	Percent	Number	Percent
They treat supernatural causes	15	75	0	0
Cultural beliefs	5	25	2	28.6
To seek the explanation about the cause of cancer	4	20	0	0
To collect medication for the problem	14	70	5	71.4
In the Yoruba ethnic group: Percentage does not add up to 100% because some patients provided more than one reason for consulting the traditional healers.				

TABLE 4: REASONS FOR CONSULTING WITH TRADITIONAL HEALERS

used in 15 patients and ritual sacrifices were done by the traditional healers to appease the ancestors as a form of treatment for 6 patients. Herbal treatment (5 patients), animal products (1 patient) and sacrifices (4 patients) were the three methods used by the traditional healers to treat oral cancers from the Hausa/Fulani ethnic groups.

When participants were asked on how oral cancer could be prevented, 28 (48.3%) were of the view that cancer cannot be prevented, 25 (43%) mentioned that prevention of cancer is in the 'hand of God' while 5 (8.7%) patients were of the opinion that 'eating good food' can prevent cancer.

DISCUSSION

The attitude of different groups of people towards life-threatening disease is highly dependent on their cultural backgrounds (Eisenbruch et al., 2004)⁷. Medical anthropologists differentiate between lay people's models of a sickness and those of health practitioners. The former is referred to as illness—the patient's perception, experience, expression, and pattern of coping with symptoms, while the latter is referred to as disease—meaning cellular or organ pathology. Each culture has its own system of beliefs, perceptions, and ideas about health and illness (Halman, 1994)¹¹.

In many cultures the explanation why a specific disease or disability occurs (causation belief) is shared by all members of the community (Harwood, 1981)¹¹. In diverse multicultural societies, the different cultures may sometimes represent considerable variation in beliefs about diseases and family life (Strauss, 1985)²⁴.

This seems to be well demonstrated by the findings in the present study. Half of the patients from the Yoruba ethnic group believed that cancer was caused by the 'hands of others', explaining that they were harmed by supernatural forces such as evil spirits or ancestral spirits, while 24 (72%) out of 32 patients from the Hausa/Fulani ethnic group attributed cancer to 'divine nature', an act of God or destiny. Many voiced that 'whatever God has written- sickness, richness, comfort—about an individual, the individual cannot change it'. Accordingly cancer was viewed as a 'disease of fate'. In groups that hold fatalistic outlook to life, the belief may be held that the individual cannot necessarily exercise control over his or her health (Dein, 2004)⁶. Among the Hausa-Fulani ethnic group in Nigeria, it is not uncommon for individuals with cancer to accept their demise and refuse potentially life-saving measures. Fatalistic attitudes have been proposed as causing poorer prognoses in colorectal cancer among black Americans compared to the white population (Powe, 1995).

Only 4 out of the 58 participants in the present report believe that their lifestyle behaviors could affect their chances of developing cancer. Contrary to this finding, 80% of U.S respondents believe that they can affect their own chances of developing cancer (Bostick et al., 1993). This culturally related attitude among Nigerians may be a potential barrier toward changing health behaviors; we however, believe that if provided with accurate information about cancer, more positive attitudes may be anticipated in this population. Beliefs with regards to causations of cancer may not always be

grounded in biomedical perspective in all populations (Randhawa & Owens 2004)²². Kirchgissier (1990) underscore the strength of science in demonstrating the 'how' of a disease but not often 'why'. Popular explanations of the causes of diseases have been studied in some other communities (Blaxter, 1983; Kirchgissier, 1990; Gregg & Curry 1994)^{3,10,15}. The findings in these studies strongly support the claim that these explanations are culturally patterned, have a high degree of logical coherence and bear complex, and at times contradictory, relationship to medically sanctioned causes. Nigerian patients explanations of the causes of cancers reflect these qualities.

Steffensen & Colker (1982)²³ described how lay explanations of diseases affect compliance with medical recommendations. They found that when recommendations are not congruent with lay explanations of disease, individuals may not be able to integrate and use information. The findings in this report can therefore be used to guide the design and implementation of educational programs related to cancer in Nigeria. Gonzalez & Lorig (1990)⁹ suggested that the first step in planning culturally sensitive patient education programs is to gain an understanding of the target group's belief and values. When we focus on how culture influences health beliefs we can gain an understanding of how health care services can be tailored to meet the needs of different groups.

There are a variety of discourses that take place regarding cancer. These discourses often evolve from lay understandings of disease and help individuals create meaning around cancer experiences and provide direction for potential treatment (Dein, 2004; Eisenbruch et al., 2004)^{6,7}. Responses about the understanding of cancer vary in the present report, majority of participants from both ethnic groups however, viewed cancer as a hidden killer that causes suffering and pain. Embedded in their stories of cancer are distinctive, often vivid images associated with fear and anxiety. Given the lack of adequate knowledge about cancer, patients often drew on familiar objects and ideas to concretize and inform their understanding of the disease. There were many local names identified for cancer in both ethnic groups, however, cancer is commonly referred to as *Jejere* (flesh eater), and *Harbin Jeji* (a disease that cannot be cured) among the Yoruba's and the Hausa/Fulani ethnic groups respectively. The

meaning of cancer among African patients appears to differ depending on local customs and beliefs (Alexander, 1985)². Jansen (1976) reported that *unhlaza* (cancer) was not considered as a symbol of an incurable disease among the Bornvana of South Africa.

