

# Competencies Perceived Based Program for Nurses' regarding 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 the effect of competencies perceived based program for nurses' regarding palliative and end of life care. Design: A quasi-experimental study design was used for conducting the study (pre/post-test). 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: One tool was used to collect the data a self- Interviewing questionnaire it consisted of five parts: part I concerning with Socio demographic data for nurses 'part II: Participants' knowledge questionnaire. part III: Attitude toward Palliative and End of Life Care part IV: Reported practice was conducted to assess nurses' practice regarding Palliative and End of Life Care part V: perceived competencies. Results: The study result revealed that, 27.9% of nurses had good total Knowledge scores before the program which improved to 100% of nurses had good total Knowledge scores after the program. 23.1% of nurses had negative total attitude scores before the program which improved to 100% of nurses had positive total attitude scores after the program, 21.2% of nurses had Unsatisfactory total practices scores before the program which improved to 100% of nurses had satisfactory total practice scores after the program, 12.5 % of nurses had Low total competency scores before the program which improved to 100% of nurses had had high total Competent scores after the program with p value= 0.000. Conclusion: No significant relation between demographic characteristics and total knowledge level, total reported practice, total attitude, total competency among the studied sample pre and post program implementation except income in total knowledge level and place of residence in total attitude level among studied sample. Recommendations: Continuity of adopting and application of competency-based program in different health care setting and collaboration with other organizations and institutions to improve knowledge and practice of nurses.

**Keywords:** Competencies, End of Life Care, Nurses, Palliative, Perceived, program.

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## 1. INTRODUCTION

Palliative care (PC) is a specialized medical care for people with serious illnesses. It focuses on providing patients with relief from the symptoms, pain and stress of serious illness whatever the diagnosis the goal is to improve life for both patients and the family. Also, it is provided by a team of doctor, nurses and other specialists who work together with a

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patient to provide an extra layer of support. (PC) is appropriate at any age and any stage in serious illness and can be provided along with curative treatment. Furthermore, Palliative care treats people suffering from serious illnesses such as cancer, cardiac disease, chronic obstructive pulmonary diseases, kidney failure, and many more. (PC) focuses on symptoms including shortness of breath, fatigue, constipation, nausea, loss of appetite, difficulty sleeping and depression. It also helps patient to gain the strength to carry on with daily life and improve his ability to tolerate medical treatments (**Rosa et al., 2023**).

Palliative care is required for a wide range of diseases. The majority of adults in need of palliative care have chronic diseases such as cardiovascular diseases (38.5%), cancer (34%), chronic respiratory diseases (10.3%), AIDS (5.7%) and diabetes (4.6%). The global need for palliative care will continue to grow as a result of the ageing of populations and the rising burden of non-communicable diseases and some communicable diseases. Each year an estimated 56.8 million people including 25.7 million in the last year of life are in need of palliative care worldwide, only about 14% of people who need palliative care currently receive. Adequate national policies, program, resources, and training on palliative care among health professionals are urgently needed in order to improve access. (**Hansen et al., 2023**).

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 (**Laabar et al., 2023**).

Competency is a continuing process in nursing, and it is a part of ongoing education, practices and certification programs and is a prerequisite for licensure testing. The code of ethics in nursing practice dictates nurses to be competent to provide the community with safe efficient care. Nursing perceived competency program are generally deliberated to signify a dynamic combination of knowledge (basic for specialized), skills (assessment, critical thinking, communication, time management, technical skills, teaching, and customer services) and abilities (caring, character and professional presentation) which donate to appreciative (**Alipanga and Kohrt, 2022**).

Competencies Perceived based program aim to ensure that palliative care service provision and education is meeting the Standards for the Provision of Quality Palliative Care Services .Thus the core competencies are underpinned by the standards for palliative care and by the following two principles: All patients have access to high-quality palliative care regardless of their care settings .National standards for education and practice are adapted for all palliative care providers to ensure provision of care. The competencies are expected to support ongoing improvement in knowledge, skills and attitudes among care providers and will provide guidance to organizations in designing staff development strategies. They can be used as performance indicators to assess the level of mastery which an individual has attained in a competency area (**Scott et al., 2023**).

