Afr. J. Med. Med. Sci. (2021) **50,** 85-89

Palliative care for Head and Neck Cancer Patients: A 10 year review

OA Maboreje[1], OA Soyannwo[1], OF Iken[2] and TN Elumelu-Kupoluyi[3]
Department of Hospice and Palliative Care[1], Community Medicine[2] and Radiology[3], University College Hospital, Ibadan, Nigeria .

Abstract
Background: Head and neck cancers (HNC) constitute a diverse group of diseases including malignancies of the oral cavity, oropharynx, larynx, sinuses, and skull base. They constitute 5-50% of all cancers globally and 6.2% of all cancers in Nigeria. Majority of these patients usually present with advanced staged disease and they are mostly for palliative care.
Methodology: Data for this study was retrieved from case files of patients seen at Hospice and Palliative care unit, UCH, Ibadan from February 2008 - January 2018. Their bio data, diagnosis and services offered were extracted and analyzed.
Results: There was a total of 77 patients with Head and Neck Cancers seen; 38 males and 39 females (M/F=1:1) out of a total of 1,765 patients enrolled by the Unit during the study period. Of these 77 patients, 20(26%) lived within the department's catchment area for Home based care services.
Services rendered included pain control, home based care, patient counseling, financial support, phone calls, psychosocial support, day care forum and bereavement support. Patient counseling was offered to all patients and pain control was managed with analgesics using the World Health Organization analgesic ladder. Other symptoms managed were sore throat, weight loss, headache, drowsiness, odynophagia. At the end of the period under review 50 (65%) were dead and 26 (34%) of the patients were lost to follow up and 1 (1%) of the patients is alive.
Conclusion: Patients with Head and Neck Cancers had supportive services rendered for their pain, other symptoms control and their psychosocial issues. Palliative care should be made available and accessible to all patients who require it.

Keywords: *Head, neck, cancer, malignancies, oropharynx, sinuses*

Résumé
Contexte: Les cancers de la tête et du cou (HNC) constituent un groupe diversifié de maladies, y compris les tumeurs malignes de la cavité buccale, de l'oropharynx, du larynx, des sinus et de la base du crâne. Ils constituent 5 à 50% de tous les cancers dans le monde et 6,2% de tous les cancers au Nigéria. La majorité de ces patients présentent généralement une maladie à un stade avancé et ils sont principalement destinés aux soins palliatifs.
Méthodologie: Les données de cette étude ont été extraites des dossiers de cas de patients vus à l'unité de soins palliatifs et palliatifs, UCH, Ibadan de février 2008 à janvier 2018. Leurs données biologiques, le diagnostic et les services offerts ont été extraits et analysés.
Résultats: Au total, 77 patients atteints de cancers de la tête et du cou ont été vus; 38 hommes et 39 femmes (H / F = 1: 1.) Sur un total de 1 765 patients recrutés par l'Unité au cours de la période d'étude. Sur ces 77 patients, 20 (26%) vivaient dans la zone de desserte du département pour les services de soins à domicile. Les services rendus comprenaient le contrôle de la douleur, les soins à domicile, les conseils aux patients, le soutien financier, les appels téléphoniques, le soutien psychosocial, le forum de garde de jour et le soutien au deuil. Des conseils aux patients ont été proposés à tous les patients et le contrôle de la douleur a été géré avec des analgésiques en utilisant l'échelle analgésique de l'Organisation mondiale de la santé. Les autres symptômes pris en charge étaient les maux de gorge, la perte de poids, les maux de tête, la somnolence, l'odynophagie. À la fin de la période sous revue, le nombre (65%) étaient décédés et le nombre (34%) des patients ont été perdus de vue et le nombre (1%) des patients est en vie.
Conclusion: Les patients atteints de cancers de la tête et du cou ont bénéficié de services de soutien concernant leur douleur, le contrôle des autres symptômes et leurs problèmes psychosociaux. Les soins palliatifs doivent être disponibles et accessibles à tous les patients qui en ont besoin.

Mots clés: *Tete et cou, oropharynx, larynx, sinus*

Introduction

The occurrence of cancers and specifically carcinomas of the head and neck vary widely between populations and have been associated with

Correspondence: Mrs. O.A Maboreje, Hospice and Palliative Care Department, University College Hospital, Ibadan, Nigeria

various known predisposing/etiological factors like tobacco use [1], alcohol ingestion and smoked foods [2], Chinese-style salted food [3], very hot drinks [4], viruses and industrial pollution [5]. In Nigeria identified risks factors included: Kola nuts, tobacco farming, viral infections, alcohol and smoking [6].

