

## Nurses' Perceived Competencies toward Palliative and End of Life Care

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### Abstract:

**Background:** palliative care addresses serious medical conditions including genetic disorders, cancer, prematurity, neurologic disorders, heart and lung conditions and others. Nurses play a crucial role in caring for Palliative and End-of-Life patients and their families as part of the care team Therefore; nurses need a set of various competencies to provide high-quality palliative care. **Aim:** To assess nurses perceived competencies toward palliative and end of life care. **Design:** Descriptive research design was used for conducting the study. **Sample:** A convenience sample was used to choose 104 nurses **setting:** The study was conducted in out-patient clinic Beni-Suef University Hospital, Egypt. **Tools:** 1<sup>st</sup> tool for data collection a self-administrative questionnaire It consisted of three parts: 1<sup>ST</sup> part concerning with Socio demographic data for nurses and including: (1) personal characteristics (2) professional characteristics 2<sup>nd</sup> part Participants' knowledge questionnaire. 3<sup>rd</sup> part Attitude toward Palliative and End of Life Care 2<sup>nd</sup> tool Observational checklist was conducted to assess nurses' practice regarding Palliative and End of Life Care 3<sup>rd</sup> tool: questionnaire related to Nurses' perceived competencies. **Results:** The study result revealed that, 70.7% of nurses had satisfactory knowledge. 65.6% of nurses' total attitude toward palliative care had positive attitude 45% of nurses' total practice toward palliative and End of Life Care was un-satisfactory and 44.3% of nurses had low total perceived competencies. **Conclusion:** There is highly statistically significant relation between nurses' total perceived competencies, total knowledge, total practice and total attitude. **Recommendations:** Developing palliative care and competency training evidence-based program which should available in all hospital to be followed by all nurses.

**Key words:** Nurses, Palliative Care, End of Life Care, Perceived Competencies

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### I. Introduction:

World Health Organization has defined palliative care as an approach that improves the life of patients and their families who are facing problems associated with life-threatening illness. Palliative care also prevents and relieves suffering of any kind of problem as physical, psychological, social, or spiritual experienced by adults and children living with life-limiting health problems through the early identification, correct assessment, treatment of pain and other problems.. PC promotes dignity, quality of life and adjustment to progressive illnesses using best available evidence, decreased medical costs, prolonged survival and increased satisfaction with health care. (WHO 2018).

Palliative care is a crucial part of integrated people-centered health services (IPCHS) Thus, weather the cause of suffering is cancer or major organ failure, drug-resistant tuberculosis or severe burns, end-stage chronic illness or acute trauma, extreme birth prematurity or extreme frailty of old age palliative care may be needed and integrated at all levels of care. The 2030 Agenda slogan 'Leave no-one behind' means that governments trying to achieve Sustainable Development Goal must develop palliative care policies to cover the 40 million persons a total that includes at least 20 million caregiver who require palliative care support globally. A good palliative care system is one that is integrated into primary health care, community and home-based care but also into informal care as care provided by family and community volunteers. (Radbruch et al., 2020).

Today the need for palliative care is growing as the number of elderly people and consequently the number of seriously ill people grows. Worldwide 58 million people die annually with around 45 million of these in developing countries, and 60% of these will be suffering from advanced illness and in need of palliative care. In many poorer European countries this is still a goal rather than reality .However, in the UK for example, since

becoming established as a specialty in 1987, palliative care has become very well established with networks of day centers and hospices serving palliative care needs. In 2008 the Hospice and Palliative Care Directory listed 223 inpatient units, 304 hospital support teams, 283 day care services and 316 community services. (Callaway *et al.*, 2018).

Chronic illness involves many disease processes often requiring the management of a team of health care providers that for many includes palliative care professionals. The 40 million recipients receiving palliative care have complex needs including symptom management. The continuous cycle of treatment and symptom management exhausts patients and families, leaving them emotionally and physically drained. The need for palliative care has never been greater and is increasing at a rapid pace due to the world's ageing population and increases in cancer and other non-communicable diseases. Despite this need, palliative care is underdeveloped in most of the world, and outside North America, Europe, and Australia, access to quality palliative care is very rare. Palliative care is expanding in the developed world in spite of myths and misunderstanding about its nature and purpose, but is only beginning to be available in the developing world where it is needed most (WHO, 2018).

End-of-life is the term used to describe the time period from receipt of a medical diagnosis determined by healthcare providers to be non-curative to the gradual or eventual demise or death of the diagnosed patient. End-of-life care "Refers generally to the processes of addressing the medical, social, emotional and spiritual needs of people who are nearing the end-of-life. It may include a range of medical and social services, including disease specific interventions, as well as palliative and hospice care for those with advanced serious conditions who are near the end-of-life". End-of-life care has been provided throughout time in various settings and by different groups of people. Religious organizations were the first to care for dying individuals by providing a compassionate and spiritual haven for the terminally ill in 1899. Palliative care began with a focus on the care of the dying. (Saunders *et al.*, 2019).