Studies have shown that the definition of what constitute cancer may vary between cultural groups. In a report on breast and cervical cancer among a group of black women in Atlanta, GA, USA, majority were of the view that the only real cancer was a late-stage cancer causing death and that a non-fatal condition could not be cancer and therefore screening was of little use (Gregg & Curry, 1994)¹⁰. Few of the patients in this study seem to know some of the usual late symptoms associated with oral cancers in the biomedical perspective, but there is lack of knowledge about the early signs and symptoms of cancer as accepted in Western medicine. This therefore suggests the need for planned health education on early identification of oral cancer by health providers in Nigeria.

Differences in opinions regarding the cause of cancer among the two Nigerian ethnic groups were reflected in the varied methods of seeking treatment. 20 of the 26 Yoruba patients compared with seven from the Hausa/Fulani ethnic group had consulted the traditional healers for treatment of oral cancer before attending hospital. Moreover, majority of Yoruba's who consulted the traditional healers did so because of the belief that the traditional healers treat supernatural causes. A similar study among the Igbo ethnic group in south east Nigeria indicated that the diagnosis of cancer is a twofold event involving both the organic and the spiritual (Nwoga, 1994)¹⁸. These patients were of the opinion that spiritual healing and cleansing needs to be implemented as an important part of the treatment for cancer. Spiritual healing is a process that dispels the evil spirits and cleanses the patient by removing impurities and restoring equilibrium to the patient's mind and body (Daghers & Ross, 2004⁵; Pretorius, De Klerk & Van Rensburg, 1993)²¹. In Western nations, patients tend to view the etiology of diseases through medical explanations, with a belief that such diseases are remediable through medical attention (Strauss, 1985)²⁴. Uba (1992)²⁵ described how illness beliefs of Southeast Asian refugees are inextricably linked with beliefs about life, harmony and energy. Accordingly, she argued that Western medi-

cine, with its focus on organic causes of illness, is often deemed to be inappropriate by these refugees and that their health care providers need to learn to frame treatment in a way that is commensurable with these beliefs. Maclean (1971) however, observed that the plight of a cancer patient attending an African hospital may worsen due to the general lack of basic facilities and manpower necessary for the treatment of cancer, and as the disease continues to progress without adequate treatment, patient may begin to see the inadequacy of Western medicine in treating his condition, thereby reinforcing the general beliefs that that Western medicine can not cure cancer.

Mismatches between the biomedical facts about the understanding and cause of cancer and the cultural assumptions held by individuals that may cause management problems is not uncommon even in developed countries where the immigrant population are from culturally and linguistically diverse background (Dein, 2004). Practitioners need not 'blame the victim' for their beliefs and it is not necessarily the patients responsibility to change their beliefs in response to biomedical culture. But rather it is biomedical culture that should be modified to be culturally appropriate to the patients needs (Dein, 2004)⁶. Practitioners should be made aware that their own professional values are socially and culturally constructed. Patient's health beliefs concerning cancer and its treatment should be elicited. Qualitative studies including ethnographic interviews are very useful in eliciting beliefs and attitudes about cancer that can inform prevention and treatment programs (Ohaen et al., 1999¹⁹; Alexander, 1985²; Dein, 2004)⁶. Adapting messages on screening, diagnosis, and treatment of oral cancer to the local community's ways of thinking might possibly enhance both doctor-patient relationships and improve compliance.

Traditional belief systems are distinctly alien to and not easily comprehended by many Western practitioners (Henges et al., 1986)¹². In Africa, traditional folk medicine reinforces people belief system and responds to the needs of the people not only by involving them in treatment but also by using the language and concepts that can easily be understood by the people (Halman, 1994)¹¹. Henges et al (1986)¹² noted that folk medicine is a clinical fact, whatever the professional think of it. Ignoring this alternative or complementary

system underscores the doctor-centered, rather than the patient-centered approach to health care delivery.

The role of modern medical treatment of cancer is not in doubt; however, since traditional healers are consulted by a large number of cancer patients in this environment, they are ideally suited to augment the services of westernized health care workers, especially in the area of cancer preventive strategies and provision of health education to patients. The fact that 8 of the 20 patients from the Yoruba ethnic group acknowledge that they were referred after treatment to the hospital by the traditional healers underlines the need for greater collaboration between the modern medical practitioners and the traditional healers in cancer management. There is need to share information on cancer between both groups, however, in a culturally sensitive manner. If relevant information is given to traditional healers on cancer, rehabilitation processes could potentially be managed in a more effective manner (Alexander, 1985²; Nwoga, 1994)¹⁸. Findings from this study also suggest that traditional healers could be used to large extent in primary health care program, especially with regard to cancer. Primary health program presently forms the cornerstone of the national health program of most African countries (Gadallah et al, 2005). Traditional healers are known to be held in high esteem among Africans (Alexander, 1985²; Daghers & Ross, 2004)⁵. Training workshops on prevention and early signs of cancers can be periodically arranged for traditional healers to facilitate their professionalization and their collaboration with other health care workers.