Head and neck cancers (HNC) constitute 5-50% of all cancers globally [12] and 5-8% of total body cancers in Europe and America [13,14]. In India, HNC constitutes about 30% of all cancers [15]. In some parts of Northern Nigeria, a yearly hospital incidence of 20-24 new cases ha been reported [16-17] while in the Southern part of Nigeria HNC form 6.2% of all cancers [18]. In south-western Nigeria a yearly incidence of 33-38 new cases had been reported [19-20]. Laryngeal cancer was commoner in patients who consumed alcohol than smokers in the report from Jos [7], while in reports from Enugu [8], Lagos [9] and Ile Ife [10] most patients with laryngeal carcinoma were non-smokers. Viruses are thought to be responsible for some Head and neck cancers in sero-positive patients by viral oncogenesis. According to Nwaorgu *et al* [11] salivary gland malignancy was the commonest tumor in patients with HIV sero-positivity in Ibadan (South-west Nigeria)while Otoh *et al* [6] reported Kaposi sarcoma as the commonest tumor in these in North-eastern Nigeria.

Many patients with cancer and other chronic diseases in developing countries present late, at times with distressing symptoms and life threatening emergencies. Palliative care aims at improving the quality of life of these patients. The aim of this study is to highlight palliative care services rendered to patients with head and neck cancers during 10 years period at the Hospice and Palliative Care Unit, University College Hospital Ibadan.

The Hospice and Palliative Care Unit, University College Hospital Ibadan was established as a result of collaboration between a not-for-profit organization: Centre for Palliative Care Nigeria (CPCN) and the University College Hospital Ibadan. It is the first structured Hospice and Palliative Care Unit in a teaching hospital in Nigeria commissioned on 19th July 2007. This partnership has provided educational activities and training, home-based care visits, hospital care, provision of palliative care services at the day care Centre, palliative care pain clinic and counseling clinic.

Comprehensive and holistic care have been provided for over 2000 adult patients as at 2018 including 600 children facing the challenges of life-limiting illness especially cancer and HIV.

Methodology

This is a retrospective notes based study of patients seen at Hospice and Palliative care Unit, University College Hospital, Ibadan between February 1st, 2008 and January31st, 2018. Data regarding sex, age range, services rendered, place of domicile, symptoms and their management were obtained from case records. Data was collated and analyzed via the SPSS v15

Results

Out of a total number of 1765 cancer cases enrolled during the study period, 77 (4.4%) had diagnosis of head and neck cancer.The ages of the patients ranged between 7-98 years with the 30- 59 year age group being most affected. (Table I)

Table I: The Age distribution of Patients under Review

Age(Years)	Frequency	Percentage
Less than 14	3	4
15-29	13	1
30-44	22	29
45-59	21	27
60-74	10	13
75 -89	7	9
90 and above	1	1
Total	77	100

The HNC types seen in the period under review as shown in table II include: Oral cavity cancer 27(35%), Pharyngeal cancer 22(29%), salivary gland cancer 11(14%), laryngeal cancer 7(9%) & para-nasal sinus and nasal cavity cancers 10(14%). Patients referred to the palliative care department presented in the advanced stage of their cancer diagnosis, either stage 3 (10%) or stage 4 (90%).

Of these patients, 20(26%) lived within catchment area of the hospice in Ibadan, Oyo State (defined as within 20km radius of the Hospice) while 57(74%) resided outside catchment area. They were referred from 18 States of Nigeria as shown in Table V. Of the total number of patients 8(10%) had home based care with 5(6.5%) relocating from outside catchment area to enjoy the home based care services.

There were 51 patients who presented with complaints of pain, scored on the numerical rating scale (0 no pain to 10, worst pain possible). Of these, 10(13%) patients presented with pain scores: 1-3, 20(26%) had pain scores 4-6 which is moderate grade while 21(27%) of the patients had presented with pain scores 7 -10; while 20(26%) had nil pain at presentation. Patients with pain score 7-10 had their

pains controlled with Oral Morphine +(-) adjuvants, pain scores of 4-6 were managed with DF118,Tramadol +(-)Adjuvants while those with pain score 1-3 were treated with NSAIDs (non-steroidal anti -inflammatory drugs) according to the WHO analgesic ladder.

