A Cross-Sectional Study on Self-Reported Knowledge, Attitudes and Practices on End-of-Life Care of Residents-in-Training in Ospital ng Makati

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Background: The Ospital ng Makati is a tertiary government hospital that is currently on its birthing phase of establishing the palliative foundation in the hospital in terms of the handling the terminally ill and dying patients by providing them quality of life while in the hospital and if still possible, to assist the family in the transition to home care.
Objective: The objective was to determine the baseline knowledge, attitude and practices of the resident physicians who are undergoing training in the Ospital ng Makati.
Methods: A cross-sectional study was conducted among the resident physicians of Ospital ng Makati to know the knowledge, attitude and practices with regards to the assessment of their end of life care understanding. A self-administered validated questionnaire was distributed among the participants from a previous study done by Pamplona that was utilized to facilitate the survey.
Results: A total of 65 people took part in the study, with a median age of 20 to 39 years old. The majority of the participants were female (40%) and Roman Catholic 60 (92.3%). The department of Pediatrics had a significant number of participants (24.6%). The University of the East Ramon Magsaysay Memorial Medical Center had a significant number of the participants 13 (20%). The majority 25. (38.5%) of the respondents are generally first years. The total of 65 respondents resulted to overall response rate of 56.5%.
Conclusion: The findings demonstrated that knowledge, attitudes, and practices related to palliative care were identified through this cross-sectional report. Interestingly, even though the majority of the participants had no prior exposure or rotation to palliative and hospice care and demonstrated a lack of understanding of the notion of palliative and hospice medicine, they had an appropriate understanding of palliative medicine in general.

Key words: Cross-sectional study, knowledge-attitude-practice, end-of-life care

Introduction

Palliate comes from the Latin word for cloak, "pallium". The meaning of palliate is to cloak, or cover up, for the symptoms of an illness without curing it. According to the World Health Organization (WHO) defines palliative care as 'an approach that improves the quality of life of patients and their families facing the problems associated with life-threatening illness, through the prevention and relief of suffering by means of early identification and impeccable assessment and treatment of pain and other problems, physical, psychosocial, and spiritual' aspects. Basically, Palliative medicine specializes on administering relief of pain and control symptoms by improving the quality of care for the patients, for their families, and for the betterment of the healthcare system. The general approach is holistic in nature as it is patient-centered, comprehensive, and multidimensional. The main aspects it addresses are not only the physical, but also the psychological, psychosocial, and spiritual dimensions.[1]

Up to date, one of the trending issues locally on health is the implementation of the Universal Health Care law. Included in this law makes all the Filipino members of PhilHealth, either as direct or indirect contributors, providing immediate eligibility and access to preventive, promotive, curative, rehabilitative and palliative care.[2]

Although a new concept, Palliative care is already taking its place in the lives of the Filipinos. Despite its emerging progress in the country, little do people know about the importance and relevance of this concept, even medical people gets confused with the idea of it. Hence, an urgent calling to intentionally incorporate the principles of palliative care, as a student had just started in the academic medical ladder of being a physician. Emphasis is needed on the areas of the general principles, clinical management and ethical considerations as the core of palliative care.[3,4]

Palliative care is a relatively new specialty that evolved during the last five decades. The goal of this specialty is to administer the best possible end of life care for dying patients with their families. During the 1960's and 1970's, this concept has evolved due to a growing public demand and unsatisfactory kind of care and compassion of the patients at their end of life phase. The cancer-specialists were concerned with medical management and interventions they could offer their patients, and not with regards to end of life care. This brought for the birth of Palliative concepts as Dame Cicely Saunders came into picture. He is the founder of the first modern hospice, St. Christopher's Hospice, in the UK back in 1967. The birth of hospice care became the major transforming event in this field which inspired a lot of physicians all over the world to undergo this emerging new field so that they too may establish the same specialty in their own countries.[1]

In the Philippines, its services began wayback in the early 1980's, which eventually emerged as a new, as pain relief and during 1990 was included in the Cancer Control Program in the government. It eventually became one of the country's first specialist fellowship training and service program at the UP-PGH in 2001. Since then, the movement with regards to the Palliative and Hospice care services has now emerged to 34 organizations with 108 hospice and palliative care services which provides end of life care services (DOH). The Department of Health has partnered with Philippine Cancer Society (PCS) on 2002 under the affiliation of Palcare. It is a training program which hones the hospice providers which mostly are healthcare professionals, others are community volunteers, retired academic teachers and some are university students. Most of population came in from Christian organizations such as the Sinag, which caters to indigent hospitalized patients.[5]

Palliative Medicine as a new discipline in the Philippines has not yet created a baseline knowledge among the people even to the medical practitioners. Only a few number of medical graduates are aware of the essence of Palliative as a specialty. It can be noted also that there are few resident graduates who are undergoing this training and later on become specialists. Nonetheless, as Palliative medicine is taking its toll in the practice, people are getting familiarized with what palliative medicine really is.[3]

One study that was conducted among the medical students of the Faculty of Medicine, University of Colombo found out that only 22% of the students were familiar with the concept of palliative care while 76% of them held that they had inadequate knowledge to manage symptoms in a dying patient.[3] It was also mentioned on the same study that the majority of the medical graduates wished to have palliative care included in the undergraduate medical curriculum. At the end point of this study, an important recommendation was emphasized with the importance of devising an integrated curriculum for palliative care with a strong emphasis on a multi-disicplinary approach for the undergraduate medical student.