Nursing perceived competency is a holistic and integrated concept which is constructed from complex activities and defined as a performance competency, which meets the standards expected from potential competencies. There are seven elements categorized nursing perceived competency subsisting within three major components that contain the ability to understand people, applying knowledge and building intrapersonal relationships, the ability to provide people-centered care, providing nursing care, practicing ethically, and collaborating with other professionals and the ability to improve nursing quality, expanding their professional capacity and ensuring the delivery of high-quality nursing. Palliative care nursing involves the assessment, diagnosis and treatment of human responses to actual or potentially life-limiting illness and necessitates a dynamic, caring relationship with the patient and family to reduce suffering. (Mikan *et al.*, 2016).

palliative care nurse play an important role in providing relief from pain and other distressing symptoms, Affirms life and regards dying as a normal process, integrating the psychological and spiritual aspects of patient care, Offering a support to help patients live as actively as possible until death and to help the family cope during the patients' illness and in their own deprivation, Using a team approach to address the needs of patients and their families, including deprivation counselling, Enhancing quality of life, May also positively influence the course of illness, Applicable early in the course of illness in alliance with other therapies that are intended to prolong life as chemotherapy or radiation therapy and includes those investigations needed to better understand and manage distressing clinical complications. Palliative care nurses work in varied settings including patients' homes, residential hospices, clinics, long-term and skilled care facilities and acute in-patient facilities. (WHO, 2018)

### **Significance of study:**

Palliative care is the umbrella term that used to describe a philosophy of care that attempts to reduce a patients' suffering and improve their quality of life during a chronic disease from the time of their life threatening diagnosis. End-of-life care falls under the palliative care philosophy with the same goals and focuses on patients who are near death. End-of-life care provides the same type of care but to patients closer to death. Knowledge consists of facts, information, and skills learned through education, experience or investigation. Palliative care should intend neither to hasten nor postpone death and regard dying as a normal process. PC should integrate the psychological needs of both the patient and family and help the patient live as actively as possible until death. Competency is an ongoing process in nursing and it is part of continuing education and certification programs and is a requirement for licensure testing. (Ferrell *et al.*, 2020)

Nursing perceived competencies are generally considered to represent a dynamic combination of knowledge basic or specialized, skills (assessment, communication, critical thinking, time management, customer services, technical skills and teaching) and abilities (caring, character and Professional presentation) which contribute to understanding According to a WHO survey approximately 80% of patients requiring palliative care live in low- and middle-income countries; 96% are adults, the remainder children. Although

childhood cancers are not among the six leading causes for palliative care, 98% of all children needing palliative and End-of-Life Care. (Zalenski et al., 2017).

The highest rates for children needing palliative care for cancer are in eastern Mediterranean countries (WHO-EMRO region). While relative overall cancer survival rates are greater than 60%, in less developed countries it is only 30% - 50%. The International Agency for Research on Cancer reported that the percentage of patients dying of cancer in 2012 varied between developed countries (40.4%) and developing countries (66.4%). More than 60% of world's total new annual cases occur in Africa, Asia and Central and South America. These regions account for 70% of the world's cancer deaths. Statistics of South Egypt Cancer Institute revealed that numbers of patients admitted to South Egypt Cancer Institute were 3282 patients and the National Cancer Institute of Cairo has cared for new patients which comprised 70-80% of all cancer patients in Egypt. A total of 70% of all new cancer patients were diagnosed with an advanced stage of the disease. (WHO 2020).

#### **Aim of the study:**

The aim of this study is to assess nurses' perceived competencies toward palliative and end of life care through the following objective:-

1. Assessing nurses' Knowledge, Attitude and practice toward palliative and end of life care.
2. Assessing nurses' perceived competencies toward palliative and end of life care .

#### **Research question**

1. Are nurses' having enough Knowledge, Attitude and practice toward palliative and end of life care?
2. Are nurses' have perceived competencies toward palliative and end of life care?

#### **Subject and Methods**

The subject and methods for this study will portray under the four main items as follows:

- I- Technical item.
- II- Operational item.
- III- Administrative item.
- IV- Statistical item.

#### **I- Technical Item:**

The technical item includes research design, setting, subject and tools for data collection.

#### **Research design:**

Descriptive research design was used for conducting the study.

#### **Setting:**

The study was conducted in out-patient clinic that represent (4) clinics from total number (13) clinics as pain out-patient clinic, Oncology Out-Patient clinic, Renal out-patient clinic and palliative care out-patient clinic in Beni-suef University Hospital. The University Hospital is located in the North Obour area at the university's crossroads (Beni -Sueif University) and includes the Outpatient clinics in each of the following floors : **First floor include** Oncology clinic and pain clinic, **Second floor include** Renal clinic and Brain and nerve clinic and finally third floor include Rheumatoid clinic and palliative care clinic.

#### **Sampling:**

##### **➤ Type of the sample:**

A convenience sample was used to choose 104 nurses who work in palliative and end of life care in Out-Patient clinic that contain all nurses invited to participate in the study.

**Tools for data collection: 1<sup>st</sup> tool** for data collection a self-administrative questionnaire was developed by researcher **It consisted of three parts:**

#### **1<sup>ST</sup> part**

Concerning with Socio demographic data for nurses. It was developed based on four categories including: **(1) personal characteristics** such as gender, age, marital status and education; Income, residence **(2) professional characteristics** such as previous education about palliative care, Nursing qualification, years of nursing experience , department of work, duration of experience about palliative care and training toward Palliative care and Period of training course.