Community health nurses have a unique opportunity not only help prepare the patient and family for the time of death, but also assist with the actual journey of how get to that final moment and play a distinctive role in advocating, promoting, providing excellent care to patients and families, 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 families, including deprivation counseling. And 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 investigations needed to better understand and manage distressing clinical complications .Education is the key to give nurses the skills and confidence need to do very important work and play an important role in (**Parikh et al., 2023**).

**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

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falls under the palliative care philosophy with the same goals and focuses on patients who are near death. Palliative care is an important mode of care with life threatening illnesses in that the goal is to prevent or relieve physical, psychological, social, emotional and spiritual suffering while improving the life for patients and families. Palliative care education increase staff knowledge improves nursing skills and enhance competency (**Parikh et al., 2023**).

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 (**Ersek and Ferrell, 2022**).

Recently in Egypt, 20 million of people require palliative care at the end of life every year, 78% of adults in need of palliative care live in low and middle-income countries, 25% of people who need end of life care are between the ages of 15-59, indicating that this care is not limited to adults over 60 as commonly misconceived. Cancer in the developing world is characterized by far more advanced stages at diagnosis, fewer allocated resources for prevention and treatment, and higher incidence than in countries with more developed health systems. In Egypt, it is already and become an important health problem not only in terms of rank order, but also in terms of incidence and mortality. The commonest sites were liver among men and breast among women. During the period 2013–2050, population of Egypt is expected to increase to approximately 160% from population size (**Perez-Cruz et al., 2023**).

### Aim of the study:

To assess the effect of competencies perceived based program for nurses' regarding palliative and end of life care **through the following objectives:**

- 1) Assessing nurses' Knowledge, Attitude and reported practice toward palliative and end of life care.
- 2) Designing and planning competencies perceived based program for nurses' regarding palliative and end of life care
- 3) Evaluating the effect of competencies perceived based program for nurses' regarding palliative and end of life care

**Research Hypothesis** After applying competencies perceived based program the nurses' Knowledge, Attitude and reported practice will be improved.

## 2. 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:

A quasi-experimental study design was used for conducting the study. (pre/post-test).

### 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- Suef University) and include 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

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care clinic. The outpatient clinic includes two room for the checkup, first room as reception for the patients and the other room for oxygen pressure. Every clinic includes (8) nurses two nurses working with doctor, two nurses recording data and the other providing care to patients. The working in this clinic is three days per week Saturday, Monday and Wednesday from 9 am until 2 pm.

### **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:**

**One tool was used to collect the data:** Structural interviewing questionnaire sheet was developed after reviewing of national and international related literature. It was consisted of **five parts:**

#### **Part I:**

Concerning with Socio demographic data for nurses 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.

#### **Part II**

Participants' knowledge questionnaire was assessed about palliative care 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

- **33 closed end questions**
  - Incorrect = zero point.
  - Correct = one point.
- **The total knowledge scores ranged from (0-33).**
  - Good knowledge (< 75%).
  - Average knowledge (from 60% - 75%).
  - Poor knowledge (> 60%).

#### **Part III**

Attitude was measured through the original Frommelt Attitudes toward Care of the Dying (FATCOD questionnaire) it modified 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.

- **34 close ended questions for attitude.**
  - disagree answer = one point.
  - Uncertain answer = two point.

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- agree answer = three point.
- Total score = 102 point.
- **The total attitude score ranged from (34-102).**
- Positive attitude (< 60%).
- Negative attitude (> 60%).

### Part IV

Reported practice 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 reported practices.

- **26 close ended questions for reported practice.**
- Done practice = one point.
- Not done practice = zero point.
- Total score = 26 point.
- **The total reported practice scores range from (0-26).**
- Satisfactory reported practice (< 60%).
- Unsatisfactory reported practice (> 60 %).

### Part V

Thirty-seven items questionnaire under five explicit domains related to perceived competencies was administered amongst this group by (**Rafeek et al., 2004**). 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 specific 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 competency.

- **37 close ended questions for competency.**
- Not at All Competent answer = one point.
- Competent answer = two point.

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- Very Competent answer = three point.
- Total score = 111 point.
- **The total competency score ranged from (37-111).**
- Law competency (< 60%).
- High competency (> 60%).

**Validity and Reliability**

The study tools were tested for content and face validity by jury test of five experts in the field of nursing community to evaluate the individual items as well as the entire instrument as being relevant and appropriate to test what they wanted to measure. The face validity of the questionnaire was calculated based on experts' opinion.