The role of the primary care physicians became limited to simply controlling and palliating symptoms due to the nature of the diseases that is chronic in nature. This gives rise to the aim of palliative medicine that is to render comfort and alleviate the patient from pain and suffering. The multidimensional principle is best illustrated in the concept of 'total pain' as described by Saunders. He emphasized and made mention that the pain mentioned here is not merely physical and biological but also includes all of the other aspects such as the psychological, social, and spiritual dimensions. Palliative care affirms life and regards dying as a normal process. This is the major role of the Family physicians as they offer a support system which includes the family of the patients to help them live as actively as possible until the end-of-life. It majors on the role of the physician to help the caregivers and families to adjust, cope and recover during the phase of the illness.[6]

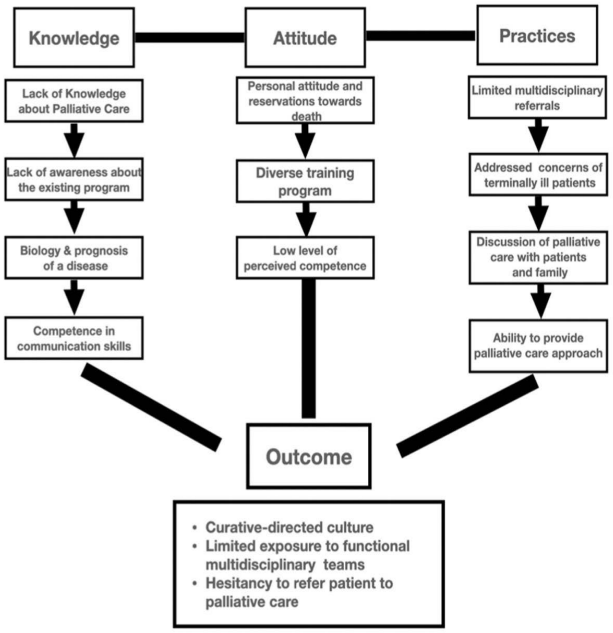
Due to the chronicity of a terminal disease, the concept of the end-of-life should be realized as well in the goal of providing a holistic care to the patient and the family. The concept of death should also be of a value as death of a loved one can be a devastating family event. In breaking bad news, physicians' compassionate behaviors have direct impact to improve patient-perceived physician compassion, caring and sensitive attitudes, and decreases anxiety, as well as develop trust in physicians.[7] In general, how physicians communicate information to families may affect the emotional reactions and long-term management of the physician. Hence, one of basic role of the family physician is to provide excellent coordinated and multidisciplinary care for the patient.[8] In this way, the patient, together with the family, optimum referral and management is achieved.

The Ospital ng Makati is a tertiary government hospital that is currently on its birthing phase of establishing the palliative foundation in the hospital in terms of the handling the terminally ill and dying patients by providing them quality of life while in the hospital and if still possible, to assist the family in the transition to home care. Currently, this is a new program that has emerged in the Ospital ng Makati early 2019, wherein a pilot study of Palliative Program was spearheaded by the Department of Family and Community Medicine. Initially, there were interdepartmental referrals for pain control, psychosocial and spiritual support for the terminally ill patients. Since it is a new concept that is introduced in the hospital where this study will be conducted, assessment of the resident's basic knowledge, attitude and practice will be the main theme of this study paper. Once assessed accordingly, it may be a jumping board of opportunity to enhance the Palliative program in the said hospital. Series of seminars and workshop on awareness and desensitization can be conducted to elaborate what Palliative and Hospice Medicine is. Therefore, knowledge, attitude and practices can be improved for the betterment of providing quality of life among the Palliative patients together with their families.

Conceptual Framework

These are the relationship between the variables that are to be studied together with the possible factors that could and may affect the overall knowledge, attitude and practices of a resident physician in training. The primary goal of this study is to establish preliminary evidence in planning a future advanced study that could further benefit in the field of palliative and hospice medicine practice in the Ospital ng Makati.

The objective was to determine the baseline knowledge, attitude and practices of the resident physicians who are undergoing training in the Ospital ng Makati.



Methods

Study Design

A cross-sectional study was conducted among the resident physicians of Ospital ng Makati to know the knowledge, attitude and practices with regards to the assessment of their end of life care understanding. A self-administered validated questionnaire was distributed among the participants from a previous study done by Pamplona that was utilized to facilitate the survey.

Study Population

Inclusion Criteria

The inclusion criteria of the study consist of a male and female resident physicians in the departments of Internal Medicine, Surgery, Pediatrics, Obstetrics and Gynecology, Emergency Medicine and Anesthesiology, Otorhinolaryngology, Rehabilitation Medicine of the Ospital ng Makati, from year levels 1-5, depending on the training program who are willing to participate in the study.

Determination of the demographic profiles such as age, sex, religion, year level, department, rotation in palliative unit, number of terminally ill patients cared for the last 6 months of the subjects was taken to be analyzed and reviewed as factors contributing in their knowledge, attitude and practices towards end-of-life care.

Exclusion Criteria

All residents who were on a leave, may it be a mandatory, personal transaction leave or emergency leave are excluded in the study. Residents from Pathology and Radiology were not included in the population pool as these training programs do not have direct interaction with medical cases possible for palliative care referrals. Family and Community Medicine residents were also excluded in the study, since Palliative and Hospice care rotation is part of their residency training program and would mean that they have the basic knowledge and foundation on the palliative knowledge that would create possible bias on the results.

Withdrawal Criteria

Participants were allowed to withdraw anytime during the course of the study.

Description of Outcome

The survey consists of a 4-part questionnaire on the subject's 1) demographic profile, 2) self-rated knowledge, 3) a set of attitudinal items, and 4) practices related to end of life care. The questionnaire regarding the knowledge and attitudes was answered using a five-point Likert scale which range from strongly disagree, disagree, neutral, agree, and strongly agree. With these unit of measurements, a high score is favorable which indicates that the participant is knowledgeable about the concepts and principles of palliative and hospice care.

