

Awareness on Palliative Oral Care Among Oral Medicine Postgraduates And Faculty - A Questionnaire Study

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I. Introduction

Palliative care in dentistry has been defined as the study and management of patients with active, progressive, far-advanced disease in whom the oral cavity has been compromised either by the disease directly or by its treatment; the focus of care is quality of life.^{1,2} Palliative care is an imperative need worldwide for people with cancer. Head and neck cancer impacts uniquely on the health and well-being of patients, which accounts for approximately 6% of cancers worldwide. Many oral conditions, such as poor oral hygiene, broken teeth, defective restorations and periodontal disease, are likely to precipitate complications during and after a course of radiation therapy. Hence a multidisciplinary approach including general physician, oncologist, radiotherapist and oral physician, may reduce the oral & general debilities that influence the patient's ability to speak, eat or swallow.³

Health care professionals including dentists lack knowledge and confidence in their ability to care for the palliative patients, are not rewarded for exhibiting concern over psychosocial issues in end-of-life care.⁴ Though an oral physician is bestowed with adequate knowledge to diagnose and treat oral manifestations of local and systemic origin, their competency in the field of palliative medicine is very less. Hence, the objective of this study is to reveal the awareness of Oral Medicine postgraduates and faculty on various aspects of palliative care by questionnaire.

II. Materials And Methods

A cross sectional questionnaire study was conducted among Oral Medicine postgraduates and faculty in different dental colleges of India. A validated questionnaire was given to 300 faculty and post graduate students in Oral medicine and Radiology, but only 210 responded of 36 faculty and 174 postgraduate students. The data was collected on a validated structured questionnaire, developed based on review of literature and tested for content validity by subject experts. This questionnaire was distributed to faculty and post graduate students in Oral medicine and Radiology and were asked to fill the same. The questionnaire constructed of total 20 questions for the category of knowledge and attitude towards palliative oral care. The questionnaire had 3 sections; first section includes general information of age and gender, qualification, no. of years of practice, second and third sections includes knowledge and attitude questions. Knowledge questions included oral lesions and treatment in palliative patients in the form of multiple choices. Attitude questions included general statements on palliative care, measured using a 5 item Likert scale (ranging from strongly agree to strongly disagree)

III. Results

We divided the respondents on the basis of their designation. Data were analyzed by mann whitney test to compare the scores between the two groups. Association between qualification and response for each knowledge and attitude question is analyzed by chi square test. The association between qualification and the response was found to be statistically significant for question K2 ($P < 0.05$), K3 ($P < 0.05$), K6 ($P < 0.01$) and K8 ($P < 0.05$). (Table 1) The proportion of correct response for K2 (Treatment of Radiation induced hyposalivation), K3 (Treatment of Cancer therapy induced mucositis) and K8 (What is the most common available treatment for opportunistic fungal infections in India) was found to be higher in faculty group compared to PG group. For K6 (Drugs used to prevent mucositis and hyposalivation), the proportion of correct response was found to be higher in PG group compared to faculty group.

Table 1: Association between qualification and responses for each knowledge question: (Chi-squared test)

Question	Response	BDS (PG)		MDS		χ^2	P-Value
		n	%	N	%		
K1	Incorrect	33	19%	9	25%	2.518	0.113
	Correct	141	81%	27	75%		
	Total	174	100%	36	100%		

K2	Incorrect	39	22%	2	6%	5.395	0.020*
	Correct	135	78%	34	94%		
	Total	174	100%	36	100%		
K3	Incorrect	81	47%	9	25%	5.657	0.017*
	Correct	93	53%	27	75%		
	Total	174	100%	36	100%		
K4	Incorrect	142	82%	28	78%	0.284	0.594
	Correct	32	18%	8	22%		
	Total	174	100%	36	100%		
K5	Incorrect	71	41%	9	25%	3.159	0.075
	Correct	103	59%	27	75%		
	Total	174	100%	36	100%		
K6	Incorrect	143	82%	36	100%	7.525	0.006*
	Correct	31	18%	0	0%		
	Total	174	100%	36	100%		
K7	Incorrect	100	57%	21	58%	0.009	0.924
	Correct	74	43%	15	42%		
	Total	174	100%	36	100%		
K8	Incorrect	50	29%	4	11%	4.851	0.028*
	Correct	124	71%	32	89%		
	Total	174	100%	36	100%		
K9	Incorrect	34	20%	12	33%	3.317	0.069
	Correct	140	80%	24	67%		
	Total	174	100%	36	100%		
K10	Incorrect	51	29%	6	17%	2.411	0.120
	Correct	123	71%	30	83%		
	Total	174	100%	36	100%		