The experts were asked to evaluate the individual items on the study tools in relation to its relevance and appropriateness in terms of the construct and if the items adequately measure all dimensions of the construct. The experts were asked to evaluate individual items and rate items on a 4-point scale as follows; not relevant scored (1), Little relevant scored (2), relevant scored (3) and very relevant (4).

**Reliability:**

The study tools were tested for its internal consistency by the pilot subject's reliability for calculating cronbach's Alpha which was 0.826 for Nurses' Knowledge questionnaire sheet ,0.783 for nurses' attitude, and 0.931 nurses perceived competences.

**Ethical considerations:**

An official permission to conduct the proposed study was obtained from the Scientific Research Ethics Committee in the Faculty of Nursing Helwan University. 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.

**I. 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 carried out on 10% (nurses worked in out-patient clinic) about (11) from the study subjects and were included from the total sample. To test the applicability, clarity and the efficiency of the tools. There were no major modifications found after the pilot study. The pilot showed very high levels of reliability.

**Field work:**

- An official letter issued from the dean of faculty of Nursing Helwan University, and director of Beni-Suef University Hospital at Beni-Suef City including the aim of the study to obtain permission after establishing a trustful relationship each subject interviewed individually by the investigator to explain the study purpose.
- Data was collected within Six and a half months of academic year (2022- 2023) one day /week (Saturday) from 9am - 2 pm, till the needed sample completed, interview of nurses, Written approval obtained from nurses after the investigator introduced her-self for each nurses, then explained the purpose of the study to assess the effect of competencies perceived based program for nurses' regarding palliative and end of life care. Study collected through structured face to face interview and the entire tool filled by the investigator

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- the questionnaires were distributed and completed by the investigator. Each session lasted about 30-45 minutes. Suitable teaching aids prepared specially for the program (booklet).
- The investigator classified program on 9 sessions (each session took 30-45 minutes).
- The program was implemented in the form of group discussion.
- The investigator then explained the data of questionnaire to the nurses and needed time to fill this questionnaire.
- The investigator taken 4 nurses each week consists about 16 nurses per month, total number of nurses = 104 nurses
- The investigator classified (104) nurses into (6) groups and every group contain 4 nurses to give program for them through one day for theoretical part and for practical part.
- The investigator took one group per week 4 nurses for six and a half months to give program for all (104) nurses' (4 nurses/ week X 26 week) =104 nurses
- Competencies perceived based program were developed based on the results of pretest questionnaire sheet.
- The competencies perceived based program was then started on a pre-determined schedule
- To make sure exposure of all nurses to the same information's, all nurses received the same program content using the same teaching methods and booklet.

### **Preparatory phase,**

- Tools of data collection development review of past and current related literature covering various aspects of knowledge, reported Practice, Attitude and Perceived Competencies of nurses toward Palliative and End of Life Care. Using available books, articles and magazine.
- The field work was out in 6.5 months. The study was conducted through four phases' assessment, designing and planning, implementation and evaluation.

### **Assessment phase,**

This phase involved the pre-test data collection for baseline assessment, in this phase the investigator collecting the following data before starting the designed competencies perceived based program the study tools were applied to assess knowledge, Practice, Attitude and Perceived Competencies of nurses toward Palliative and End of Life Care. Pre-test questionnaire was administered to the study sample to assess level of knowledge and reported practices, Attitude and Perceived Competencies of nurses toward Palliative and End of Life Care the data obtained during this phase were considered the basics for content of program.

### **Designing and Planning phase,**

After identifying nurse's knowledge, Practice, Attitude and Perceived Competencies toward Palliative and End of life care in the assessment phase, the investigator develops the competencies perceived based program based on items of assessment with simple Arabic language to be suitable for understanding.