## **2<sup>nd</sup> part**

Participants' knowledge questionnaire was assessed about palliative care and this Questionnaire consists of 33 questions categorized in three subscales including : (1) philosophy and principles of palliative care , (2) Concept about palliative care (4) management of pain and symptoms and (3) psychosocial and spiritual care it was designed by researcher in Arabic form to avoid misunderstanding.

### **Scoring system for knowledge**

- The answers were formulated as: Correct and Incorrect answer
- One point was awarded for each correct answer;
- In-correct answer took zero.
- Mean and standard deviation was calculated and then converted into percent score.
- The total scores were 33 scores.
- The knowledge scores were classified into satisfactory and unsatisfactory knowledge.
- Satisfactory if percent score was 60% or more (20: 33 scores)
- Unsatisfactory if the percent score was less than 60% (zero : <20 scores)

## **3<sup>rd</sup> part**

Attitude was measured through the original Frommelt Attitudes toward Care of the Dying (FATCOD questionnaire) it developed by Frommelt, 1991 which consists of 34 items using a three-point Likert scale to indicate respondents' attitudes toward caring for Palliative and End of Life Care patients.

### **Scoring system for attitude**

- The instrument consists of an equal number of positively and negatively worded statements with response options of agree, uncertain, and disagree.
- Agree answer scored (3)
- Uncertain answer scored (2)
- Disagree answer scored (1).
- Mean and standard deviation was calculated and then converted into percent score.
- The total scores were 102 scores.
- Positive if percent score was 60% or more (62: 102 scores)
- Negative if the percent score was less than 60% (zero : <62 scores).

## **2<sup>nd</sup> tool**

Observational checklist was conducted after reviewing the relevant literature to assess nurses' practice regarding Palliative and End of Life Care. The checklist had 26 practical questions related to PC practice as Listening with empathy when providing care.

### **Scoring system for practice**

- one grade for done and zero for not done
- Mean and standard deviation was calculated and then converted into percent score.
- The total scores were 26 scores.
- Satisfactory if percent score was 60% or more (16: 26 scores)
- Unsatisfactory if the percent score was less than 60% (zero : <16 scores)

## **3<sup>rd</sup> tool:**

Thirty-seven items questionnaire under five explicit domains related to perceived competencies was developed and administered amongst this group. An existing questionnaire by (**Rafeek et al., 2004**) was adapted and reformatted according to the specification of the rationale and learning outcomes .The original questionnaire included twenty-eight items that covered areas related to diagnostic, patient management, clinical skills, team working and practice management. The researcher made some modification of the items in competencies from this study because the original items were tailored to the college and the present study on nurses as they hadn't enough time because all time on the shifts provide care to the patients who are on the end of life.

**Part A** included twenty-one items that covered areas related to communication and relationship domain and have 4 items, Communication Skills domain and have 5 items, Managing Change domain and have 6 items, Professional Development and Lifelong Learning domain and also have 6 items

**Part B** Nursing core competencies included in the study and had 16 items .These skills were: general professional technical skills, complex professional technical skills, general clinical skills, specific clinical skills

as ability to understand people and situations ,Ability to provide people-centered care, Ability to improve nursing quality, Ability to understand needs, Ability to support decision Making critical thinking/problem solving, and Ability to expand professional capacity, interpersonal communication, professional orientation, case management, ability to supervise, resource management, team building/team work.

#### **Scoring system for Perceived Competencies**

- The response format on the a three-point Likert scale ranges from (1= Not At All Competent to 3=Very Competent )
  - Very competent answer scored (3),
  - Competent answer scored (2)
  - Not at all competent answer scored (1).
  - Mean and standard deviation was calculated and then converted into percent score.
  - The total scores were 111 scores
  - High competent if percent score was 60% or more (67: 111 scores)
  - Low competent if the percent score was less than 60% (zero : <67 scores)

#### **Validity:**

The questionnaire was revised and validated by panel of 5 experts in community health nursing to assess the content validity they agreed and no comments.

#### **Reliability:**

Internal consistency among the questionnaire items was 0.93 Cronbach's alpha ( $\alpha$ ) and it was considered within the acceptable range.

#### **Ethical considerations:**

An official permission to conduct the proposed study was obtained from the Scientific Research Ethics Committee. Participation in the study was voluntary and subjects were given complete full information about the study and their role before signing the informed consent and that they had the right to refuse to participate. The ethical considerations included explaining the purpose and nature of the study, stating the possibility to withdraw at any time, confidentiality of the information where it was not be accessed by any other party without taking permission of the participants. Ethics, values, culture and beliefs was respected.

## **II- Operational Item:**

#### **Preparatory phase:**

It was included reviewing of past, current, national and international related literature and theoretical knowledge of various aspects of the study using books, articles, internet, periodicals and magazines to develop tools for data collection.

#### **Pilot study:**

A pilot study was conducted with ten nurses that included in the study in out-patient clinic as pain out-patient clinic, Oncology Out-Patient clinic, Renal out-patient clinic and palliative care out-patient clinic in Beni-suef University Hospital to determine the clarity of questions, effectiveness of instructions, completeness of response sets, time required to complete the questionnaire and success of data collection technique. Pilot subjects were asked to comment on the applicability and appropriateness (validity) of the questionnaire. All questions were answered no clarity of questions was required. Participated nurses in pilot study took half an hour to complete the questionnaire.