Table 2: Comparison of response received for attitude questions: (Chi-squared test)

Question	Qualification	Strongly Agree		Agree		Can't Say		Disagree		Strongly Disagree		χ ²	P-Value
		n	%	n	%	N	%	n	%	n	%		
B1	BDS (PG)	44	25%	95	55%	20	11%	14	0%	1	1%	13.466	0.009*
	MDS	19	53%	16	44%	1	3%	0	0%	0	0%		
B2	BDS (PG)	27	16%	112	64%	30	17%	5	0%	0	0%	5.765	0.124
	MDS	9	25%	17	47%	10	28%	0	0%	0	0%		
B3	BDS (PG)	75	43%	85	49%	14	8%	0	0%	0	0%	3.225	0.199
	MDS	18	50%	18	50%	0	0%	0	0%	0	0%		
B4	BDS (PG)	86	49%	81	47%	7	4%	0	0%	0	0%	4.315	0.115
	MDS	24	67%	12	33%	0	0%	0	0%	0	0%		
B5	BDS (PG)	26	15%	91	52%	32	18%	25	0%	0	0%	10.965	0.012*
	MDS	8	22%	26	72%	1	3%	1	0%	0	0%		
B6	BDS (PG)	53	30%	102	59%	19	11%	0	0%	0	0%	1.815	0.404
	MDS	13	36%	17	47%	6	17%	0	0%	0	0%		
B7	BDS (PG)	35	20%	90	52%	28	16%	18	0%	3	2%	10.470	0.033*
	MDS	16	44%	12	33%	4	11%	4	0%	0	0%		
B8	BDS (PG)	47	27%	97	56%	21	12%	8	0%	1	1%	3.075	0.545
	MDS	10	28%	23	64%	1	3%	2	0%	0	0%		

Statistically significant association between qualification and response was observed for questions B1 (Palliative care is the active total care of the patient whose disease is not responsive to curative treatment.) (P<0.01), B5 (Palliative preventive measures reduce the complications in patients undergoing treatment for diagnosed cancer.) (P<0.05) and B7 (In palliative care, autonomy refers to patient's right to ask for whatever treatment they choose.) (P<0.05).(Table 2)For B1, the proportion of samples opting "Strongly Agree" was higher in faculty group compared to PG group. For B5, the proportion of samples opting "Agree" was higher in PG group compared to faculty group. For B7, the proportion of samples opting "Strongly Agree" was higher in faculty group compared to PG group.

Table 3:Correlation between total score

Qualification	n	Mean	Std Dev	SE of Mean	Mean Difference	Z	P-Value
BDS (PG)	174	5.80	1.63	0.12	-0.640	-2.287	0.022*
MDS	36	6.44	1.21	0.20			

Higher mean total score was recorded in faculty group compared to PG group and the difference between them was statistically significant (P<0.05). (Table 3)

Table 4:Correlation between years of practice and total score

Qualification	n	Mean	Std Dev	SE of Mean	Mean Difference	Z	P-Value
BDS (PG)	174	2.45	2.19	0.17	-5.520	-8.372	<0.001*
MDS	36	7.97	3.44	0.57			

The correlation between years of practice and total score was not found to be statistically significant in PG as well as faculty group (P≥0.05). (Table 4)

IV. Discussion

World Health Organization defined palliative medicine for the first time in 1990, as ‘a facet of oncology, concerned with the control of symptoms rather than with the control of the disease’. The approach now, as designed by WHO, is to consider all the incurable, life-threatening diseases, but cancer remains the top reason for the referrals.^{5,6}With the aging of population, morbidity profile in India has been changed, the number of patients living with end stage chronic diseases and cancer have increased.⁷Palliative care patients require special dental attention. This extends from operative and preventive care to the concept of total patient care covering both the physical and emotional aspects of well-being.⁸ Our study mainly focused on knowledge and attitude regarding palliative care for cancer patients among faculty and post graduate students in Oral medicine and Radiology. This is the first study of its kind in the literature conducted among only faculty and post graduate students in Oral medicine and Radiology.