### **This phase aims at designing and planning for Competencies Perceived Based Program**

#### **Through:**

- Determine learning objectives of the program.
- Determine learning contents of the program.
- Choose teaching methods as discussion and presentation Education media as video& Educational booklet
- Preparing setting required for achieving Competencies Perceived Based program
- Designing the methodology and media
- Determine evaluation tool

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**Implementation phase,**

- Competencies Perceived based program implementation based on conducting session's plan using different educational methods and media such as (group discussion, demonstration, CD, pictures, and posters or banner) in addition to the use of guiding booklet specifically designed and developed based on nurses assessment needs.
- Competencies Perceived based program was implemented in out-patient clinic in Beni-Suef University Hospital. The investigator taken 4 nurses each week one day /week (Saturday) from 9am -2pm consists about 16 nurses per month, total number of nurses = 104 nurses.
- The first session started with greeting and conveying the feeling of acceptance to participant nurses, after that orientation to the program and its aims took place, using simple words to identify the program,
- Reduce anxiety level and develop sense of trust, the last sessions started
- With greeting and welcomed nurses, summary for the previous session, the content of the new session and at the end of the session, nurses were asked for their feedback in discussion.
- The Competencies Perceived based program was applied through 9 sessions; each session took about 30-45 minutes every (Saturday) at the hospital. Each session includes (6) groups and every group contain 4 nurses.
- At the beginning of the first session, an orientation to the objectives of the study and the goal of the Competencies Perceived based program. Also, nurses were oriented about program sessions time, duration, place and contents. The investigator stressed on the importance of continuous attendance and active Different teaching and learning methods were used during the sessions which included lecture, discussion and brain storming. Instructional media includes booklet. The Competencies Perceived based program was presented in a clear and concise form to be used as memorial references.
- Each session started with a summary about the previous session and the objectives of the new session, using a very simple language that suit the level of nurses without ignoring motivation and reinforcement techniques.
- Direct reinforcement in the form of a copy from the booklet pamphlet was given as a reward for each nurse to use it as a future reference.
- Nurses were allowed to ask any interpretation, elaboration or explanations of any item included in the sessions. At the end of every session, the nurses were discussed to correct any misunderstanding.
- **General Objective:** The general objective of Competencies Perceived based program sessions was to upgrade nurses' knowledge and practices regarding Palliative and End of Life Care

**Program sessions:**

- First session included introductory session an orientation about the program, Objectives of the program, Introduction, Outlines of the program. The nurses were informed about the time of program. Each session started by explaining the objectives of it taken into consideration using simple and clear language.
- Second session included acquire basic knowledge about Symptoms that improve with the provision of palliative care at the end of life, importance of palliative care and end of life, Principles and foundations of palliative and end-of-life care
- Third session included acquire basic knowledge regarding diagnostic criteria of Patients receiving palliative care at the end of life.
- Fourth session involved basic knowledge about aspects, Places that provide palliative care and Barriers to palliative care and end of life
- Fifth session included basic knowledge regarding importance of the perceived competencies Based Program regarding palliative and end of life care.



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- Sixth session involved knowledge regarding elements upon which the perceived competencies of the palliative care and end-of-life.
- Seventh session contained knowledge regarding Perspective areas of competence for the palliative care and end-of-life nurse
- Eighth session included summary of instruction needed to improve the provision of palliative and End of life care, instructions help in improvement of palliative and end-of-life care and benefits of adopting competencies perceived based program for nurses' regarding palliative and end of life care
- Ninth session evaluate the effectiveness and the outcomes of the program (evaluate knowledge, attitude and reported practices of nurses after implementation of the program).
- By the end of each session a summary was made, and time allocated to feedback on previous session, questions and answer and plan for next session were made and the investigator adjusting with the nurse's day for next session according follow up time.
- Teaching methods such as lecture, group discussion, demonstration, CD, booklet, pictures, and posters or banner and brain storming.
- The investigator and the studied nurses shared for telephone numbers to be in contact and follow up with them.

**Program booklet:**

A Booklet including all content of the program was designed and given to nurses as an educator during program implementation. Its aim was providing accurate knowledge and practice related Competencies Perceived based program regarding Palliative and End of Life Care.

**Evaluation Phase:**

Evaluation was applied After implementation program Six and a half months through post- testing using the same tools in order to identify differences, similarity and areas of improvement as well as defects and estimates the effect of competencies perceived based program for nurses' regarding palliative and end of life care on improving the level of nurses' knowledge, attitude and reported practice.

**III) Administrative Items:**

An official Permission was obtained from the dean of faculty of Nursing Helwan University and official Permission from director of Beni-Suef University Hospital at Beni-Suef City to conduct the study this letter included a permission to collect the necessary data and explain the purpose and nature of the study.

