PAIN AND PALLIATIVE CARE UNITS –A STUDY WITH SPECIAL REFERENCE TO KERALA STATE

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Abstract

Background

Pain and Palliative care units are private, non-profit, charitable foundations and hospital pain clinics which aim at providing end of life care , adequate pain and other symptom control, as well as bereavement support to patients suffering from chronic illnesses.

Aim

The present study has been undertaken to analyze the activities of pain and palliative care units in the state of Kerala and to find out whether there is any regional disparity in the pain and palliative care activities in Kerala.

Materials and Methods

The respondents of the study include Pain and Palliative care units functioning in Kerala. The total number of Pain and Palliative care units selected as sample was 55. For the purpose of analysis, statistical tools like averages, percentages, rank test, Pearson's Chi Square test and Kruskal –Wallis test were applied.

Results

The study revealed that the majority of the patients cared by the PPC units in Kerala State were cancer patients and patients suffering from problems of old age. The major help provided by the unit to the

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patients was home care visit and organizing family help. The major care provided by the PPC units was physical care. The major physical care provided by the PPC units included 'bathing', and 'giving medicines'.

Conclusion

The majority of the patients cared by the PPC units in the state of Kerala were cancer patients and patients suffering from problems of old age. The major help provided by the units to the patients was home care visit and organizing family help.

Key words: Kruskal-Wallis Test, Local Self Government Institutions, National Rural Health Mission, Non Governmental Organizations

Manuscript

Introduction

Pain and Palliative Care units are based on the principles of social justice, equity, better health and improvement of quality of life for all. The central methodology of Pain and Palliative Care is community development through community participation. The state of Kerala has made significant progress in the field of social development and had long ago recognized the importance of palliative care as can be seen from the growth of community based care units. Its experiments in palliative care since 1993, with active involvement of local communities, have been so successful that today 80 % of all palliative care services in the country are delivered in Kerala which reach to 40 % of the needy patients. .According to Steve Conway(2008)[1], the three levels of community development include providing direct resources to the community for their development, supporting and sustaining existing community development activities and promoting the community development philosophy. A health network consists of a system of clinical and non-clinical programs of Governments (particularly Ministries of Health), community-based organisations, non-governmental organisations (NGOs), private companies, or consortiums composed of some or all of the above entities. A network is a system of care that includes primary, secondary, tertiary, and home-based care. Linkages and integration provide for the coordination and collaboration of multiple provider groups through referrals and co-location. The use of trained community health care workers such as volunteers, medical assistants, counselors, and family members could provide opportunities to expand the

delivery of palliative care in the community setting. Libby Sallnow, Neeru Anand,Minni Arora and Stanley Macaden (2008)[2], in a study "The Indian Care Pathway: Results From a Year of Implementation", stated that the needs of developing palliative care services across India are many and varied but the areas of training and quality care consistently listed as high priorities.

Significance of the study

The commitment of Pain and Palliative care units towards sustainable development of communities reflects one of their core values i.e. community impact. Around the globe, Pain and Palliative care units engage with their communities and participate in numerous social development programs. By creating and managing programs and partnerships that have a positive impact, Pain and Palliative care units help to make communities better, stronger and more vibrant. They believe in sharing their success by supporting charitable causes and employee volunteer activities.

Kerala's attempts at caring for terminally ill patients have been regarded as a model for the rest of the world. Recognizing the importance of palliative care, The Government of Kerala announced the Palliative Care Policy on 18th April 2008 with the object of providing better care to the patients suffering from chronic illness, emphasizing the community -based approach to palliative care and considered home- based care as the corner-stone of the palliative care services.

The review of earlier literature revealed that most of the studies in palliative care have been conducted in the field of medical science. No study has so far been conducted for analyzing the activities of pain and palliative care units in Kerala. In this context the present topic entitled "Pain and Palliative Care Units –A study with special Reference to Kerala State" assumes greater importance.