Description of Study Procedures

The Ospital ng Makati has a total of 165 residents coming from the departments of Internal Medicine, Surgery, Pediatrics, Obstetrics and Gynecology, Emergency Medicine, Rehabilitation medicine, Anesthesiology and Otorhinolaryngology combined. In this study, the researcher utilized the 95% confidence interval and a 5% margin of error. The sample size computation is one hundred fifteen (115) residents using the software application of Epi Info.

The participants recruited accessed the online questionnaire, and the data were collected through the google drive. Using their own computer or mobile device, participants individually accessed the online survey form. Participants completed the study in one sitting over approximately 10 minutes at their most convenient time. The data collection was approximately done in 30days after the approval of the research protocol.

Statistical Analyses

The data was stored on the google drive and was analyzed using the software SPSS version 20. Descriptive statistics were used to summarize the demographics and the analysis of the knowledge, attitude, practices of the residents in training at Ospital ng Makati.

Data and Statistical Analysis Plan

This research is a cross-sectional study, that is focused on the data from the selected departments at Ospital ng Makati at one specific point in time.

Ethical Considerations

Informed Consent Process. A non-compulsory consent obtained in a participant together with ample disclosure of the research information and protocol are paramount components in conducting the informed consent process.

Privacy and Confidentiality. Confidentiality of the records of this study will not be disclosed as much as possible. Identities of the individuals in this report as a result of the study were not revealed. Research information will be kept in a secured google drive file at all times and only the researcher will be able to access the data gathered and maintained up to five years after the full establishment of the Palliative and Hospice care program in the said institution.

There are no direct risks identified in the said research, in fact there are several benefits that will be contributory in the furtherance of development of Palliative program in the said hospital.

Results

General Description of the Sample Population

A total of 65 people took part in the study, with a median age of 20 to 39 years old. The majority of the participants were female (40%) and Roman Catholic 60 (92.3%). The department of Pediatrics had a significant number of participants (24.6%). The University of the East Ramon Magsaysay Memorial Medical Center had a significant number of the participants 13 (20%). The majority 25. (38.5%) of the respondents are generally first years. The total of 65 respondents resulted to overall response rate of 56.5%.

Prior Exposure to Palliative and Hospice Concepts

The majority of the participants 44 (67.7%) reported that they had no prior experience with palliative care while a minority of the participants 21 (32.3%), said they had previous exposure with the concepts of palliative medicine. Fifty-seven (87.7%) of the participants mentioned that they had no previous rotation in Palliative and Hospice care unit, while 8 (12.3%) reported to have rotation during their clerkship and internship period. However, there is almost an equal proportion of the participants who had attended previous lecture and workshop about end of life or hospice care as presented by 34 (52.3%) and 31 (47.7%) who had never attended any hospice-related lecture. Also a great percentage of 53 (81.5%) of participants were aware of the existing Palliative and Hospice service and program in the hospital (Table 2).

Knowledge on End-of-Life Care

Thirty five resident physicians (53.8%) agreed and felt proficient enough to discuss palliative care with patients and their families, while 25 participants (38.5%) felt ambivalent about the obligation to discuss palliative medicine. Forty one residents, on the other hand, opted to refer the patients to the palliative care service. Only 36 (55.4 %) of respondents believed they are capable of breaking the bad news to the patient and family members, while 19 (29.2%) feel neutral. Twenty-six

Table 1. Demographic characteristics of survey sample (n=65).

Characteristics	Value N (%)
Age Group	
20-29 30	(46.2%)
30-39 35	(53.8%)
Gender	
Female	40 (61.5%)
Male	25 (38.5%)
Religion	
Evangelical Christian	4 (6.2%)
Others	1 (1.5%)
Roman Catholic	60 (92.3%)
Department	
Anesthesiology	8 (12.3%)
Emergency Medicine	9 (13.8%)
Internal Medicine	11 (16.9%)
Obstetrics and Gynecology	5 (7.7%)
Otorhinolaryngology	5 (7.7%)
Pediatrics	16 (24.6%)
Surgery	3 (4.6%)
Rehabilitation Medicine	8 (12.3%)
Year Level	
First Year	25 (38.5%)
Second Year	16 (24.6%)
Third Year	13 (20%)
Fourth Year	9 (13.8%)
Fifth Year	2 (3.1%)
Medical School	
ADMU	3 (4.6%)
Cagayan State University	1 (1.5%)
Cebu Institute of Medicine	1 (1.5%)
DLSU	11 (16.9%)
Emilio Aguinaldo College Manila	1 (1.5%)
FEU	5 (7.7%)
OLFU	2 (3.1%)
PLM	7 (10.8%)
Saint Louis University	1 (1.5%)
San Beda	2 (3.1%)
SLMC	4 (6.2%)
UERM	13 (20%)
University of Perpetual Help	3 (4.6%)
UST	9 (13.8%)
Virgen Milagrosa University Foundation	1 (1.5%)
West Visayas State University	1 (1.5%)

participants (40%) have said they are neutral about disclosing end-of-life care preferences and decisions in the form of a family conference or meeting, while 23 respondents (35.3%) had said they are confident in conducting family conferences or medical junta with both the patient and their relatives. However, a number of the participants (33.8%) believe they are capable of discussing advanced directive orders (Table 3).

Attitude on the End-of-Life Care towards Managing End-of-Life Patient Care Issues

There is a neutral competence in assessing and controlling the pain of terminally ill patients, according to 28 (43.1 %) of the participants. A quarter of the participants (36.9%) feel neutral about utilizing opioid analgesics, while an equal proportion disagree and have a neutral sense of competence about administering adjuvant analgesics in the form of anti-depressants and anti-convulsants. Nearly half of the respondents (33%) disagree that they are knowledgeable enough to assess and manage agitation and terminal delirium in their patients. In addition, 27 (41.5%) of respondents claim to be unqualified to handle emotional and spiritual problems of patients and their families, particularly during the end period of life.