#### **Field work:**

An approval to carry out this study was obtained from Dean of Faculty of Nursing Helwan University and official permission was obtained from the director of Beni-Suef University Hospital for conducting the study. Interviewing the nurses were carried out in a specialized room. The interviewing questionnaire sheet was completed by the investigator from each nurse. Data was collected 2 days/week within 6 months through the academic year 2019-2020 till the needed sample was completed.

## **III- Administrative Item:**

An approval to carry out this study was obtained from Dean of Faculty of Nursing, Helwan University and official permission was obtained from the director of Beni-Suef University Hospital for conducting the study.

**IV-Statistical Item:**

Data entry and statistical analysis were done using Statistical Package of Social Science (SPSS). Quality control was at the stage of coding and data entry. Data were presented using descriptive statistics in the form of frequencies and percentage for qualitative variables; mean and standard deviation (SD) for quantitative variable. Qualitative categorical variables were compared Chi-square ( $X^2$ ) test; the hypothesis that the row and column variables are independent, without indicating strength or direction of the relationship, Analysis of variance (ANOVA) test. Statistical significance was considered at (P-value <0.05

**II. Results**

**Part I Socio demographic data for nurses**

**Table (1) Percentage Distribution of Nurses' Socio-demographic Characteristics (n=104)**

	No	%
<b>Age</b>		
o 20-30 years	92	88.5
o 31-40 years	12	11.5
o 41-50 years	0	0.0
o >50 years	0	0.0
<b>Mean ± SD</b>	26.8 ± 2.87	
<b>Marital status</b>		
o Single	45	43.3
o Married	58	55.7
o Widowed	0	0.0
o Divorced	1	0.9
<b>Income</b>		
o Insufficient	81	77.9
o Sufficient	20	19.3
o Sufficient and Saved	3	2.8

Table 1: shows that 88.5% of nurses had 20: 30 years with mean ± SD = 26.8 ± 2. 87 and 55.7% of nurses were married , 77.9% of nurses' income was insufficient.