Scope of the study

The present study has been undertaken to analyze the activities of pain and palliative care units and to find out whether there is any regional disparity in the palliative care activities. The study is confined to palliative care units functioning in Kerala.

Objective of the Study

The main objectives of the study are:

1. To analyze the activities of pain and palliative care units in the state of Kerala.
2. To find out the regional disparity, if any in the activities of pain and palliative care units in the state of Kerala.

Hypotheses of the Study

H_{01} There is no difference in the area covered by each PPC unit in the state of Kerala.

H_{02} There is no difference in the periodicity of visit of the PPC units in the state of Kerala.

Selection of Sample

The respondents of the study include Pain and Palliative care units functioning in the State of Kerala. The palliative care units have been selected from the data base maintained by the Institute of Palliative Medicine, Kozhikode, Kerala and Consortium of pain and palliative care units in Ernakulam District.

Selection of Pain and Palliative care Units

For selecting the Pain and Palliative care units, the State of Kerala was first divided into three zones- south, central and north. From these zones, one district each representing south, central and north(Alappuzha, Ernakulam and Kozhikode) have been selected at random. There were in all 79 Pain and Palliative care units in the selected districts of Kerala (20 in Alappuzha, 22 in Ernakulam and 37 in Kozhikode) as on 31st Oct 2010. All the units which render home care services have been selected for the study. 12 units in Ernakulam, 11 units in Alappuzha and 32 units in Kozhikode are offering home care services. Thus, the total number of Pain and Palliative care units selected as sample has come to 55.

Collection of Data

The data required for the study were collected from both primary and secondary sources. The primary data were collected from the respondents based on structured questionnaire. The secondary data were collected from reports, books and journals published by the Consortium of Pain and Palliative care Units in Ernakulam District. Institute of Palliative Medicine and from various web sites.

Tools of Analysis

The data collected were suitably classified and analyzed keeping in view the objective of the study. For the purpose of analysis, statistical tools like percentages, rank test, Kruskal–Wallis test and Karl Pearson Chi Square test were used. For the rank data weighted average method was used to obtain the rank. Weighted mean is calculated and these means are ranked in order of magnitude from highest to lowest. To test the hypothesis the Chi-square test was used. The Kruskal–Wallis one-way analysis of variance by ranks is a non-parametric method for testing equality of population medians among groups for the situation where the ANOVA normality assumptions may not apply.

Period of the Study

The study covers a period of two years (2009-2011).

Pain and Palliative Care Units –A Study with Special Reference to Kerala State- Analysis

PPC units are usually linked with either LSGs or NGOs for their smooth and efficient functioning. The study revealed that most of the units in Kerala were linked with either LSGs or NGOs. There was no significant difference in the linkage of units with LSGs/NGOs throughout Kerala State (χ^2 = 0.000126 with 1 df at 5 % level of significance). However, there was significant difference in the type of organizations with which the units were linked, throughout the state of Kerala (χ^2 = 1.872 with 1 df at 5 % level of significance).

The area covered by each unit was 5 to 10 kms. for 81.8% of the units in the south, 41.7% of the units in central and 40.6% of the units in the north zone of Kerala State. However, 33.3% of the units in the central and 25% of the units in the north zones covered an area of 20 kms. and more. There was significant difference in the area covered by each the units, throughout the state of Kerala (χ^2 = 5.519 with 2 df at 5 % level of significance). Therefore, the null hypothesis H_{01} stating that there is no difference in the area covered by each PPC unit in Kerala State stands rejected.

The major help provided by the unit to the patients was home care visit which was ranked as first by the PPC units in the central and north zones of Kerala ,where as it was 'Organizing family help' in the south zone(Table 1).