**I- Statistical Item:**

Data was collected from the study sample was revised, coded and entered using personal computer (PC). Computerized data entry and Statistical analysis were fulfilled using the statistical Package for the Social Science (SPSS), version 24. The collected data was organized, revised, analyzed and presented in numbers and percentage in tables, figures and diagram. Proper and suitable statistical tests were used to test the significance of the results obtained. The following statistical techniques were used (percentages, mean value, standard deviation, chi-square(X<sup>2</sup>), proportion probability (p-value) and T test.

**Significance of the results:**

- When  $P > 0.05$ , it is statistically insignificant difference.
- When  $P < 0.05$ , it is statistically significant difference.
- When  $P < 0.01$  or  $P < 0.001$ , it is high significant difference

3. RESULTS

Part I Socio demographic data for nurses

Table (1): Frequency Distribution of personal characteristics among Nurses' regarding Palliative and End of Life Care (n=104).

Table (2): Frequency Distribution of professional characteristics among Nurses' regarding Palliative and End of Life Care (n=104).

Figure (2): percentage Distribution of personal characteristics (Nurses' qualification) regarding Palliative and End of Life Care (n=104).

Figure (3): Percentage Distribution of personal characteristics regarding training toward palliative care among Nurses (n=104).

Part II Number and Percentage Distribution of Total Knowledge among nurses regarding Palliative and End of Life pre and post Competencies Perceived Based Program (n=104).

Figure (4): Percentage Distribution of Total Knowledge among nurses regarding Palliative and End of Life pre and post Competencies Perceived Based Program (n=104).

Part III Number and Percentage Distribution of nurse's total attitude regarding Palliative and End of Life pre and post Competencies Perceived Based Program (n=104).

Figure (5): Percentage Distribution of Total attitude among nurses regarding Palliative and End of Life pre and post Competencies Perceived Based Program (n=104).

Part IV Number and Percentage Distribution of nurse's total reported practices regarding Palliative and End of Life pre and post Competencies Perceived Based Program (n=104).

Figure (6): Percentage Distribution of Total reported practices among nurses regarding Palliative and End of Life pre and post Competencies Perceived Based Program (n=104).

Part V Number and Percentage Distribution of Total competency among nurses regarding Palliative and End of Life pre and post Competencies Perceived Based Program (n=104).

Part VI Correlation between Knowledge, practices, attitude, and competency pre -post applying Program (N=104).

Part I Socio demographic data for nurses

Table (1): Frequency Distribution of personal characteristics among Nurses' regarding Palliative and End of Life Care (n=104).

personal characteristics	The studied sample (N=104)	
	No.	%
<b>Age</b>		
20-30 years	74	71.2
31-40 years	30	28.8
<b>place of residence</b>		
Rural	75	72.1
Urban	29	27.9
<b>Marital status</b>		
Single	60	57.7
Married	44	42.3
<b>Income</b>		
Insufficient	52	50
Sufficient	52	50

Table 1: shows that, 71.2% of nurses aged from 20: 30 years old. Concerning place of residence 72.1% of nurses live in rural area. In addition to, Marital status 42.3% were married. Regarding income ,50% of nurses has insufficient income level.

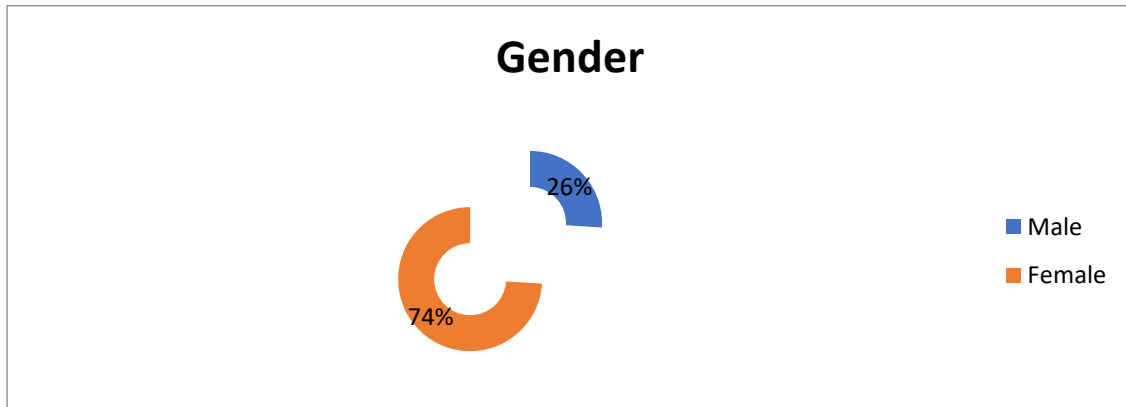


Figure (1) percentage Distribution of personal characteristics (gender) among Nurses' regarding Palliative and End of Life Care (n=104).