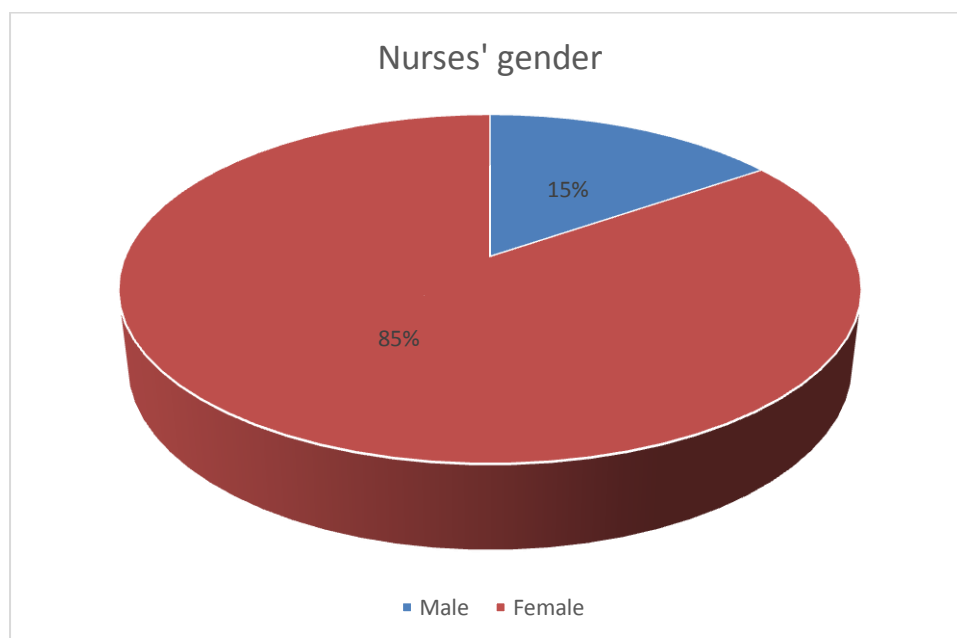


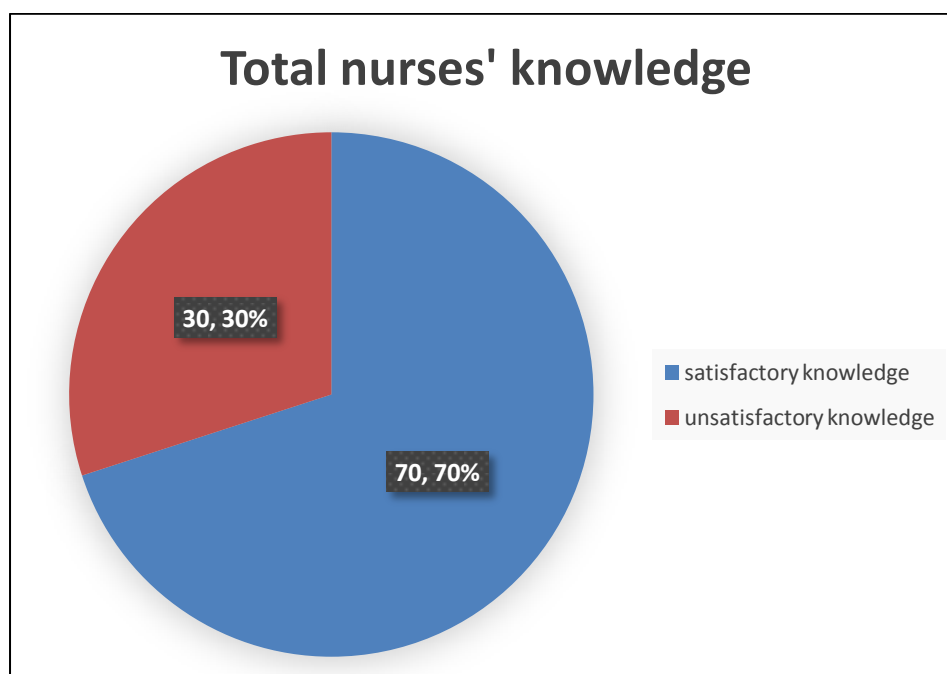
Figure (1) Percentage distribution of nurses according to their gender (n=104)

Figure 1 shows that 85% of nurses were female while 15% of them were male.

**Table (2)** Percentage Distribution of Nurses' Professional Characteristics (n=104)

	No	%
<b>Nursing qualification</b>		
○ Diploma	0	0.0
○ Bachelor	104	100.0
○ Master	0	0.0
<b>Department of work</b>		
○ Pain out-patient clinic	38	36.5
○ Oncology Out-Patient clinic	32	30.7
○ Palliative care out-patient clinic	24	23.1
○ Renal out-patient clinic	10	9.7
<b>Experience of palliative care</b>		
○ <5 years	74	71.2
○ 5>10 years	18	17.4
○ 11≥15 years	12	11.4
○ ≥15 years	0	0.0
<b>Training toward Palliative care</b>		
○ Yes	47	45.2
○ No	57	54.8
<b>Period of training course(n=47)</b>		
○ <1 week	20	42.6
○ >1 week	27	57.4

**Table 2** shows that 100% of nurses had bachelor degree in nursing sciences. 36.5% of nurses were worked at pain out-patient clinic, (71.2%) of nurses had experiences less than 5 years. 54.8% of nurses hadn't training toward Palliative care. 42.6% of nurses had training period for one week.



**Figure (2)** Percentage Distribution of Nurses' Total Knowledge Regarding Palliative care (n=104)

**Figure 2:** shows that 70.7% of nurses had satisfactory knowledge. While, 30.3% of nurses had unsatisfactory knowledge.

Nurses' Total Attitude toward Palliative and End of Life

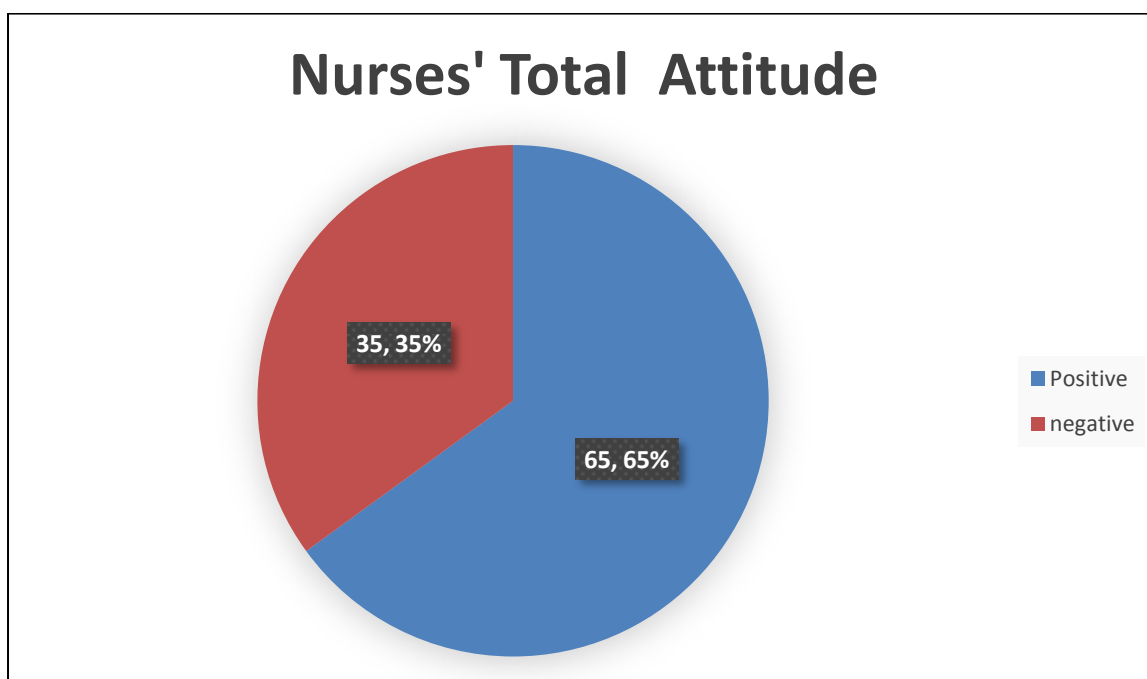
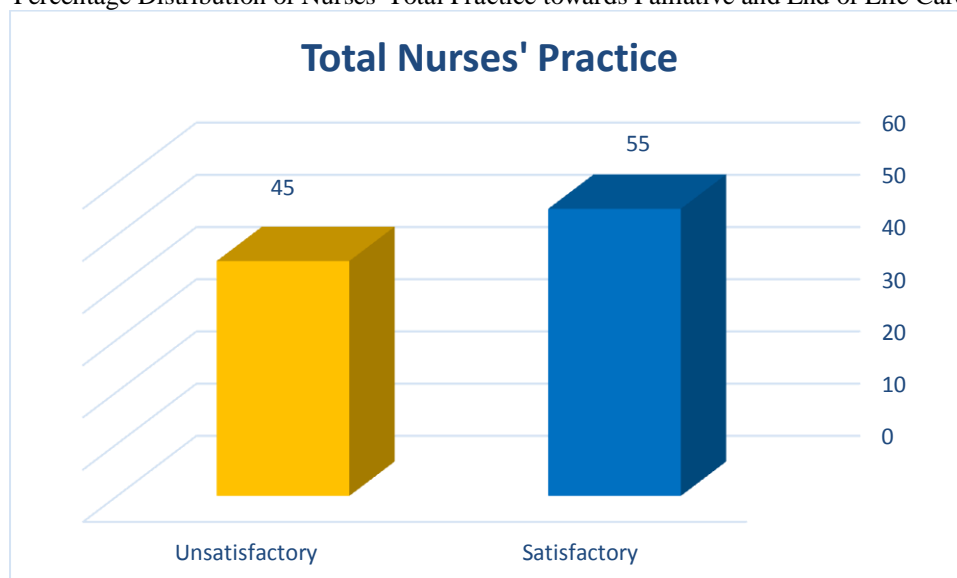