The study revealed that the PPC units in the south and central zones cared mostly old age patients where as the PPC units in the north cared patients who were bed ridden (Table 2). Palliative care includes total care of patients. The major care provided by the PPC units, throughout the state of Kerala was physical care which was ranked as first by the units. Social care was ranked as second by the units in the south and north zones whereas, it was financial care for the units in the central (Table 3).The Kruskal Wallis Test result given in Table 4 revealed that there was no significant difference in the nature of care provided to the patients by the PPC Units, throughout the state of Kerala (except in the case of social care), since p values were greater than .05. The majority of the patients cared by the PPC units in the central and north zones of the state of Kerala were cancer patients whereas, the units in the south zone cared patients suffering from problems of old age and debility (Table 5). Kruskal Wallis Test result (Table 6) revealed that there was no significant difference in the type of diseases cared for by the PPC Units, throughout the state of Kerala (except in the case cancer and Problems of old age and debility), since p values were greater than .05.

It was understood that most of the PPC units (52.7%) offered home care visits monthly. 27.3% visited the patients once in two weeks and 10.9 % visited the patients once in a week. Only 1.8% of the units visited the patients every day. Others comprised of 1.8%, which normally visited the patients once in a week, but would increase the periodicity of visit in case of emergencies. However, the Chi square test result revealed that there was no significant difference in the periodicity of visit of the PPC units, throughout the state of Kerala (χ^2 = 7.808 with 3 df at 5 % level). Therefore, the null hypothesis H_{02} stating that there is no difference in the periodicity of visit of the PPC units in Kerala State stands accepted. 87.3%

of the units spent up to 1 hr with patients during their visit and 10.9 % of them spent 1to2 hrs and 1.8 % of them spent an average of 3hrs and more. There was significant difference in the average time spent by each unit with patients during the visit, throughout the state of Kerala (χ^2 = 3.432 with 1 df at 5 % level) . The major physical care provided by the PPC units in the south zone was 'bathing' but it was 'Giving medicines to patients' in the central and north zones of Kerala (Table 7). Kruskal Wallis Test result (Table 8) revealed that there was no significant difference in the type of physical care provided by the PPC units, throughout the state of Kerala (except in the case of physical care viz.,attending to bed sore, changing the 'condom catheter'and giving medicines), since p values were greater than .05. 'Listening the sorrows and fears of patients' was the first and foremost method of providing psychological care to the patients by the PPC unit in Kerala. 'Chatting with patients was the second type of psychological care provided by them to reduce the mental sufferings of the patients (Table 9). Kruskal Wallis Test result (Table 10) revealed that there was no significant difference in the type of psychological care provided by the PPC units, throughout the state of Kerala, since p values were greater than .05. The PPC units in Kerala provided financial care to the patients mainly in the form supplying medicines at free of cost (Table 11). Kruskal Wallis Test result revealed that there was no significant difference in the type of financial care provided by the PPC units, throughout the state of Kerala (except in the case of financial care viz. providing wheel chairs/ water beds, Commodes etc.), since p values were greater than .05(Table12).

PPC units in the south zone provided spiritual care mainly by encouraging the patients to reminisce with family and friends. Fulfilling the wishes of patients' was the usual form of spiritual care adopted by the PPC units in the central zone. 'Psychological boost' was the usual form of spiritual care adopted by the PPC units in the north zone of Kerala (Table 13). Kruskal Wallis Test result (Table 14) revealed that there was no significant difference in the type of spiritual care provided by the PPC units, throughout the state of Kerala, since p values were greater than .05. 'Public donations' was the main source of funds of the PPC units in the central and north zones of Kerala. In the south zone, PPC units used their own funds (Table 15). Only 9.1% of the units in Kerala spent an average of Rs. 4 lakh and more in a year for palliative care activities. 45.5 % of the units spent an average of Rs. 1 lakh to Rs. 2 lakh annually and 29.1 % of the units spent an annual amount of less than Rs. 1 lakh. There was no significant difference in the annual average amount spent by the units, throughout the state of Kerala (χ^2 = 2.261 with 2 df at 5 % level) (Table 16). 81.82% of the PPC units in Kerala organized development/ awareness programmes for the promotion of palliative care movement in Kerala. Whereas, 18.18%of them did not organize any such programmes. There was no significant difference in the organization of development/ awareness programmes by the units for the promotion of palliative care movement, throughout the state of Kerala (χ^2 = 2.507 with 1 df at 5 % level) (Table 17). 'Free Training to public' was the major social development /awareness programme organized by the PPC units in the south and north zones of Kerala. In the central zone, the units

organized classes on pain and palliative care and medical camp (Table 18). The majority (52.7%) of the PPC units in Kerala had only moderate awareness about patient's culture and the extent to which it influences the patient's life and family relationships. However, 41.8% of them had high awareness and 1.8% of them had very high awareness about patient's culture and its influences. Only 3.6 % of them had moderate awareness (Table 19).