Other complaints were weight loss in 39(50%) patients, sore throat in 12 patients (16%), fatigue 11(14%) patients and vomiting in 4(5%) patients. (Table 2)

Table 2: Other Symptoms Presented

Patients Symptoms	Number of Patients (%)
Weight Loss	39(50%)
Sore Mouth	12(16%)
Fatigue	11(14%)
Dry Mouth	11(14%)
Cough	5(7%)

Services rendered by the Palliative care team for these patients included counseling which was rendered to all patients and relations/carers on insight to patient's disease condition, care of wounds, nutrition of patient ensuring balanced diet, proper coordination of activities and manpower to avoid carers or burnout from caring for patient and on the need for legal involvement concerning legal matters, pain control for those who required it, financial support to 20 patients who were indigent, phone call services to 11 patients, home based care services to 8 patients, psychosocial support to 24 patients and day care forum services to 12 patients. The Palliative Care services were provided alongside other modalities such as chemotherapy, radiotherapy and psychotherapy to address pain and other symptoms.

Table 3: Services Rendered

Type of Services	Number of Patients (%)
Pain Control	51(66%)
Home Visit	8(10%)
Financial Support	20(26%)
Phone Calls	11(14%)
Day Care Forum	12(16%)
Psychosocial Support	24(31%)
Counseling	77(100%)

At the time of data collection 1 person (1%) was alive, 50 person (65%) were dead, 26 person (34%) of the patients were lost to contact (defined as after 3 months of the hospice and palliative care team being unable to get through by phone to the patients).

Discussion

Head and neck cancers constitute a diverse group of diseases including malignancies of the oral cavity, oropharynx, larynx, sinuses, and skull base. Treatment of these cancers includes a combination of surgical resection, chemotherapy, and radiation. Due to both the patterns of disease recurrence and the adverse effects of treatments, patients with head and neck cancer often have a complex and prolonged course of illness. Their illness trajectory is usually marked by periods of freedom from disease and symptoms interspersed with bouts of serious illness, debility, and numerous physical and psychological symptoms including pain, dysphagia, weight loss and disfigurements. Palliative care is therefore an essential aspect of the care to improve the patients' quality of life and provide much needed support for their families.

The University College Hospital is a foremost tertiary health institution with various specialties and a national oncology referral centre for patients from different parts of Nigeria.Its comprehensive cancer care facilities includes: radiotherapy, chemotherapy, nuclear medicine and palliative care. All these services contributed to the care of the patients with HNC while those who lived in the catchment area also benefitted from home based care. The home-based care provided much needed counseling and education of the close families and carers. Patients who were not on ward admission and especially those outside the palliative care service catchment area were referred to health institutions around their places of domicile as palliative care services are currently available at very few sites [7] in Nigeria. Such patients were also contacted through telephone calls for counseling, follow up regarding symptoms and medication review.

It is common to find that majority of patients present at late stages of cancer disease in Nigeria and other developing countries. Oral symptoms are rarely attributed to cancer and frequently interpreted as minor oral conditions. As a result of these beliefs, patients tend to postpone seeking help [22]. Furthermore, there remains poor acceptance of palliative care by most physicians as they aim for curative measure for patients after diagnosis has been made. The need for education, counseling to establish insight and psychosocial support was identified in most patients and their families. Modern application of palliative care principles allowed the palliative care team to use both curative treatments alongside management of symptoms and psychosocial concerns.

In order to effectively manage pain, patients were taught how to score pain intensity using numerical rating scales, a validated Symptom Assessment System (SAS) which uses a 0-10 scale with 0 being the least and 10 being the worst level of pain. Most of these instruments and techniques are both valid and reliable in the assessment of the intensity of pain. Patients were taught how to rate their pain using the scale which was moderate to severe. Most patients in the study (51%) reported moderate to severe pain.

The World Health Organization (WHO) has advocated for effective pain management and widely recommends the use of the 'Analgesic Ladder' [23]. It was originally applied to the management of cancer pain but is now widely used by medical professionals for the management of other types of pain. The general principle is to start with first step drugs, and then climb the ladder if pain is still present or go down the ladder when pain improves. The medication ranges from household, over-the-counter drugs with minimal side-effects at the lowest rung, to powerful opioids. In our study, 52% of the patients received strong opioids, despite the fact that more than half qualified for use of this type of drug due to other treatment modalities such as surgery, chemotherapy and radiotherapy and none availability of opioids and physicians not prescribing these medication when available. This suggests that there is a need to advocate for wider availability of opioids, especially liquid morphine, in the country, to relieve the pains and suffering of the patients with cancer pain and continuous education of medical personal on opioid prescription and use.