Attitude on the End-of-Life Care towards Support for Palliative Practice and Philosophy

In terms of residents' support for palliative care practices and philosophy, 32 (49.2%) strongly agreed that patients might benefit if palliative care referrals were made early in the course of the patient's illness. In addition, 35 (53.8 %) respondents strongly agreed that the family's psychosocial and spiritual needs are better met when the palliative service is coordinated. Only 33 participants (50.8 %) agreed to include palliative care in their discussion about treatment options when the patient's life is limited to months and a cure is not foreseeable. In addition, a majority of the 35 respondents (53.8 percent) strongly agreed that an interdisciplinary approach to palliative care and good referrals are much more beneficial.

Attitude on the End-of-Life Care on the Views on Physician-patient Communication

A majority of the respondents, 33 (50.8 percent), agree and believe that palliative care should be discussed before the illness reaches its ultimate stage. In addition, 38 (58.5%) of respondents believed that the concept of palliative care should be brought up by the attending physician. A total of 34 (52.3 %) participants strongly agreed that counselling the dying patient about his or her prognosis is critical.

Table 2. Exposure to palliative and hospice medicine concept.

Variables	Frequency	Percent
Previous Palliative and Hospice Care Exposure		
NO	44	67.7
YES	21	32.3
With Previous Rotation in Hospice/ Palliative Care Unit		
NO	57	87.7
YES	8	12.3
Attended any lecture and/or workshop about end of life or hospice care		
NO	31	47.7
YES	34	52.3
Aware of a Hospice/Palliative Care services in the Hospital		
NO	12	18.5
YES	53	81.5

Table 3. Knowledge on end-of-life care - competence in communication skills (N=65).

Variables	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Questions 1-5					
1. I feel competent enough to discuss palliative care with patients and their families	2 (3.1%)	35 (53.8%)	25 (38.5)	3 (4.6%)	0
2. I feel competent in discussing with other services in shifting to or referral to palliative care	10 (15.4%)	41 (63.1%)	13 (20%)	1 (1.5%)	0
3. I feel competent in breaking the bad news such as poor prognosis to a patient or family member	6 (9.2%)	36 (55.4%)	19 (29.2%)	4 (6.2%)	0
4. I feel competent to conduct a family conference/ meeting to discuss end-of-life care preferences and decisions of the patient	5 (7.7%)	23 (35.4%)	26 (40%)	9 (13.8%)	2 (3.1)
5. I feel competent in discussing advanced directives such as do not resuscitate (DNR) orders	18 (27.7%)	33 (50.8%)	10 (15.4%)	4 (6.2%)	0

Table 4. Attitude on end-of-life care -managing end-of-life patient care issues.

Variables	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Questions					
1. I feel competent enough to assess and manage the pain of my terminally-ill patients	3 (4.6)	24 (36.9%)	28 (43.1%)	10 (15.4%)	0
2. I feel competent in using opioid analgesics	10 (15.4%)	16 (24.6%)	24 (36.9%)	14 (21.5%)	1 (1.5%)
3. I feel competent in using adjuvant analgesics such as antidepressants, anticonvulsants	5 (7.7%)	15 (23.1%)	21 (32.3%)	21 (32.3%)	3 (4.6%)
4. I feel knowledgeable enough to assess and manage agitation and terminal delirium	2 (3.1%)	12 (18.5%)	16 (24.6%)	33 (50%)	2 (3.1%)
5. I feel knowledgeable enough to assess and manage psychosocial and spiritual concerns during the terminal phase for the patient	3 (4.6%)	14 (21.5%)	21 (32.3%)	27 (41.5%)	0

Table 5**.** Attitude on end-of-life care - support for palliative practice and philosophy**.**

Variables	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Questions					
1. It would be beneficial for patients if palliative care referral were introduced in the early course of the patient's disease	32 (49.2%)	27 (41.5%)	4 (6.2%)	2 (3.1%)	0
2. The psychosocial and spiritual needs of the family are better taken cared of when in coordination with the palliative service	35 (53.8%)	29 (44.6%)	1 (1.5%)	0	0
3. I include palliative care in my discussion about treatment options when the patient's life is limited to months and cure is not possible	25 (38.5%)	33 (50.8%)	5 (7.7%)	2 (3.1%)	0
4. The interdisciplinary approach and proper referrals of palliative care is much more effective	35 (53.8%)	28 (43.1%)	1 (1.5%)	1 (1.5%)	0

Table 6. Attitude on end-of-life care - views on physician-patient communication.

Variables	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Questions					
1. Palliative services should be talked about prior to the terminal stage of the illness	28 (43.1%)	33 (50.8%)	4 (6.2%)	0	0
2. The idea of palliative care is most appropriate to be brought up by no other than the attending physician of the patient	21 (32.3%)	38 (58.5%)	5 (7.7%)	1 (1.5%)	0
3. It is important that the patient who is dying be told of his/her prognosis	34 (52.3%)	28 (43.1%)	3 (4.6%)	0	0
4. I have difficulty disclosing to the patient and his family that the patient has poor prognosis and is dying	1 (1.5%)	26 (40%)	14 (21.5%)	23 (35.4%)	0
5. I am comfortable discussing with patients and their families about palliative care	9 (13.8%)	36 (55.4%)	18 (27.7%)	2 (3.1)	0

Twenty-six percent of the respondents (40 %) agreed that disclosing a negative prognosis to the patient and family is daunting. However, the majority of participants (36, or 55.4%) said that they are comfortable discussing palliative care with their patients.