The extent to which the units could use appropriate form of address based on patients' cultural background revealed that most of (69.1%) the PPC units in Kerala were able to use the correct form of address. 20 % of them opined that they could use more or less correct form of address and only 3.6% of the units opined that they were using absolutely correct form of address based on patients' cultural background. There was no significant difference in the usage of correct form of address by the PPC units, throughout the state of Kerala (χ^2 = 0.100 with 1 df at 5 % level) (Table 20).

Only 29.1% of the units enquired about the education level and religious beliefs of the patients before starting the treatment .38.2% of them sometimes asked and 27.3% of them very rarely asked and 3.6 % of them did not ask about the education level and religious beliefs of the patients before starting the treatment (Table 20). There was no significant difference in the enquiry about the education level and religious beliefs of the patients by the units before starting the treatment, throughout the state of Kerala (χ^2 = 0.925 with 2 df at 5 % level) (Table 21).

The major support provided by the units in the south and north zones of Kerala was 'Bereavement visit'. The units in the central zone encouraged the family members of the deceased to participate in various activities with the family, friends and community (Table 22).

36.4 % of the units in Kerala did not face any language barriers, while 40% of the units sometimes faced and 21.8 % of them very rarely faced such barriers (Table 23). There was no significant difference in the chances of facing language barriers, throughout the state of Kerala (χ^2 = 2.034 with 2 df at 5 % level) (Table 23).

The major language barrier faced by PPC units in the south zone was 'Difficulty of understanding the patients/ care givers language'. It was 'Illiteracy of the patient/ family members' for the PPC units in the central zone and for the PPC units in the north zone of Kerala, it was 'patients or caregiver seem to be getting impatient, looks blank/ confused / has a facial expression not in keeping with context of the discussion' (Table 24).

16.4% of the PPC units in Kerala did not face any problem while rendering pain and palliative care services. 65.5% of them very rarely faced problems and 7.3% of the units sometimes faced problems (Table 25).

Conveyance problems to reach the patients' were reported to be the major problem faced by the units in the south zone of Kerala. For the PPC units in the central zone, it was 'Lack of funds' and for the units in the north zone, it was 'friction among volunteers' (Table 26). Kruskal Wallis Test result revealed that there was no significant difference in the nature of problem faced by PPC units in rendering palliative care services,(except in the case of problem viz., lack of funds)

throughout the state of Kerala, since p values were greater than .05(Table 27).

Conclusion

The majority of the patients cared by the PPC units in Kerala State were cancer patients and patients suffering from problems of old age. The major help provided by the unit to the patients was home care visit and organizing family help. The major care provided by the PPC units was physical care. The major physical care provided by the PPC units included 'bathing', and 'giving medicines'. 'Free Training to public' and organizing classes on pain and palliative care and medical camp were the major social development /awareness programmes organized by the PPC units in Kerala.

References

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SANTHA S.