Figure (1): shows that, 26% of nurses were male and 74% were female

Table (2): Frequency Distribution of professional characteristics among Nurses' regarding Palliative and End of Life Care (n=104).

professional characteristics	The studied sample (N=104)	
	No.	%
<b>Department of work</b>		
Pain out-patient clinic	29	27.9
Oncology Out-Patient clinic	31	29.8
Palliative care out-patient clinic	32	30.8
Renal out-patient clinic	12	11.5
<b>Experience of palliative care</b>		
<5 years	65	62.5
5>10 years	29	27.9
11>15 years	10	9.6
<b>Period of training course</b>		
<1 week	15	14.4
>1 week	89	85.6

Table (2) shows that, 30,8% of nurses were worked at Palliative care out-patient clinic , 62,5% of nurses had experiences less than 5 years while 27,9% of nurses don't have training toward Palliative care and 85,6% of nurses had training period for one week and more

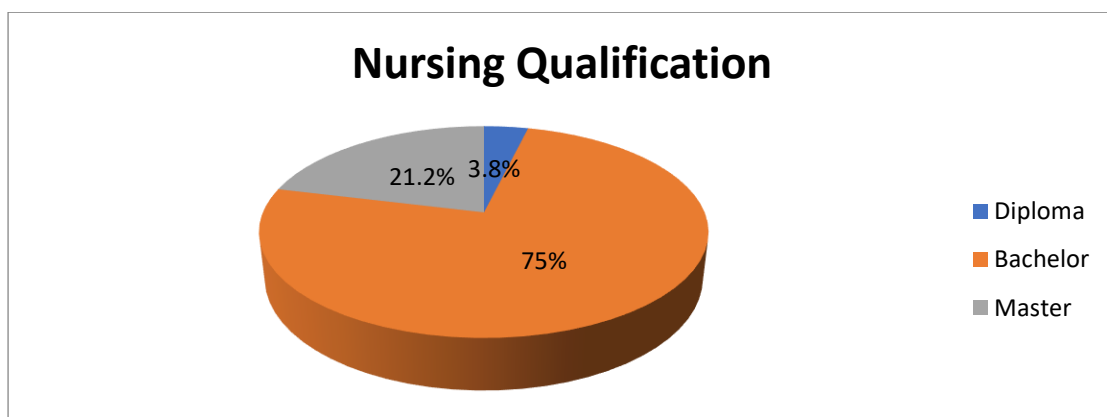
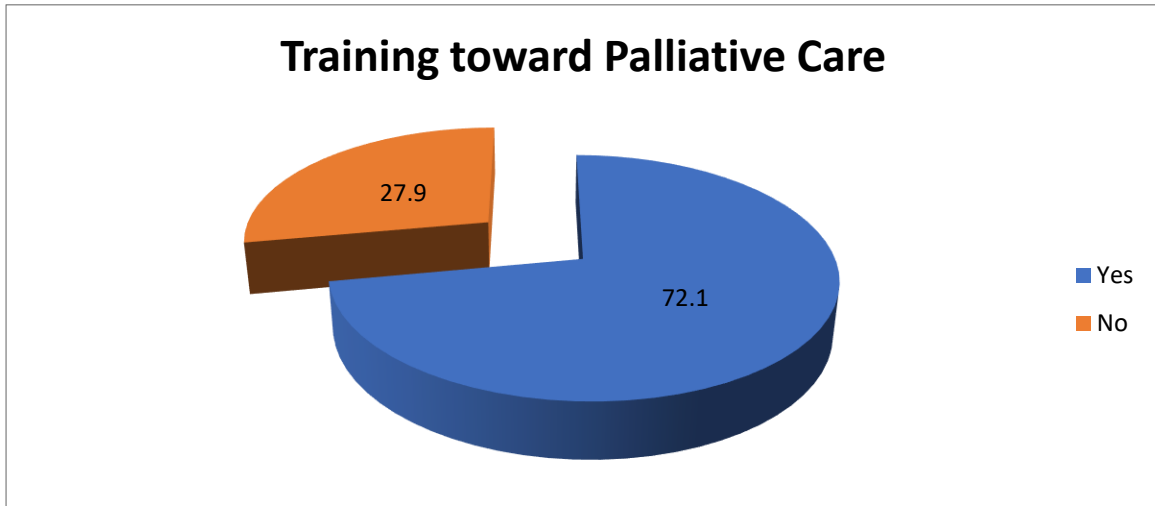