Practices on the End-of-Life Care in Discussion of Palliative Care Views

A large majority of the respondents agreed that they introduce and discuss palliative care with their already terminally ill patients, 30 (46.2%) agreed that as their physicians, they ask about the terminally ill patient's end-of-life preferences, 45 (69.2%) agreed that they address the control of pain and other symptoms through medications, environmental adjustment, and education, 28 (43.1%) provide psychosocial and spiritual care, and 45 (69.2%) agreed that they provide psychosocial and spiritual care. A modest minority of respondents (28.3%) believe that spiritual parts of care for terminally ill patients and their families are neutrally incorporated, whereas 31 (41.7%) neutrally manage their terminally ill patients using the palliative technique. The significant majority of respondents (29.6%) said that terminally ill patients should be referred to a palliative and hospice medicine program or a specialist.

Analysis of Data

Key Findings

As a result of the study, significant findings have been obtained. As previously stated, a high score in each category in the questionnaire suggests a good correlation, signifying that the participant is aware and informed about palliative and hospice care concepts and principles.

There is a big distinction between being exposed to palliative medicine and doing a rotation in palliative medicine, which is worth mentioning. Exposure simply means that the participant has encountered a terminally ill patient with a life-limiting condition before. Palliative rotation, on the other hand, would involve a well-structured program with adequate evaluation at the completion of their rotation. Table 8 showed a significant correlation coefficient of 0.542, suggesting a moderate positive degree of association between residents with previous Palliative and Hospice exposure and those that had a previous rotation.

Many of the residents in training at the Ospital ng Makati who had a previous rotation during their internship or clerkship years found a positive correlation in the actual referral of terminally ill patients to a palliative specialist, in this case, the hospital's palliative department. Despite a small significance of the correlation, it shows that their previous exposure to palliative medicine somehow influenced and impacted their ability to provide appropriate support and care to terminally ill patients (Table 9).

Palliative and Hospice care workshops and lectures for medical professionals and laymen have become much more common these days, and many of the respondents in this study were able to attend a lecture or workshop seminar on end-of-life or hospice care. The concept of palliative care is most appropriate to be brought up by the patient's attending physician, as shown in a positive weak correlation coefficient of 0.286. Another strong link was found when asking terminally ill patients about their end-of-life care preferences, with a correlation coefficient of 0.256. (Table 10).

The existing Palliative and Hospice Medicine program at the Ospital ng Makati is beginning to have a substantial impact on the way terminally ill patients are treated at the end of their lives. According

Table 7. Practices on end-of-life care - discussion of palliative care views**.**

Variables	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Questions					
1. I introduce and discuss palliative care with my terminally ill patients	7 (10.8%)	40 (61.5%)	17 (26.2%)	1 (1.5%)	0
2. I ask my terminally ill patients about their end of life care preferences	7 (10.8%)	30 (46.2%)	21 (32.3%)	6 (9.2%)	1 (1.5%)
3. I address control of pain and other symptoms through medication, environmental adjustment and education	5 (7.7%)	45 (69.2%)	14 (21.5%)	1 (1.5%)	0
4. I provide psychosocial and emotional support for both patient and their families, throughout all the phases of care from diagnosis until bereavement	4 (6.2%)	28 (43.1%)	24 (36.9%)	9 (13.8%)	0
5. I integrate the spiritual aspects in the management of terminally-ill patients and their families	3 (4.6%)	24 (36.9%)	28 (43.1%)	8 (12.3%)	2 (3.1%)
6. I manage my terminally ill patients using the palliative care approach	4 (6.2%)	21 (32.3%)	31 (47.7%)	9 (13.8%)	0
7. I refer my terminally ill patients to a palliative care specialist	25 (38.5%)	29 (44.6%)	10 (15.4%)	1 (1.5%)	0

Table 8. Association between previous palliative and hospice care exposure to demographic variables with knowledge, attitudes and practices to end-of-life care (N=65).

With previous palliative and hospice care exposure				
	Correlation Coefficient	Sig. (2-tailed)	Significantly correlated?	Strength of correlation
Gender	-0.073	0.564	NO	
Religion	0.199	0.111	NO	
Department	-0.003	0.983	NO	
Year Level	-0.146	0.247	NO	
Medical School Graduated From (No Abbreviation please)	0.242	0.052	NO	
With Previous Rotation in Hospice/ Palliative Care Unit	.542**	0.000	YES	positive moderate
Attended any lecture and/or workshop about end of life or hospice care	0.199	0.113	NO	
Aware of a Hospice/Palliative Care services in the Hospital	-0.095	0.451	NO	
I feel confident enough to discuss palliative care with patients and their families	0.170	0.176	NO	
I feel confident in discussing with other services in shifting to or referral to palliative care	0.059	0.639	NO	
I feel confident in breaking the bad news such as poor prognosis to a patient or family member	0.181	0.149	NO	
I feel confident to conduct a family conference/ meeting to discuss end-of-life care preferences and decisions of the patient	0.091	0.470	NO	
I feel confident in discussing advanced directives such as do not resuscitate (DNR) orders	0.165	0.189	NO	
I feel confident enough to assess and manage the pain of my terminally-ill patients	-0.096	0.446	NO	
I feel confident in using adjuvant analgesics such as antidepressants, anticonvulsants	-0.079	0.534	NO	
I feel knowledgeable enough to assess and manage psychosocial and spiritual concerns during the terminal phase for the patient	0.220	0.078	NO	
I feel knowledgeable enough to assess and manage agitation and terminal delirium	-0.013	0.916	NO	
I feel knowledgeable enough to assess and manage psychosocial and spiritual concerns during the terminal phase for the patient	0.220	0.078	NO	
I feel confident in using opioid analgesics	0.075	0.553	NO	
It would be beneficial for patients if palliative care referral were introduced in the early course of the patient's disease	0.213	0.089	NO	
The psychosocial and spiritual needs of the family are better taken cared of when in coordination with the palliative service	0 .119	0.345	NO	
I include palliative care in my discussion about treatment options when the patient's life is limited to months and cure is not possible.	-0.140	0.266	NO	
The interdisciplinary approach and proper referrals of palliative care is much more effective	-0.092	0.465	NO	
Palliative services should be talked about prior to the terminal stage of the illness	0.044	0.725	NO	
The idea of palliative care is most appropriate to be brought up by no other than the attending physician of the patient	0.071	0.573	NO	
It is important that the patient who is dying be told of his/her prognosis	-0.123	0.328	NO	
I have difficulty disclosing to the patient and his family that the patient has poor prognosis and is dying	-0.180	0.151	NO	
I am comfortable discussing with patients and their families about palliative care	0.199	0.112	NO	
I introduce and discuss palliative care with my terminally ill patients	-0.007	0.955	NO	
I ask my terminally ill patients about their end of life care preferences	-0.136	0.281	NO	
I address control of pain and other symptoms through medication, environmental adjustment and education	-0.038	0.765	NO	
I provide psychosocial and emotional support for both patient and their families, throughout all the phases of care from diagnosis until bereavement	0.051	0.688	NO	
I integrate the spiritual aspects in the management of terminally-ill patients and their families	0.052	0.682	NO	
I manage my terminally ill patients using the palliative care approach	-0.186	0.138	NO	
I refer my terminally ill patients to a palliative care specialist	-0.153	0.224	NO	