Figure (3) Percentage Distribution of Nurses' Total Attitude toward Palliative and End of Life (n=104)

Figure 3 reveals that 65.6% of nurses' total attitude toward palliative care had positive attitude. While, 35.4% of nurses' total attitude toward palliative care had negative attitude.

Part IV nurses' practice observational checklist

Percentage Distribution of Nurses' Total Practice towards Palliative and End of Life Care



Percentage Distribution of Nurses' Total Practice towards Palliative and End of Life Care (n=104)

Figure 4 reveals that 55% of nurses' total practice toward palliative care was satisfactory. While, 45% of nurses' total practice toward palliative and End of Life Care was unsatisfactory



**Part V Nurses' perceived competencies regarding palliative and End of Life Care**

Percentage Distribution of Nurses' Total Perceived Competences (n=104)

Total nurses Perceived competencies		(n=104)
Total communication and relationship (n=4)	Low	40 (38.4%)
	High	64 (61.6%)
	Mean ± SD	2.48 ± 0.22
Total communication skills (n=5)	Low	35 (33.7%)
	High	69 (66.3%)
	Mean ± SD	3.65 ± 0.64
Total management of change (n=6)	Low	66 (63.5%)
	High	38 (36.5%)
	Mean ± SD	3.91 ± 0.37
Total professional development and lifelong learning (n=6)	Low	45 (43.3%)
	High	59 (56.7%)
	Mean ± SD	3.84 ± 0.39
Total nurses core competencies (n=16)	Low	60 (57.7%)
	High	44 (42.3%)
	Mean ± SD	10.5 ± 1.14
Total nurses' perceived competencies (37)	Low	46 (44.3%)
	High	58 (55.7%)
	Mean ± SD	27.43 ± 3.86.99

The table clarifies that 55.7% of nurses had high total perceived competencies. While, 44.3% of nurses had low total perceived competencies.

The Relation between Nurses' Total Perceived Competencies, Total Knowledge, Total Practice and Total Attitude

Item	Nurses Total Knowledge		Nurses total practice		Nurses total attitude	
	R	P-value	R	P-value	R	P-value
Total leader skills and behavior	0.466	0.000**	0.566	0.000**	0.549	0.000**
Total communication skills	0.688	0.000**	0.698	0.000**	0.635	0.000**
Total manage change	0.532	0.000**	0.597	0.000**	0.659	0.000**
Total professional development and lifelong learning	0.675	0.000**	0.652	0.000**	0.734	0.000**
Total nurses competencies toward palliative care	0.753	0.000**	0.677	0.000**	0.698	0.000**

(\*) statistically significant & (\*\*) high statistically significant P ≤ 0.001.

The table shows that there is highly statistically significant between nurses' total perceived competencies, total knowledge, total practice and total attitude.

**III. Discussion**

The dimension of palliative care has dilated to incorporate patients who may live for many years with end stage cancer or organ failure. Some chronically ill patients die from the adversely effect of treatment. One of the vital factors influencing a thriving delivery of palliative health care is that the health care professionals' knowledge, attitudes, beliefs, and experiences, that verify not solely their procedure however conjointly their behavior throughout analysis and treatment of patients Nurses are the most valuable palliative care team members who address the physical, functional, social, and spiritual dimensions of care (Cahill et al., 2020).