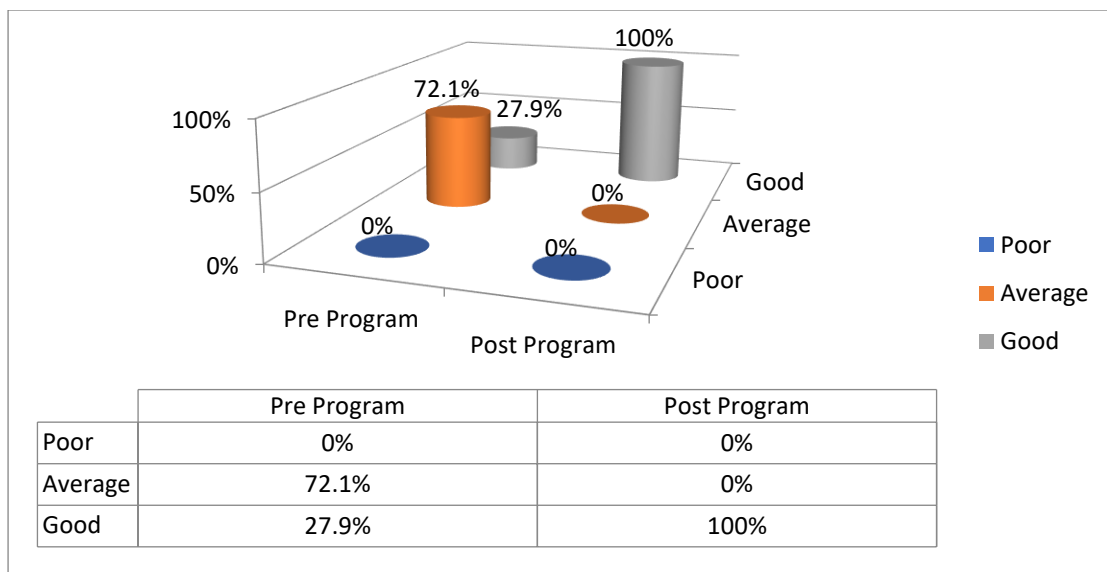
Figure (2): percentage Distribution of personal characteristics (Nurses' qualification) regarding Palliative and End of Life Care (n=104).

**Figure (2):** shows that, 75% of nurses had bachelor’s degree in nursing sciences. While 3,8 were diploma and 21,2 had master’s degree in nursing sciences.



**Figure (3): Percentage Distribution of personal characteristics regarding training toward palliative care among Nurses (n=104).**

**Figure (3):** shows that, 72.1% of nurses had trained toward Palliative care while 27,9 hadn’t trained toward Palliative care.