Table 9. Association between previous palliative and hospice care rotation to demographic variables and knowledge, attitudes and practices to end-of-life care (N=65).

With Previous Rotation in Hospice/ Palliative Care Unit	Correlation Coefficient	Sig. (2-tailed)	Significantly correlated?	Strength of correlation
Gender	-0.104	0.411	NO	
Religion	0.108	0.391	NO	
Department	0.102	0.417	NO	
Year Level	0.085	0.502	NO	
Medical School Graduated From (No Abbreviation please)	0.010	0.937	NO	
Attended any lecture and/or workshop about end of life or hospice care	0.170	0.175	NO	
Aware of a Hospice/Palliative Care services in the Hospital	-0.063	0.617	NO	
I feel confident enough to discuss palliative care with patients and their families	0.176	0.161	NO	
I feel confident in discussing with other services in shifting to or referral to palliative care	0.042	0.739	NO	
I feel confident in breaking the bad news such as poor prognosis to a patient or family member	-0.072	0.567	NO	
I feel confident to conduct a family conference/ meeting to discuss end-of-life care preferences and decisions of the patient	-0.013	0.917	NO	
I feel confident in discussing advanced directives such as do not resuscitate (DNR) orders	0.037	0.772	NO	
I feel confident enough to assess and manage the pain of my terminally-ill patients	0.067	0.596	NO	
I feel confident in using adjuvant analgesics such as antidepressants, anticonvulsants	0.044	0.726	NO	
I feel knowledgeable enough to assess and manage psychosocial and spiritual concerns during the terminal phase for the patient	0.187	0.136	NO	
I feel knowledgeable enough to assess and manage agitation and terminal delirium	0.009	0.940	NO	
I feel knowledgeable enough to assess and manage psychosocial and spiritual concerns during the terminal phase for the patient	0.060	0.638	NO	
I feel confident in using opioid analgesics	0.046	0.719	NO	
It would be beneficial for patients if palliative care referral were introduced in the early course of the patient's disease	0.078	0.538	NO	
The psychosocial and spiritual needs of the family are better taken cared of when in coordination with the palliative service	-0.115	0.362	NO	
I include palliative care in my discussion about treatment options when the patient's life is limited to months and cure is not possible.	-0.011	0.930	NO	
The interdisciplinary approach and proper referrals of palliative care is much more effective	-0.107	0.396	NO	
Palliative services should be talked about prior to the terminal stage of the illness	-0.098	0.436	NO	
The idea of palliative care is most appropriate to be brought up by no other than the attending physician of the patient	-0.210	0.094	NO	
It is important that the patient who is dying be told of his/her prognosis	0.000	1.000	NO	
I have difficulty disclosing to the patient and his family that the patient has poor prognosis and is dying	-0.020	0.875	NO	
I am comfortable discussing with patients and their families about palliative care	0.110	0.384	NO	
I introduce and discuss palliative care with my terminally ill patients	-0.202	0.107	NO	
I ask my terminally ill patients about their end of life care preferences	-0.048	0.703	NO	
I address control of pain and other symptoms through medication, environmental adjustment and education	-0.058	0.644	NO	
I provide psychosocial and emotional support for both patient and their families, throughout all the phases of care from diagnosis until bereavement	0.031	0.807	NO	
I integrate the spiritual aspects in the management of terminally-ill patients and their families	0.000	1.000	NO	
I manage my terminally ill patients using the palliative care approach	-0.140	0.265	NO	
I refer my terminally ill patients to a palliative care specialist	-.304*	0.014	YES	negative weak

Table 10. Association of the Palliative-related lecture or workshops attended/exposure to demographic variables and knowledge, attitudes and practices to end-of-life care (N=65).