This indicates a need for more hospice centers all over the nation to facilitate effective care of these patients outside catchment area and also a need for training more health workers in palliative care.

Acknowledgement

Special thanks to our patients for their cooperation, to Judith Paice and Ferrell Betty for taking time in going through the paper and making amendments at the initial stages and the team

References

1. Johnson NW. Orofacial neoplasms: global epidemiology risk factors and recommendations for research.Int Dent J 1991; 41:365-375.
2. Sisson GA, Torium DM and Atiyah RA. Paranasal sinus Malignancy- A comprehensive update Laryngoscope 1989; 143-152.
3. Yu MC. Nasopharyngeal carcinoma: epidemiology and dietary factors. In: Relevance to human cancer of N-nitroso compounds, tobacco smoke and mycotoxins.O'Neil IK,Chen J. Bartsch H(eds). IARC SciPubl, No105:1991; p39-47.
4. Key Tj, Allen NE, Spencer EA and Travis RC. The effect of diet on risk of cancer. Lancet 2002; 360:861-68.
5. Evaluation of carcinogenic Risks to Humans. IARC Monogrcarcinog Risks Hum, Internal Report 1998; No.98/004.Vol 77.
6. Bhatia PL: Head and neck cancer in Plateau State of Nigeria. West Afr J Med 1990, 9:304-310. Pub Med abstract.
7. Lilly-Teriah da OB, Ukoli CO and Nwana EJC: Cancer of the larynx in black Africans in Jos,Nigeria.Cent Afr J Med. 1999, 45(2):40-42.
8. Okafor BC: Otolaryngology in South-Eastern Nigeria III. Pattern of disease of the throat.Nig Med J 1983, 13:30-41
9. Somefun AO, Nwanwolo CC, Okeowo PA *et al*, :Prognostic factors in the management outcome of carcinoma of the larynx in Lagos.Niger Postgrad Med J *2003,* 10:103-106.
10. AmusaYB, Olabanji JK and Ogundipe OV: Pattern of head & neck malignant tumour in a Nigerian teaching hospital: a ten year review. West Afr J med 2004, 23:280-285.
11. Nwaorgu O, Kokong D, Onakoya P *et al:* Prevalence of human immunodefiency virus sero-positivity in head and neck malignancies in sub-Saharan Africa. Acta Oto-Laryngol 2007, 127:1218-1221.
13. Garfinkel L. Perpective on cancer prevention.Cancer J clin. 1995;45:5-9.13.Tobias JS.cancer of the head and neck. BMJ 1994; 308:961-966.
14. Zagar GK, Smith JL, Norante JD and McDonald S; Tumours of the head and neck. In clinical Oncology: A multidisciplinary approach for physicians and students. 7th edition. Edited by Rubin P. Baltimore W.B Saunders; 1993:319-362.
15. Sanghvi LD, Rao DN and Joshi S: Epidemiology of head and neck cancers. Seminsurgoncol 1989, 5:305-309.
16. Bhatia PL: Head and neck cancer in Plateau State of Nigeria. West Afr J Med 1990, 9:304-310.
17. Otoh EC, Johnson NW, Danfillo Is: Primary head and neck cancers in North Eastern Nigeria West Afr. J Med 2004; 23: 305-313
18. Lilly-Tariah da OB, Nwana EJ and Okeowo PA: cancers of the ear nose and throat.Nig. J surg science 2000. 10:52-56

19. AmusaYB, Olabanji JK and Ogundipe OV: Pattern of head & neck malignant tumour in a Nigerian teaching hospital: a ten year review. West Afr J med 2004, 23:280-285.
20. Nwawolo CC, Ajekibge AT, *et al* : Pattern of head and neck cancers among Nigeria in Lagos. WAJM 2001, 20: 111-116.
21. Nigeria year book Times press Ltd.Apapa; 1981:451-467.
22. Scott SE, Grunfeld EA *et al.* Patient delay in oral cancer. A qualitative study of patients' experience.Psychooncology. 2006;15:474-85[PubMed]
23. who.int/cancer/palliative/painladder/en
24. http://uch-ibadan.org.ng/hospice_and_palliative_care

Received = 24th February 2020
Accepted = 5th June 2020