Table 1 Kind of help provided by the PPC Units

Kind of help	South		Central		North	
	Mean	Rank	Mean	Rank	Mean	Rank
Home care visit	5.818	2	5.917	1	6.000	1
Helping at the outpatient visit	4.714	3	4.857	2	4.767	2
Organizing family help	6.000	1	3.500	5	3.250	5
Identifying the needy patients in the locality and linking them to the nearby Palliative care unit	4.000	5	2.857	6	3.364	4
Raising Funds	4.500	4	4.375	3	3.655	3
Others			4.000	4		

Source: Primary data

Table 2 Type of Patients cared by the PPC Units

Type of Patients cared	South		Central		North	
	Mean	Rank	Mean	Rank	Mean	Rank
Bed Ridden	3.182	2	3.000	2	3.355	1
Chronically ill	1.909	4	2.917	3	2.833	3
Old Age	3.727	1	3.182	1	2.844	2
Others	2.000	3	1.000	4	2.000	4

Source: Primary data

Table 3 Nature of Care provided to the patients by the PPC Units

Nature of Care	South		Central		North	
	Mean	Rank	Mean	Rank	Mean	Rank
Physical care	6.000	1	5.583	1	6.000	1
Psychological care	3.000	4	4.000	4	3.407	5
Social care	4.556	2	4.167	3	4.469	2
Financial care	4.444	3	4.455	2	4.167	3
Spiritual care	2.000	5	3.167	5	2.059	6
Others					4.000	4

Source: Primary data

Table 4 Nature of Care provided to the patients by the PPC Units (Kruskal Wallis Test)

	Physical care	Psychological care	Social care	Financial care	Spiritual care
Chi-Square	5.394	.411	6.444	1.539	4.913
Df	2	2	2	2	2
Asymp. Sig.	.067	.814	.040	.463	.086

Source: Primary data

Grouping Variable: Zone

Table 5 Type of diseases cared for by the PPC Units

Type of diseases cared	South		Central		North	
	Mean	Rank	Mean	Rank	Mean	Rank
Cancer	12.182	2	12.546	1	12.906	1
Burns					7.750	12
Spinal Injuries	10.750	3	11.167	3	11.040	3
HIV					8.143	10
AIDS					8.667	9
Stroke	9.750	6	10.750	4	9.750	5
Problems of Old age and debility	12.818	1	12.182	2	11.786	2
Psychiatric illness	10.000	5	9.250	7	9.105	8
Asthama			9.667	5	6.000	13
Chronic airway diseases			7.333	9	7.800	11
Chronic kidney diseases	10.000	5	7.667	8	9.222	7
Chronic obstructive respiratory diseases			9.500	6	9.400	6
Paraplegia or motor neuron diseases	10.250	4	7.000	10	10.059	4

Source: Primary data

Table 6 Type of diseases cared for by the PPC Units (Kruskal-Wallis Test)

	Cancer	Spinal injuries	AIDS	Problems of old age and debility	Psychiatric illness	Astma	Chronic airway diseases	Chronic kidney diseases	Chronic obstructive respiratory diseases	Paraplegia or motor neuron diseases
Chi-Square	19.834	1.252	1.103	16.578	1.370	2.000	.383	2.260	.038	2.109
df	2	2	2	2	2	1	1	2	1	2
Asymp. Sig.	.000	.535	.576	.000	.504	.157	.536	.323	.845	.348

Source: Primary data

Grouping variable:zone

Table 7 Type of Physical Care provided by the PPC Units

Type of Physical Care	South		Central		North	
	Mean	Rank	Mean	Rank	Mean	Rank
Bathing	6.000	1	4.333	7	4.636	5
Attending to bed sore	2.727	4	6.500	3	5.031	2
Changing clothes			3.333	8	4.800	3
Changing the ‘’Condom Catheter’’	2.000	5	6.727	2	4.759	4
Giving medicines	1.455	6	6.833	1	5.133	1
Dressing the wounds	4.167	3	5.222	4	4.286	7
Training the family members in simple nursing tasks	4.333	2	4.429	6	4.462	6

Source: Primary data

Table 8 Type of Physical Care provided by the PPC Units (Kruskal Wallis Test)

	Bathing	Attending to bed sore	Changing clothes	Changing the ''Condom Catheter''	Giving medicines	Dressing the wounds	Training the family members in simple nursing tasks	Others
Chi-Square	.139	17.038	1.159	20.076	18.371	4.165	.059	.500
df	2	2	1	2	2	2	2	1
Asymp. Sig.	.933	.000	.282	.000	.000	.125	.971	.480

