

# Factors Affecting the Palliative Care Service Provision Among Primary Care Physicians in Ilocos Norte

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Palliative care is an approach which improves the quality of life of patients and their families facing life-threatening illness, through the prevention, assessment and treatment of pain and other physical, psychosocial and spiritual problems. The Palliative and Hospice Care Act was enacted to improve quality of life of terminally- ill patient, however, the readiness of general practitioner to participate in palliative care is still a critical issues. This study aimed to identify factors affecting provision of palliative care, as perceived by primary care physicians in Ilocos Norte. The study is a descriptive-comparative research utilizing the purposive sampling technique in selecting the participants. It used a structured survey questionnaire in google form and was sent through email. For participants having difficulty with online platform, printed questionnaire was distributed. Data gathered was entered and analyzed using Microsoft Excel. Specifically, mean, standard deviation was used for descriptive statistics and spearman correlation for inferential statistics was utilized.

As to the knowledge of the primary care physicians, this study showed that they are knowledgeable as to the definition and objectives of palliative care. The study able to assess factors affecting the provision of palliative care in five (5) domains. Among the domains it was noted that national, regional and local healthcare networking and healthcare team are perceived challenges in provision of palliative care among the primary care physicians of Ilocos Norte.

**Key words:** Palliative care, primary care physician

## INTRODUCTION

According to the four-part typology developed by the International Observatory on End of Life Care, the Philippines is categorized as a country in Group Three: that is, with localized palliative care provision. It means that palliative care is present in the country but not well known or utilized.<sup>1</sup>

In Ilocos Norte, the only known facility that caters palliative and hospice referral is the Department of Family and Community Medicine of Mariano Marcos Memorial Hospital and Medical Center. As mandated by the "The Palliative and Hospice Care Act", the department started to accept Palliative and Hospice referral from other departments in 2017.

This study was conducted to investigate the factors affecting the palliative care provision of primary care physicians in Ilocos Norte.

The result of this study can be basis to help primary care physicians and policy makers to formulate, develop, and implement health programs and policies for the improvement of palliative care delivery. Hence, targeting facilitators and barriers on palliative care provision can help achieve the improvement of comfort care services on the reducing the suffering of a patient after a life-prolonging treatment becomes ineffective and death is imminent.

Generally, this study aimed to identify factors affecting provision of palliative care, as perceived by primary care physicians in Ilocos Norte.

The study was conducted in Ilocos Norte where a structured survey questionnaire in google form was sent to assess the knowledge and perceived barriers of primary care physicians in delivering palliative care.

## METHODS

The study is a descriptive-comparative research utilizing the purposive sampling technique in selecting the participants. The publicly

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accessible master list of physicians in Ilocos Norte was obtained from the Ilocos Norte Medical Society and primary care physicians who practise in Ilocos Norte was selected at random to participate in this study.

Respondents included in this study were; 1) primary care physicians or general practitioners who are working or practicing in private clinics and 2) primary care physicians or general practitioners who are working or practicing in government institutions in Ilocos Norte. Excluded in the study were; 1) primary care physicians practicing outside Ilocos Norte, 2) primary care physicians belonging to the specialized societies, except Philippine Academy of Family Physicians (PAFP), 3) physicians with no direct encounter with patients, 4) physicians currently in residency training.

The study gathered information from a sample of primary care physicians or general practitioners working in Ilocos Norte using a structured survey questionnaire in google form and was sent through email and messenger. For respondents who are not accustomed to the use of the internet, a printed survey form was provided.

The sample size was computed using Cochran formula:

$$n_0 = \frac{Z^2 pq}{d^2}$$

where:  $n_0$  is the sample size  
 $Z$  is the z-score corresponding to the confidence level  
 $pq$  is the estimated variance  
 $d$  is the margin of error

For a 95% confidence level with  $Z = 1.96$ ,  $pq = (0.5)(0.5)$  and a 5% margin of error:

$$n_0 = \frac{(1.96)^2 (0.025)}{0.05} = 384.$$

Since the population size  $N = 81$  of primary care physicians or general practitioners is relatively small, the modified sample size formula was used. Hence we have the sample size.

$$n = \frac{n_0}{1 + \frac{n_0 - 1}{N}} = \frac{384}{1 + \frac{383}{81}} \approx 67$$

Prior to the start of data collection, the research protocol was thoroughly evaluated by the Technical Research Committee and the Research Ethics Review Committee (RERC). After its approval, the researcher proceeded with the study. To encourage further cooperation of the respondents, an informed consent addressed to the respondents was included in the questionnaire. Link to the questionnaire was sent to the respondents. For respondents who are not technology inept, the informed consent document and questionnaire was personally distributed. Participants was given 15-30 minutes to answer. The

structured questionnaire was developed based on the study of Calimag et al (2019). The questionnaire underwent content validity by a palliative specialist, and reliability testing was done before data collection.