Increasing access to palliative care is particularly important in response to the rising prevalence of chronic non-communicable diseases in low- and middle-income countries (LMICs) and persistent morbidity and mortality due to infectious diseases such as HIV/AIDS and COVID-19. Nurses must become knowledgeable about palliative care and developed continuing education programmer which support palliative care and hospice nursing competencies)Therefore, the aim of current study was to assess nurses' perceived competencies toward palliative and end of life care. (Crowe et al., 2020)

**Part I Socio demographic data for nurses**

The present study shows that majority of nurses had 20: 30 years with Mean ± SD 26.8 ± 2.87 age .This is in the same line with (Vincent et al., 2017) who conducted a study in Montfermeil, France about "palliative care should be extended to the intensive care unit cancer patients" and reported that (74%) of respondents were within the age 20 - 30 years with a Mean ± SD37.9 ± 8.9 age.

Regarding gender and marital status of studied subjects the present study revealed that majority of nurses were female. Also more than half of nurses were married. This finding was in the same line with **(Huang et al, 2020)** who conducted a study in Kaohsiung, Taiwan about "Associations among knowledge, attitudes, and practices toward palliative care consultation service in healthcare staffs" and found that (82.9%) were female and (59.0%) were married. From the researcher point of view these results might be due to school of nursing science on time were receive female more than male student that's is might be fact that females are patient and merciful than male.

In relation to residence and monthly salary the current results showed that about nearly two thirds of nurses were live in urban areas, Also more than three quarters of nurses' income were insufficient this is in the same line with **(Anteneh S et al, 2014)** who conducted a study in Gondar, Ethiopia and reported that (37.5%) of the respondent had insufficient income less than 2000 ETB monthly and (38.1%) of the participant were from Urban.

Regarding years of experience the results of the present study showed that nearly three quarters of nurses had experiences less than 5 years, These results similar with **(Thai et al., 2016)** who conducted a broadcast study in Tunisia entitled as "The Nurses' Knowledge and Attitudes towards the Palliative Care" and reported that the majority of nurses (56.2%) had less than 5 years of experience.

Regarding level of education the present study clarified that all of nurses had bachelor degree in nursing sciences this study matches with **(Huang et al, 2020)** and reported that (79.5%) participants had a bachelor's degree. From the researcher point of view this might due to education must include development of the skills and abilities to continue to learn through life.

Regarding department of work the present study showed that more than one third of nurses were worked at pain out-patient clinic, These study coming in contact with **(Kassa et al., 2014)** who administered a study in Addis Ababa, Ethiopia and about "Assessment of knowledge, attitude and practice and associated factors towards palliative care among nurses working in selected hospitals" and revealed that (27,6 %) of respondent had working in Pain Out-Patient clinic.

Regarding training toward Palliative care and training period the current study revealed that more than half of nurses hadn't training toward Palliative care and more than two fifth of nurses had training period for one week. These study matches with **(Ayed,2015)** who conducted a published study in Egypt about "The Nurses' Knowledge and Attitudes toward the Palliative Care and practice" and reported that (59.4%) obtaining training toward palliative care. And (57.9%) had training period for 1 week. From the researcher point of view this might due to Palliative care clinic founded recently in the hospital.

## **Part II Nurses' Knowledge regarding palliative care**

Regarding Total nurses' knowledge the present study shows that more than two thirds of nurses had satisfactory knowledge. While, nearly one third of nurses had unsatisfactory knowledge this in the same line with **(Morsy W.et al ,2014)** who conducted the study in Harari Regional State of Ethiopia about "Palliative care of nurses towards Knowledge, Attitude and Practice in Harari National developing countries Regional of State, Eastern Ethiopia. And revealed that (56%) had good knowledge about palliative care.

## **Part III nurses' Attitude toward palliative care**

Regarding nurses' total attitude toward palliative care the present study reveals that nearly two thirds of nurses' total attitude toward palliative care had positive attitude. This finding is in line with **Kass et al 2014** who reported that (76%) and other studies done in Iran Harari Regional state reported that (88.3%) of nurses' total attitude toward palliative care had positive attitude and Egypt **(Malloy et al., 2018)** who conducted a study in Washington DC, USA about "Providing Palliative Care to Patients with Cancer: Addressing the Needs in Kenya" and reported that half of the studied nurses have a fair attitude toward caring for dying patients, about one third of them have positive attitude.

## **Part IV nurses' practice observational checklist**

As regarding total nurses' practice towards palliative care. The present study revealed that more than half of nurses' total practice toward palliative care was satisfactory. While, more than two fifth of nurses' total practice toward palliative care was unsatisfactory. This similar with **(Kassam et al., 2015)** who conducted a study done in Toronto, Canada about "Differences in end-of-life communication for children with advanced cancer who were referred to a palliative care team" and reported that majority of respondents (76.2%) had good practice.