Attended any lecture and/or workshop about end of life or hospice care	Correlation Coefficient	Sig. (2-tailed)	Significantly correlated?	Strength of correlation
Gender	-0.005	0.969	NO	
Religion	0.075	0.555	NO	
Department	0.036	0.777	NO	
Year Level	0.078	0.537	NO	
Medical School Graduated From (No Abbreviation please)	0.002	0.990	NO	
With Previous Rotation in Hospice/ Palliative Care Unit	0.199	0.113	NO	
Attended any lecture and/or workshop about end of life or hospice care	0.170	0.175	NO	
Aware of a Hospice/Palliative Care services in the Hospital	0.022	0.862	NO	
I feel confident enough to discuss palliative care with patients and their families	0.194	0.121	NO	
I feel confident in discussing with other services in shifting to or referral to palliative care	0.194	0.121	NO	
I feel confident in breaking the bad news such as poor prognosis to a patient or family member	0.125	0.320	NO	
I feel confident to conduct a family conference/ meeting to discuss end-of-life care preferences and decisions of the patient	0.005	0.967	NO	
I feel confident in discussing advanced directives such as do not resuscitate (DNR) orders	0.105	0.403	NO	
I feel confident enough to assess and manage the pain of my terminally-ill patients	0.003	0.983	NO	
I feel confident in using adjuvant analgesics such as antidepressants, anticonvulsants	-0.015	0.903	NO	
I feel knowledgeable enough to assess and manage psychosocial and spiritual concerns during the terminal phase for the patient	0.163	0.194	NO	
I feel knowledgeable enough to assess and manage agitation and terminal delirium	0.156	0.215	NO	
I feel knowledgeable enough to assess and manage psychosocial and spiritual concerns during the terminal phase for the patient	0.121	0.337	NO	
I feel confident in using opioid analgesics	0.044	0.730	NO	
It would be beneficial for patients if palliative care referral were introduced in the early course of the patient's disease	0.038	0.762	NO	
The psychosocial and spiritual needs of the family are better taken cared of when in coordination with the palliative service	0.178	0.157	NO	
I include palliative care in my discussion about treatment options when the patient's life is limited to months and cure is not possible.	0.044	0.729	NO	
The interdisciplinary approach and proper referrals of palliative care is much more effective	0.189	0.132	NO	
Palliative services should be talked about prior to the terminal stage of the illness	0.079	0.529	NO	
The idea of palliative care is most appropriate to be brought up by no other than the attending physician of the patient	.286*	0.021	YES	positive weak
It is important that the patient who is dying be told of his/her prognosis	0.087	0.493	NO	
I have difficulty disclosing to the patient and his family that the patient has poor prognosis and is dying	-0.141	0.263	NO	
I am comfortable discussing with patients and their families about palliative care	0.186	0.139	NO	
I introduce and discuss palliative care with my terminally ill patients	0.199	0.111	NO	
I ask my terminally ill patients about their end of life care preferences	.256*	0.040	YES	positive weak
I address control of pain and other symptoms through medication, environmental adjustment and education	0.182	0.146	NO	
I provide psychosocial and emotional support for both patient and their families, throughout all the phases of care from diagnosis until bereavement	0.076	0.548	NO	
I integrate the spiritual aspects in the management of terminally-ill patients and their families	0.168	0.180	NO	
I manage my terminally ill patients using the palliative care approach	-0.018	0.888	NO	
I refer my terminally ill patients to a palliative care specialist	0.031	0.805	NO	

Table 11. Association of awareness of the Palliative and Hospice care services in the hospital to demographic variables and knowledge, attitudes and practices to end-of-life care (N=65).

Aware of a Palliative and Hospice Care services in the Hospital	Correlation Coefficient	Sig. (2-tailed)	Significantly correlated?	Strength of correlation
Gender	-0.113	0.371	NO	
Religion	0.167	0.184	NO	
Department	-0.222	0.076	NO	
Year Level	-0.114	0.367	NO	
Medical School Graduated From (No Abbreviation please)	0.077	0.543	NO	
With Previous Rotation in Hospice/ Palliative Care Unit	-0.095	0.451	NO	
Attended any lecture and/or workshop about end of life or hospice care	-0.063	0.617	NO	
Aware of a Hospice/Palliative Care services in the Hospital	0.022	0.862	NO	
I feel confident enough to discuss palliative care with patients and their families	0.052	0.678	NO	
I feel confident in discussing with other services in shifting to or referral to palliative care	0.144	0.253	NO	
I feel confident in breaking the bad news such as poor prognosis to a patient or family member	-0.026	0.838	NO	
I feel confident to conduct a family conference/ meeting to discuss end-of-life care preferences and decisions of the patient	0.191	0.128	NO	
I feel confident in discussing advanced directives such as do not resuscitate (DNR) orders	0.001	0.993	NO	
I feel confident enough to assess and manage the pain of my terminally-ill patients	-0.020	0.872	NO	
I feel confident in using adjuvant analgesics such as antidepressants, anticonvulsants	0.042	0.741	NO	
I feel knowledgeable enough to assess and manage psychosocial and spiritual concerns during the terminal phase for the patient	0.149	0.235	NO	
I feel knowledgeable enough to assess and manage agitation and terminal delirium	0.024	0.849	NO	
I feel knowledgeable enough to assess and manage psychosocial and spiritual concerns during the terminal phase for the patient	0.234	0.060	NO	
I feel confident in using opioid analgesics	-0.209	0.094	NO	
It would be beneficial for patients if palliative care referral were introduced in the early course of the patient's disease	-0.046	0.717	NO	
The psychosocial and spiritual needs of the family are better taken cared of when in coordination with the palliative service	0.143	0.254	NO	
I include palliative care in my discussion about treatment options when the patient's life is limited to months and cure is not possible.	.288*	0.020	YES	positive weak
The interdisciplinary approach and proper referrals of palliative care is much more effective	.323**	0.009	YES	positive weak
Palliative services should be talked about prior to the terminal stage of the illness	-0.020	0.873	NO	
The idea of palliative care is most appropriate to be brought up by no other than the attending physician of the patient	-0.139	0.270	NO	
It is important that the patient who is dying be told of his/her prognosis	0.223	0.074	NO	
I have difficulty disclosing to the patient and his family that the patient has poor prognosis and is dying	0.006	0.965	NO	
I am comfortable discussing with patients and their families about palliative care	0.040	0.752	NO	
I introduce and discuss palliative care with my terminally ill patients	.279*	0.025	YES	positive weak
I ask my terminally ill patients about their end of life care preferences	0.123	0.330	NO	
I address control of pain and other symptoms through medication, environmental adjustment and education	-0.003	0.984	NO	
I provide psychosocial and emotional support for both patient and their families, throughout all the phases of care from diagnosis until bereavement	0.132	0.296	NO	
I integrate the spiritual aspects in the management of terminally-ill patients and their families	0.147	0.241	NO	
I manage my terminally ill patients using the palliative care approach	0.238	0.057	NO	
I refer my terminally ill patients to a palliative care specialist	.439**	0.000	YES	positive moderate