The identified independent variables are the respondent's socio-demographic profile. The dependent variables include the level of knowledge, perceived barriers of the respondents in the survey questionnaire that will be provided. The data gathered was analyzed using Microsoft Excel. Specifically, mean, standard deviation was used for descriptive statistics and spearman correlation for inferential statistics was utilized. In addition, frequency and percentages was used to analyze the demographic characteristics of the respondents. Mean values and standard deviation was used to analyze the degree of each variable in the extent of involvement and knowledge of primary care physicians with regards to palliative care provision services, and perceived barriers affecting palliative care provision services in Ilocos Norte. The mean ratings for the statements in determining the level of knowledge of primary care physicians and the current challenges or affecting the implementation of palliative care services was interpreted using the following Likert scale intervals:

1.00 – 1.79	Strongly Disagree
1.80 – 2.59	Disagree
2.60 – 3.39	Undecided
3.40 – 4.19	Agree
4.20 – 5.00	Strongly Agree

## RESULTS

This study included 50 primary care physicians or general practitioners working in Ilocos Norte who satisfied the inclusion criteria and were willing to participate.

The respondents were uniformly distributed among the age groups. There were 10 physicians in each age group. All respondents of the study were presently residing in the province of Ilocos Norte. Majority of the respondents were private practitioners (54%) and mostly are female physician (68%). Most of the respondents of the study are married (54%) and twenty-four respondents (48%) recalled that their undergraduate curriculum did not include palliative care. Majority of the respondents (76%) provided hospice and palliative care to patients while 12 (24%) did not. Among those who provided palliative care, there were seven (14%) with 10 years or more work experience while five (10%) had less than 10. Forty-eight (96%) did not undergo formal in-service training on palliative care and only two (4%) received formal training. (Table 1)

### Level of Knowledge of Primary Care Physicians

The respondent physicians strongly agree (4.74) on the definition that "holistic care, which also incorporates support for the family, for patients not only at the end of life but also in the developmental stage of an incurable disease". The respondents also strongly agree on the other definitions of palliative care such as "series of treatments aimed to bring the patient to a dignified end-of-life" (4.56), "pain therapy, whether

**Table 1.** Socio-demographic profile of the respondents.

Independent Variables	Frequency	%
Age (in years):		
< 30	10	20
30 – 40	10	20
41 – 50	10	20
51 – 60	10	20
> 60	10	20
Residential Address Inside		
Ilocos Norte Outside	50	100
Ilocos Norte	0	0
Work Sector		
Private	27	54
Government	23	46
Sex		
Male	16	32
Female	34	68
Marital Status		
Married	27	54
Unmarried	23	46
Undergraduate curriculum consists of palliative care:		
Yes	20	40
Not	6	12
Sure No	24	48
Provide hospice and palliative care		
Yes	12	24
No	38	76
Length of palliative care work experience		
< 10 years	5	10
10 years or more	7	14
Received formal in-service training on palliative care		
Yes	2	4
No	48	96

moderate or severe, in the incurable patient” (4.68), “management of all symptoms affecting the incurable patient”(4.54). On the definition “alternative treatments for incurable patients and their families” the respondent physicians agree with the lowest average rating of 4.04.

The respondents strongly agree on the objectives that palliative care “ensure the best quality of life of incurable patients” (4.92), “alleviate pain” (4.86) and “relieve symptoms” (4.82); agree that palliative care “prolong as long as possible the patient’s life (3.84); and are undecided on the objective of “cure the patient’s illness” (2.9).

As to the most authoritative guidelines on health care planning, respondents strongly agree that it should be a specialized multiprofessional palliative care team that includes the family’s GP (4.82). The respondent physician agree on the most most authoritative

guidelines on health care planning recommend that palliative care should be provided by “other general practitioners”(3.98), “multiprofessional hospital team led by a pain therapist”(4.12), “specialized nursing staff in collaboration with an anesthetist” (4.14), “specialized nursing staff”(4.0).

### Current Challenges or Factors Affecting the Implementation of Palliative Care Services in the Country

The over-all mean of health provision among geographically isolated areas is described as “Undecided” as evidence with over-all mean rate of 3.17. The over-all mean of efforts among the stakeholders in the implementation in palliative care services is described as “Agree” as evidence with over-all mean rate of 3.41. The level of awareness of the healthcare professionals about the need for palliative care not only in cancer but especially in chronic, non-cancer diseases. the over-all mean is described as “Undecided” with over-all mean rate of 3.2. The level of health and medication literacy among patients so they may cooperate or aware of the need for early treatment and palliation is described as “Agree” with over-all mean rate of 3.63.

### Association of Respondents’ Socio-Demographic Characteristics with Knowledge of Primary Care Physicians and Perceived Barriers

The test for association of the respondents’ sociodemographic characteristics and knowledge of primary care physicians about palliative care shows that there is significance between age and objectives of palliative care,  $r=0.356$ ,  $p\text{-value}=0.011$ . As the age of the respondents increases the level of rates in objectives of palliative care also increases. Marital status also shows a significant relationship with the level of objectives of palliative care,  $r=-0.374$ ,  $p\text{-value}=0.007$ . Those married respondents tends to have increasing level of rates in objectives of palliative care.