## **Part V Nurses' perceived competencies regarding palliative care**

Regarding total nurses' perceived competencies the present study clarifies that more than half of nurses had low competencies regarding palliative care. While, more than two quarters of nurses had high competencies regarding palliative care. The relation between nurses' total perceived competencies, total knowledge, total practice and total attitude. The present study shows that there is highly statistically significant between nurses' total perceived competencies, total knowledge, total practice and total attitude  $P \leq 0.001$ . This similar with

((**Watatani et al., 2013**) who conducted a study in Kyoto, Japan about “Global competencies of regional stem cell research: bibliometrics for investigating and forecasting research trends” and reported that nursing competencies ,knowledge was positively associated with attitude and practice ( $P < 0.01$ ).

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#### **IV. Conclusion**

On the light of results of the current Study and answers of the research questions, it could be concluded that: there is highly statistically significant between nurses' total knowledge and their total practice regarding Palliative and End of Life Care. Also, there is highly statistically significant between nurses' total practice and their total attitude. Moreover, there is a statistically significant between nurses' total knowledge and their demographic characteristics. There is a statistically significant between nurses' total practice and their demographic characteristics. And there is a statistically significant between nurses' total attitude and their demographic characteristics except income.

#### **V. Recommendations**

“On the light of the current study findings the following recommendations are suggested:

- Updating knowledge and practice of nurses through carrying out continuing educational programs about palliative care and collaboration with other organizations and institutions..
- Developing palliative care evidence-based program which should available in all hospital to be followed by all nurses.
- Guidance to assist nurses who are involved in palliative care should be developed and provided accordingly.
- Train nurses in a wide range of facilities and settings provide educational support and help maintain stable nursing workforce.

#### **VI. Summary**

Palliative care nursing requires a various range of knowledge, attitudes and skills to provide nursing care for people at the end-of-life (EOL). It involves supporting patients' physical, emotional needs and offers support for family and loved ones (WHO) identified three main fundamentals on the provision of palliative care should be based. These are: the development of national policy to advocate for the provision of palliative care as part of the essential health service system by the government, pain control that requires training and awareness of health professionals, and support to change regulations to make effective pain relief available and finally, training for health workers and public education Perceived self-competence has been used in the palliative care setting and refers to nurses' assessment of their level of competence to provide quality care to patients and family approaching EOL (**WHO, 2014**).

**The present study aims** to assess nurses' perceived competencies toward palliative and end of life care through the following objectives:

- Assessing nurses' Knowledge, Attitude and practice toward palliative and end of life care.
- Assessing nurses perceived competencies toward palliative and end of life care.

#### **Research question**

- 1) Are nurses' having enough Knowledge, Attitude and practice toward palliative and end of life care?
- 2) Are nurses having perceived competencies toward palliative and end of life care?

#### **Methodology**

##### **Research design:**

Descriptive research design was used for conducting the study.

##### **Setting:**

The study was conducted in out-patient clinic in Beni-suef University Hospital, Egypt

**Sampling:**

➤ **Type of the sample:**

A convenience sample was used to choose 104 nurses who work in palliative and end of life care in Out-Patient clinic that contain all nurses invited to participate in the study.

**Tool for data collection:**

**Tool I: Structured interview questionnaire: it was developed by the researcher and it consisted of three parts:**

**1<sup>ST</sup> part**

Concerning with Socio-demographic data for nurses. Including personal characteristics and professional characteristics

**2<sup>nd</sup> part**

Participants' knowledge questionnaire was assessed about palliative care .This Questionnaire consists of 33 questions toward Palliative and End of Life Care.

**3<sup>rd</sup> part**

Nurses' attitude which consists of 34 items to indicate respondents' attitudes toward caring for Palliative and End of Life Care patients.

**2<sup>nd</sup> tool**

Observational checklist was conducted to assess nurses' practice regarding Palliative and End of Life Care. The checklist had 26 practical questions related to PC practice.

**3<sup>rd</sup> tool:**

The questionnaire consisted of a total thirty-seven item under five explicit domains related to perceived competencies was developed and administered amongst this group.

**Part A** included twenty-one items that covered areas related to Communication and Relationship, Communication Skills, Managing Change, Professional development and Lifelong learning.

**Part B** Nursing core competencies included in the study and had 16 items.

**Results:**

The important finding that was obtained from the study can be summarized as follow:

- Regarding to Nurses' Total Knowledge toward Palliative care and End of Life Care the study results show that 70.7% of nurses had satisfactory knowledge and 30.3% of nurses had unsatisfactory knowledge.
- Regarding to Nurses' Total Attitude toward Palliative and End of Life the study results delineate that 65.6% of nurses' total attitude toward palliative care had positive attitude and 35.4% of nurses' total attitude toward palliative care had negative attitude.
- Regarding to Nurses' Total Practice towards Palliative and End of Life Care the study results demonstrate that 55% of nurses' total practice toward palliative care was satisfactory and 45% of nurses' total practice toward palliative and End of Life Care was unsatisfactory.
- Regarding to Nurses' Total Perceived Competences towards Palliative and End of Life Care the study results indicate that 55.7% of nurses had high total perceived competencies and 44.3% of nurses had low total perceived competencies.
- Regarding the Relation between Nurses' Total Perceived Competencies, Total Knowledge, Total Practice and Total Attitude the study results show that there is highly statistically significant between nurses' total perceived competencies, total knowledge, total practice and total attitude. (\*\*) high statistically significant  $P \leq 0.001$ .

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