The function of oral cavity is essential for patient's ability to thrive. Therefore, alleviation of pain and prevention of infection in the oral cavity should be a priority in providing total, active care for the patient. The oral problems experienced by the late stage cancer patient clearly affect the quality of his or her remaining life.⁹ Common Palliative Oral lesions especially in cancer related patients are mucositis, xerostomia, opportunistic fungal infections like candidiasis. In our study, 75% of teaching staff and 81% of PG students had knowledge regarding oral lesions in palliative care. Prevention is always better than cure. In our study the questions used to assess knowledge in that aspect showed inadequate knowledge. 0% of faculty and 18% of PG's knew about Drugs used to prevent mucositis and hyposalivation. 75% of faculty and 59% of PG's knew about antidepressant with salivary sparing function. 67% of faculty and 80% of PG's had adequate knowledge regarding prevention of radiation induced caries.

Treatment of these lesions is a challenging task for oral physicians, here 94% of faculty and 78% of PG's showed a correct response for treatment of radiation induced hypo salivation. Study by fredrych et al revealed that 72.4% of general dentists considered that regular dental check-ups helps in maintaining the optimal level oral health in post radiation therapy.¹⁰ For treatment of cancer induced mucositis only 75% of faculty and only 59% of PG's showed a correct response. 89% of faculty and 71% of PG's knew about treatment of opportunistic fungal infections. 83% of faculty and 71% of PG's knew about treatment of cancer induced dysguesia. The present study revealed that the overall inadequacy in knowledge among PG's as well as teaching staff. But the attitude regarding palliative care is good in both the groups.97% of the faculty and 80% of PG's agreed that palliative care is the active total care of the patient whose disease is not responsive to curative treatment. In contrast Girietal study revealed that only 30% of dental Pg students knew about the primary goal of palliative care.⁴94% of faculty and 67% of PG's agreed that palliative preventive measures reduce the complications in patients undergoing cancer treatment. But 15% of PG's disagreed this statement. According to a study by Frydrych et al, 32.8% of general dentists refer oral cancer patients for pre-radiation therapy dental assessment.¹⁰

Interestingly 90% of faculty and 96% of PG's agreed that oral physicians play a key role in palliative care of advanced oral cancer patients. Fredrychetal study revealed that 36% of general dentists communicate with the oral physicians for care of Oral Cancer Patients and 77% of dentists agreed that General dentists should be able to provide dental treatment for oral cancer patients.¹⁰ A study by Saini et al, revealed that 88% of dental students confirmed that dentists are a part of palliative care.¹¹

Studies regarding awareness on palliative care in dentists are scarce and these limited studies also showing poor to average knowledge in palliative care. Gopal etal study revealed that there was no significant

difference in the awareness and knowledge of palliative care among general practitioners, dentists and staff nurses.¹² A global effort is necessary to prepare doctors of the new millennium for future challenges in palliative care management.¹³ Dawyer et al revealed two major problems include lack of knowledge regarding to nature of terminal stage of cancer and lack of education related to palliative care. Similar to other studies^{1,4,15} our study also revealed good attitude in general dentists as well as dental PG's, it is a positive sign to improve our knowledge in the field of palliative care.

V. Conclusion

In our study, the knowledge level on palliative care was inadequate but the attitude of Oral Medicine postgraduates and faculty was very positive. Hence there is a ray of light for improvement. The WHO claims that palliative care has to be compulsory in courses leading to a basic health professional qualification. Success in the specialty of Oral medicine and Radiology depends on the in depth knowledge and interest in the emerging areas. Owing to inadequacy in overall awareness, this study elicits the importance of adoptive palliative care in post graduate students curriculum. Hence, there is a need to integrate palliative care in our subject curriculum by respective apex bodies and training programs should be organized.

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