The test for association shows that there is a significance between provide hospice and palliative care and factors affecting the implementation of palliative care services in the country with respect to National, Regional and Local Healthcare Network,  $r = -0.327$ ,  $p\text{-value}=0.020$ . Those who provide hospice and palliative care tends to have increasing level rating in factors affecting the implementation of palliative care services in the country with respect to National, Regional and Local Healthcare Network. Length of palliative care work experience has a significance in relationship with the level of rating in factors affecting the implementation of palliative care services in the country with respect to National, Regional and Local Healthcare Network,  $r=0.619$ ,  $p\text{-value}=0.032$ . As the length of work experience in palliative care increases the level of rating in factors affecting the implementation of palliative care services in the country with respect to National, Regional and Local Healthcare Network also increases.

### DISCUSSION

Findings of this study show that respondents strongly agree on the definition and objectives of palliative care with a mean rate of 4.33.

Palliative and hospice care has the objectives of improving the quality of life of patients with life limiting, complex, chronic illnesses or those progressively debilitating diseases beyond any benefit from curative treatment. Studies concluded that knowledge was the major barrier for community physicians to provide palliative care however in a study done among community physician at Taiwan, it revealed that beliefs and experiences rather than knowledge affects their palliative care provision.<sup>2</sup>

Primary care physicians are the link between patients and specialist in the hospital. The study was able to assess factors affecting the provision of palliative care in 4 domains: a) national, regional, local healthcare networking; b) implementation process; c) healthcare team; d) patient perception. Effective national, regional and local healthcare networking results to better health of the people. The government made a step to make health accessible to the people especially to the GIDA through enactment of a code empowering the local government units.<sup>3</sup> In this study, the respondents perceived health provision among geographically isolated areas was described as "Undecided" with a mean of 3.14. This could be due to non-prioritization of health among the stakeholder and lack of institutionalized standards on palliative care which could lead to catastrophic cancer treatment cost and high out of pocket expenses.<sup>4</sup>

As to the implementation process, the respondents agree on the efforts among stakeholders in the implementation of palliative care services with a mean of 3.41. WHO considered palliative care as an important part of taking care patients with life-limiting diseases and has encouraged countries to improve its availability, it is still considered as the neglected child of healthcare family. It receives low priority from health policy makers and with no funding.<sup>5</sup>

Healthcare professional level of awareness about the need for palliative has an over-all mean of 3.2 which is described as "Undecided". Multidisciplinary team is needed in providing successful palliative care, however effective multidisciplinary team is under threat due to organizational and funding factors.<sup>6</sup> It could be due to the limited or no access to academic or continuing professional development among health care professionals and limited research into specific needs or limited knowledge among methodologies to use for specific research question such as palliative care.<sup>4</sup>

Commonly, patients view palliative care as an approach that is synonymous to end-of-life or care close to the death and thus palliative care is often met with shock and fear when introduced. Nevertheless, respondent of this study perceived that patients are cooperative or aware of the need for early treatment and palliation if it is needed. Other studies has shown that patients and caregivers who receive palliative care interventions early in the trajectory of their illness, usually feel more comfortable, show a broader understanding towards palliative care, enjoy an improvement of quality of life and feel more equipped with resources to cope.<sup>7</sup>

As to the association of socio-demographic profile of the respondents, age and marriage are significantly associated with the knowledge on the objectives of palliative care. The study shows that as the respondent is being attached martially and as the age increases,

the level of knowledge and understanding on the concept of palliative care increases. Previous studies noted that senior physician were much more likely to provide palliative care. This may be because they are more experienced in clinical service and human life.<sup>2</sup> The study also shown that those physicians who render palliative care and with more work experience in palliative care strongly agree on the current challenges affecting the implementation of palliative care services in the country with respect to National, Regional and Local Healthcare Network. In a 2008 Country Report on the Philippines, some of the identified challenges on the provision of palliative care were lack of political will to support palliative care and no government stream of funding.<sup>5</sup>

## CONCLUSION AND RECOMMENDATIONS

This study was conducted to determine the factors affecting the provision of palliative care among primary care physicians of Ilocos Norte. Among the 4 domain, it was noted that national, regional and local healthcare networking and healthcare team perceived as a challenge in provision of palliative care among primary care physicians of Ilocos Norte. With this, the study should be relayed to those policy maker to be able to come up with national strategies as to deliver efficient health care especially palliative care. Linkages among institutions should also be strengthen to provide easier referral.

As to the knowledge of the primary care physicians, this study showed that they are knowledgeable as to the definition and objectives of palliative care, however there is no correlation between their knowledge and practice. For the future researcher, it is recommended to assess the willingness of primary care physician to practice palliative care.

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