In conclusion, cultural and religious factors seem to play an important role in the explanations, labels and treatment of cancer in this environment. This call for greater collaborations between the modern medical practitioners and traditional healers with regards to the early diagnosis and prevention of cancer. Studies of this nature will provide a solid foundation for the development of culturally appropriate strategies to meet the health needs of Nigerians as regards treatment and preventive program for cancers. In view of the relatively small sample in the present study, it is recommended that the research project be replicated with a larger sample comprising parents from the four major ethnic groups in Nigeria.

REFERENCES

- 1 Adekunle, A.O., Olaitan EO. (2000). Evaluation of the Nigerian population policy- myth or reality. *Afr. J. Med*, 3-4, 305-310.
- 2 Alexander, G. L (1985). A survey of traditional medical practices used for the treatment of malignant tumors in an east African population. *Soc. Sci. Med*, 20, 53-59.
- 3 Blaxter, M. (1983). The causes of disease. *Women talking. Soc. Sci. Med*, 17, 59-69
- 4 Bostick, R., Sprafka, J., Virnig, B., Potter, J. (1993). Knowledge, attitudes, and personal practices regarding prevention and early detection of cancer. *Prev. Med*, 22, 65-85.
- 5 Daghers, D., Ross E. (2004). Approaches of South African traditional healers regarding the treatment of cleft lip and palate. *Cleft Palate-Craniofac*, 41, 461-471.
- 6 Dein, S. (2004). Explanatory models of and attitudes towards cancer in different cultures. *Lancet. Oncol*, 5, 119-124.
- 7 Eisenbruch, M., Yeo, S. S., Meiser, B., Goldstein D., Tucker, K., Barlow-Stewart, K. (2004). Optimizing clinical practice in cancer genetics with cultural competence: lessons to be learned from ethnographic research with Chinese-Australians. *Soc. Sci. Med*, 59, 235-248.
- 8 Gadallah, M., Zaki, B., Rady, M., Anwe, W., Sallam I. (2005). Patient satisfaction with primary health care services in two districts in lower and upper Egypt. *East Mediterr Health J*. 422-430.
- 9 Gonzalez, V. N., Lorig, K. (1990). Working cross-culturally. In: Lorig K. editor. *Patient education. A practical approach*. Thousand Oaks, CA: sage, 151-171.
- 10 Gregg, I., Curry, R. H. (1994). Explanatory models for cancer among African-American women at two Atlanta neighborhood health centers: the implications for a cancer screening program. *Soc. Sci. Med*, 39, 519-526.
- 11 Harwood, A. (1981). *Ethnicity and medical care*. Cambridge: Harvard University Press. Helman, C. (1994). *Culture, health and illness: an introduction for health professionals*, 3rd ed. Oxford: Butterworth Heinemann.
- 12 Hentges, K., Shields, C. E., Cantu C. (1986). Folk medicine and medical practice. *Text Med*, 1986, 82, 2-29.
- 13 Jansen, G. (1976). *The Doctor-Patient Relationship in an African Tribal Society*. Van Gorcum. Asen. 21.
- 14 Kanem, R. H. (1987). Negotiations, superstitions and plight of individuals born with severe birth defects. *Soc. Sci. Med*, 144, 179-286.
- 15 Kirchgissier, K. (1990). Change and continuity in patient theories of illness: the case of epilepsy. 30, 1313-1318.
- 16 Kleiman, A. (1980). *Patients and healers in the context of culture*. Berkley: University of California Press.
- 17 Maclean, U. (1971). *Magical Medicine. A Nigerian Case-Study*, (pp. 137-138). London: The Penguin Press.
- 18 Nwoga, I. A. (1994). Traditional healers and perceptions of the causes and treatment of cancer. *Cancer Nursing*, 17, 470-478.
- 19 Ohaeri, J. U., Campell, O. B., Ilesanmi, O. A., Omogboun. A. O. (1999). The psychological burden of caring for some Nigerian women with breast cancer and cervical cancer. *Soc. Sci. Med*, 49, 1541-1549.
- 20 Powe, B. (1995). Perceptions of cancer fatalism among African Americans. *J. National Black Nurses Assoc*, 7, 41-48.
- 21 Pretorius E, De Klerk GW, Van Rensburg HCJ (1993). *The traditional healers in South African health care*. Pretoria, South Africa: Human Sciences Research Council.
- 22 Randhawa, G., Owens A. (2004). The meanings of cancer and perceptions of cancer services among South Asians in Luton, UK. *Br. J. Cancer*, 91, 62-68.
- 23 Steffensen, M. S., Colker, L. (1982). Intercultural misunderstanding about health care. *Soc. Sci. Med*, 16, 337-342.
- 24 Strauss, R. P. (1985). *Culture, rehabilitation and facial defects: international case studies*. Cleft Palate, 1, 56-62.
- 25 Uba, L. (1992). Cultural barriers to health care for Southeast Asian refugees. *Public Health Rep*, 107, 544-548.