Source: Primary data

Grouping variable: zone

Table 9 Type of Psychological Care provided by the unit to patient and family members

Type of Psychological Care	South		Central		North	
	Mean	Rank	Mean	Rank	Mean	Rank
Listening the sorrow sand fears of patients	4.875	1	4.667	1	4.519	1
Listening the concerns of the family members			3.125	4	3.056	4
Sharing of problems with t he patients and family	3.667	3	3.143	3	3.381	3
Chatting with the patients	4.571	2	3.727	2	3.885	2

Source: Primary data

Table 10 Type of Psychological Care provided by the unit to patient and family members (Kruskal Wallis Test)

	Listening the sorrow sand fears of patients	Listening the concerns of the family members	Sharing of problems with t he patients and family	Chatting with the patients
Chi-Square	1.912	.087	.624	2.623
df	2	1	2	2

Asymp. Sig.	**.384**	**.768**	**.732**	**.269**

Source: Primary data

Grouping Variable: Zone

Table 11 Type of Financial Care provided by the PPC Units

Type of Financial Care	South		Central		North	
	Mean	Rank	Mean	Rank	Mean	Rank
Supply medicines free of cost	4.909	1	4.667	1	4.906	1
Supply rice and provisions for the family	4.000	2	3.667	3	3.727	2
Provide wheel chairs/ water beds, Commodes etc.	4.000	2	4.000	2	3.435	3
Books, clothes and school fees for the kids.			2.250	4	2.083	4
Others					1.000	5

Source: Primary data

Table 12 Type of Financial Care provided by the PPC Units (Kruskal Wallis Test)

	Supply medicines free of cost	Supply rice and provisions for the family	Provide wheel chairs/ water beds, Commodes etc.	Books, clothes and school fees for the kids.
Chi-Square	.752	.530	8.342	.314
df	2	2	2	1
Asymp. Sig.	.687	.767	.015	.575

Source: Primary data

Grouping variable: zone

Table 13 Type of Spiritual Care provided by the PPC Units

Type of Spiritual Care	South		Central		North	
	Mean	Rank	Mean	Rank	Mean	Rank
Fulfilling the wishes of patients			8.800	1	7.286	4
Psychological boost	8.000	2	7.000	4	8.091	1
Helped to establish/ re-establish a sense of meaning and purpose to life			7.667	2	8.000	2
Encourage to reminisce with family and friends	9.000	1	7.600	3	7.500	3

Gift giving				**3.667**	**8**
Prepare advance directives	**5.000**	**5**	**6.000**	**5**	
Assisting with life closure	**7.000**	**4**	**5.667**	**6**	
Creation of legacies			**4.500**	**7**	

Source: Primary data

Table 14 Type of Spiritual Care provided by the PPC Units (Kruskal Wallis Test)

	Fulfilling the wishes of patients	Psychological boost	Helped to establish/ re-establish a sense of meaning and purpose to life	Encourage to reminisce with family and friends	Prepare advance directives	Assisting with life closure
Chi-Square	**3.380**	**2.081**	**.104**	**1.656**	**.646**	**1.037**
df	**1**	**2**	**1**	**2**	**1**	**1**
Asymp. Sig.	**.066**	**.353**	**.748**	**.437**	**.421**	**.309**

Source: Primary data

Grouping variable: zone

Table 15 Sources of funds of the PPC Units

Sources of funds	South		Central		North	
	Mean	Rank	Mean	Rank	Mean	Rank
Public Donations	**3.200**	**3**	**3.778**	**1**	**3.969**	**1**
Funds from local self-government institutions	**3.800**	**2**	**3.500**	**2**	**2.600**	**3**
Own	**4.000**	**1**	**3.250**	**3**	**2.500**	**4**
Others					**2.833**	**2**