to the data gathered, there is a relationship between palliative care discussion and treatment alternatives supplied when the patient's life is limited to months and cure is not possible, as shown by the correlation coefficient of 0.288. With a correlation coefficient of 0.323, another positive weak association was found between the effectiveness of the interdisciplinary approach and proper referrals of palliative care. Another weak positive link, with a correlation coefficient of 0.279, was seen in the discussion of palliative care with terminally ill patients. Finally, because the hospital has a palliative care service, a positive moderate association was discovered on the referral of terminally ill patients to a palliative care specialist (Table 11).

Discussion

This is the first local study to quantify the resident physicians in training at Ospital ng Makati's knowledge, attitude, and practices in end-of-life care. Although Ospital ng Makati is the city's only government training facility, this is where Palliative and Hospice Medicine rose to prominence. The lack of any type of undergraduate or in-service training on palliative care has a severe impact on knowledge of the field. Furthermore, this is consistent with the findings of most previous research in which training was found to have a favorable significant relationship with strong palliative care knowledge.[9] Training has been shown to boost palliative care knowledge, especially when the substance and quality are appropriate, but it can also have little or negative effects if the content and quality are inadequate.[10]

Pinto, et al. did study in this area. This is in contrast to the notion that palliative care is only for those who are terminally ill and dying, as reported in this study, which found that 87.3 percent of respondents believed that early palliative care integration could improve patients' quality of life, which is higher than the 72.5 percent reported for Chinese physicians. This is in contrast to the concept that palliative care is only for those who are terminally ill and dying, as reported in this study, which found that most respondents only include palliative care important especially to the pediatric population. The Palliative and Hospice Medicine program's interdisciplinary approach, together with the department of pediatrics' collaborative efforts through their regular multidisciplinary conference, has improved the popular understanding of palliative medicine among the resident doctors in the Ospital ng Makati.

More than half of the participants in a comparable survey conducted by Gedamu stated they were uncomfortable talking about death and dying, grief and loss. The underlying cause for this hesitancy to address death with patients could be related to culture, tradition, or religious factors.[11] This was also found to be a significant association with the respondents' answers in terms of their uncertainty and lack of confidence in handling palliative cases in this study. It's worth mentioning that there was a substantial link between the respondents' faith (mostly Roman Catholic) and their apprehension about discussing spiritual problems and adopting palliative care in terminally ill patients. The majority of the respondents were first year residents who are relatively assigned to the post at the ward, where most of the inter-department referrals are practiced.

The findings demonstrated that knowledge, attitudes, and practices related to palliative care were identified through this cross-sectional report. Interestingly, even though the majority of the participants had no prior exposure or rotation to palliative and hospice care and demonstrated a lack of understanding of the notion of palliative and hospice medicine, they had an appropriate understanding of palliative medicine in general.

Through its efforts of gradual introduction, subsequent immersion, and desensitization of these concepts once fully embraced by the departments, the hospital's existing Palliative and Hospice Care Program will eventually lead to an incredible improvement in the caring for dying and terminally ill patients and their relatives.

Conclusion

One of the leading proponents of making palliative care a more integral part of patients' holistic and complete lifelong care is the World Health Organization (WHO). They issued this resolution highlighting the integration of palliative care into each country's health system to enable universal access and to provide mandatory palliative care training, workshops, and knowledge for health professionals. Of important note, Universal Health Care requires that all individuals and groups will be able to obtain the health care they deserve without worry of financial hardship. It is a complete suite of critical, high-quality health services that extends the lifespan from conception to death, including health promotion, prevention, treatment, rehabilitation, and palliative care.

Thus, palliative care though relatively new, must be an essential approach in the health care delivery. Through the years, every physician will be well versed and knowledgeable enough to handle patients with chronic and debilitating life illness, and eventually yield positive results. This must be implemented efficiently in patients with life-limiting, debilitating and life-threatening illnesses, providing early guidance for symptom control with the goal of improving quality of life, care satisfaction, and minimizing hospital costs. It can be accomplished through advanced care planning and individual care goals that take into account personal values and preferences of the patient and it's family.[12]

Recommendations

Palliative care integration in all settings, including ambulatory care medical clinics, in-patient, critical care units, the emergency room, and the community is found to be vital. It is critical to ensure that patients with serious life-limiting illnesses have access to high-quality care by integrating palliative care from the first consultation and, as necessary, by establishing more advocacy groups that promote a comprehensive understanding of palliative concepts both among medical professionals and laymen alike.

Maintain inter-departmental interdisciplinary conferences as excellent intellectual opportunities for enhancing the quality holistic approach to palliative patients and their families.

Finally, to undertake a follow-up cross-sectional analysis to examine the success of the palliative care at the Ospital ng Makati, and also future collaboration with local governmental agencies to develop community palliative medicine programs in order to foster compassionate communities.

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