Source: Primary data

Table 16 Fund utilised by Pain and Palliative Care units

Fund Utilised (Annual Avg.(Rs.)		Zone			
		South	Central	North	Total
Less than1,00,000	Count	6	4	6	16
	% within Zone	54.5%	33.3%	18.8%	29.1%
1,00,000- 2,00,000	Count	5	5	15	25
	% within Zone	45.5%	41.7%	46.9%	45.5%
2,00,000-3,00,000	Count	0	3	5	8
	% within Zone	.0%	25.0%	15.6%	14.5%
3,00,000-4,00,000	Count	0	0	1	1
	% within Zone	.0%	.0%	3.1%	1.8%
4,00,000and above	Count	0	0	5	5
	% within Zone	.0%	.0%	15.6%	9.1%
Total	Count	11	12	32	55
	% within Zone	100%	100%	100%	100%

Source: Primary data

χ^2 = 2.261 with 2 degrees of freedom. Not significant at 5 % level

Table 17 Organization of Social Development /Awareness Programme by PPC Units

Responses		Zones			
		South	Central	North	Total
Yes	Count	6	9	30	45
	% within Zone	54.5%	75.0%	96.8%	81.82%
No	Count	5	3	2	10
	% within Zone	45.5%	25.0%	3.2%	18.18%
Total	Count	11	12	32	55
	% within Zone	100%	100%	100%	100%

Source: Primary data

χ^2 = 2.507 with 1 degree of freedom. Not significant at 5 % level

Table 18 Nature of Social development / Awareness Programme Organized by PPC Units

Nature of Social development / Awareness Programme Organized	South		Central		North	
	Mean	Rank	Mean	Rank	Mean	Rank
Workshops			5.000	4	5.286	5
Seminars	6.000	3	5.667	3	5.316	4
Free Training to public	6.667	1	5.833	2	6.000	1
Medical camp	5.000	4	6.250	1	2.600	6
Classes	6.500	2	6.250	1	5.778	2
Circulation of Broachers			4.857	5	5.333	3

Source: Primary data

Table 20 Usage of Form of Address Based on Patient's Cultural Background by the PPC Units

Usage of Form of Address		Zone			
		South	Central	North	Total
absolutely correct	Count	0	2	0	2
	% within Zone	.0%	16.7%	.0%	3.6%
correct	Count	10	8	20	38
	% within Zone	90.9%	66.7%	62.5%	69.1%
more or less correct	Count	1	1	9	11
	% within Zone	9.1%	8.3%	28.1%	20.0%
no opinion	Count	0	1	3	4
	% within Zone	.0%	8.3%	9.4%	7.3%
Total	Count	11	12	32	55
	% within Zone	100%	100%	100%	100%

Source: Primary data

χ^2 = 0.100 with 1 degree of freedom. Not significant at 5 % level

Table 21 Enquiry about the Education Level and Religious Beliefs of the Patients Before Starting the Treatment by the PPC Units

		Zone			
		South	Central	North	Total
always ask	Count	2	6	8	16
	% within Zone	18.2%	50.0%	25.0%	29.1%
sometimes ask	Count	5	3	13	21
	% within Zone	45.5%	25.0%	40.6%	38.2%
very rarely ask	Count	4	3	8	15
	% within Zone	36.4%	25.0%	25.0%	27.3%
do not ask	Count	0	0	2	2
	% within Zone	.0%	.0%	6.3%	3.6%
no opinion	Count	0	0	1	1
	% within Zone	.0%	.0%	3.1%	1.8%
Total	Count	11	12	32	55
	% within Zone	100%	100%	100%	100%

Source: Primary data

χ^2 = 0.925 with 2 degrees of freedom. Not significant at 5 % level

Table 22 Kind of Bereavement Support Provided by PPC Units

Kind of Bereavement Support	South		Central		North	
	Mean	Rank	Mean	Rank	Mean	Rank
Bereavement visit	9.857	1	9.333	2	9.900	1
Encourage the family members to participate in rituals			9.000	3	8.333	4
Encourage the bereaved survivor to talk about what it is like to live without the deceased			8.000	4	8.250	5

Encourage the family members of the deceased to participate in activities with the family, friends and community			9.500	1	8.400	3
Establish a good rapport with the patients family	9.714	2	9.000	3	8.533	2
Counseling to the bereaved			6.500	6	6.333	6
survivors			4.000	7	4.667	8
Writing a condolence note or letter from the doctor after the death of the patient to the bereaved	8.000	3	7.000	5	6.143	7
Assist the family members to deal with practical matters, secure documents to redeem insurance, find legal counsel to execute the will, meet financial obligations.					2.000	9

Table 23 Language Barriers Faced by the PPC Units

Language Barriers		Zone			
		South	Central	North	Total
sometimes	Count	3	4	15	22
	% within Zone	27.3%	33.3%	46.9%	40.0%
very rare	Count	3	2	7	12
	% within Zone	27.3%	16.7%	21.9%	21.8%
no	Count	5	6	9	20
	% within Zone	45.5%	50.0%	28.1%	36.4%
no opinion	Count	0	0	1	1
	% within Zone	.0%	.0%	3.1%	1.8%
Total	Count	11	12	32	55
	% within Zone	100%	100%	100%	100%

Source: Primary data

χ^2 = 2.034 with 2 degrees of freedom. Not significant at 5 % level

Table 24Nature of Language Barriers Faced by the PPC Units

Nature of Language Barriers	South		Central		North	
	Mean	Rank	Mean	Rank	Mean	Rank
Difficulty in understanding the patients/ care givers language	4.000	1	3.000	2	3.571	2
Patient/ Caregiver seem to be getting impatient, looks blank/ confused / has a facial expression not in keeping with context of the discussion					4.000	1
Illiteracy of the patient/ family members			4.000	1	2.000	3

Source: Primary data

Table 25 Problem Faced By the PPC Units in Rendering Palliative Care Services

Responses	Frequency	Percent
Sometimes	4	7.3
Very rare	36	65.5
No	9	16.4
No opinion	6	10.9
Total	55	100.0

Source: Primary data

Table 26 Nature of Problem Faced by PPC Units in rendering Palliative care services

Nature of Problem	South		Central		North	
	Mean	Rank	Mean	Rank	Mean	Rank
Conveyance problems to reach the patients	12.000	1	11.250	3	11.214	4
Lack of funds	10.857	3	11.500	1	11.500	2
Non-co-operation of patients and the family	10.000	5	10.667	5	11.400	3
Lack of interest of the volunteers					9.500	9
Lack of proper training in palliative care	11.000	2	11.000	4	9.667	8

Personal problems			**9.500**	**7**	**8.000**	**11**
Non-co-operation among volunteers					**8.000**	**12**
Friction among volunteers					**12.000**	**1**
Lack of support from doctors					**8.500**	**10**
Lack of support from nurses					**10.500**	**7**
Non availability of medicine	**10.750**	**4**	**11.333**	**2**	**10.917**	**6**
Problems among team members			**10.000**	**6**	**11.000**	**5**

Source: Primary data

Table 27 Nature of Problem Faced by PPC Units in rendering Palliative care services

(Kruskal Wallis Test)

	Conveyance problems to reach the patients	Lack of funds	Non-co-operation of patients and the family	Lack of proper training in palliative care	Personal problems	Non availability of medicine	Problems among team members
Chi-Square	**5.731**	**5.985**	**3.151**	**.484**	**.351**	**1.654**	**1.000**
df	**2**	**2**	**2**	**2**	**1**	**2**	**1**
Asymp. Sig.	**.057**	**.050**	**.207**	**.785**	**.554**	**.437**	**.317**

Source: Primary data

Grouping variable: zone

Table 19 Level of Awareness of the PPC Unit Members about the Patient's Culture and its Influence on Life and Family Relationships Before Giving Care

Level of awareness	Frequency	Percent
Very high	**1**	**1.8**
High	**23**	**41.8**
Moderate	**29**	**52.7**
Low	**2**	**3.6**
Total	**55**	**100**

Source: Primary data