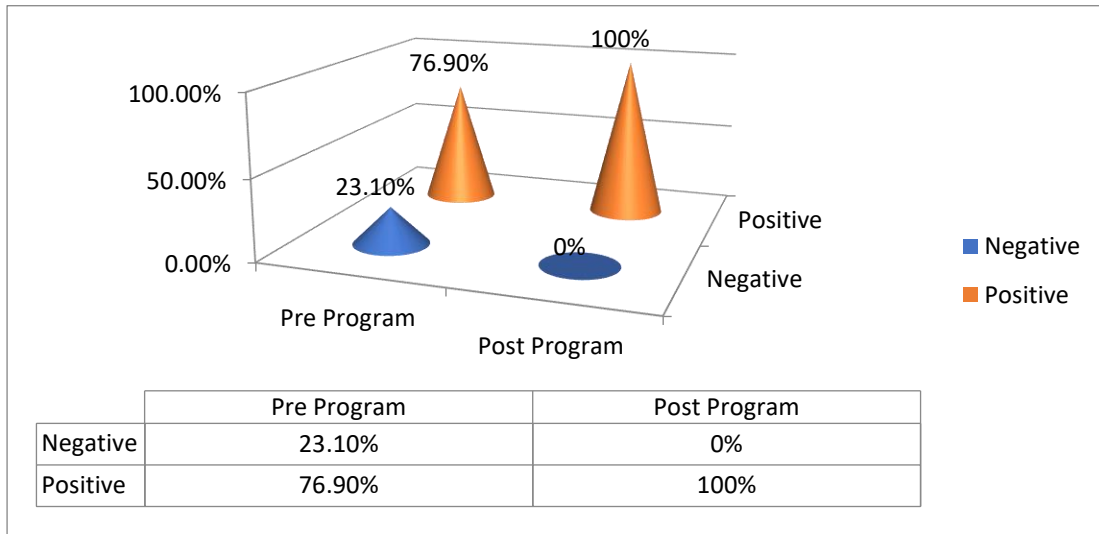


**Figure (4): Percentage Distribution of Total Knowledge among nurses regarding Palliative and End of Life pre and post Competencies Perceived Based Program (n=104).**

**Figure (4):** clarifies that, 27.9% of nurses had good total Knowledge scores regarding Palliative and End of Life Perceived Based Program pre- program which improved to 100% of nurses had good total Knowledge scores regarding Palliative and End of Life Perceived Based Program post program with p value= 0.000

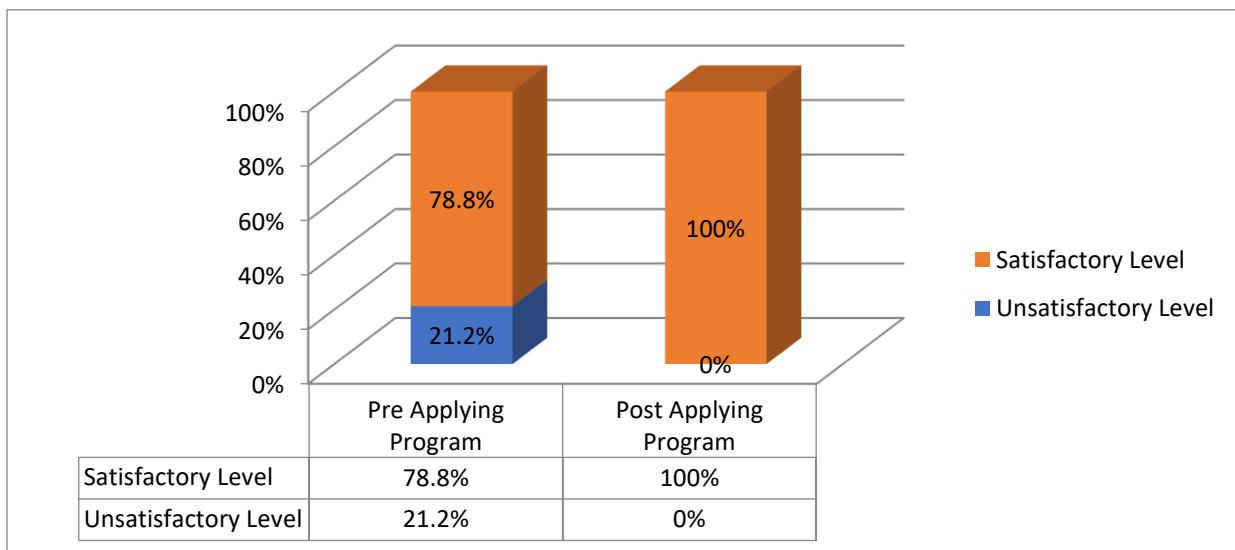
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**Figure (5): Percentage Distribution of Total attitude among nurses regarding Palliative and End of Life pre and post Competencies Perceived Based Program (n=104).**

Figure (5) Reveals that, 23.1% of nurses had negative total attitude scores among nurses regarding Palliative and End of Life Perceived Based Program pre- program which improved to 100% of nurses had positive total attitude scores among nurses regarding Palliative and End of Life Perceived Based Program post program with p value= 0.0



**Figure (6): Percentage Distribution of Total reported practices among nurses regarding Palliative and End of Life pre and post Competencies Perceived Based Program (n=104).**

Figure (6) Reveals that, 21.2% of nurses had Unsatisfactory total practices scores regarding Palliative and End of Life Perceived Based Program pre- program which improved to 100% of nurses had positive total attitude scores regarding Palliative and End of Life Perceived Based Program post program with p value= 0.000

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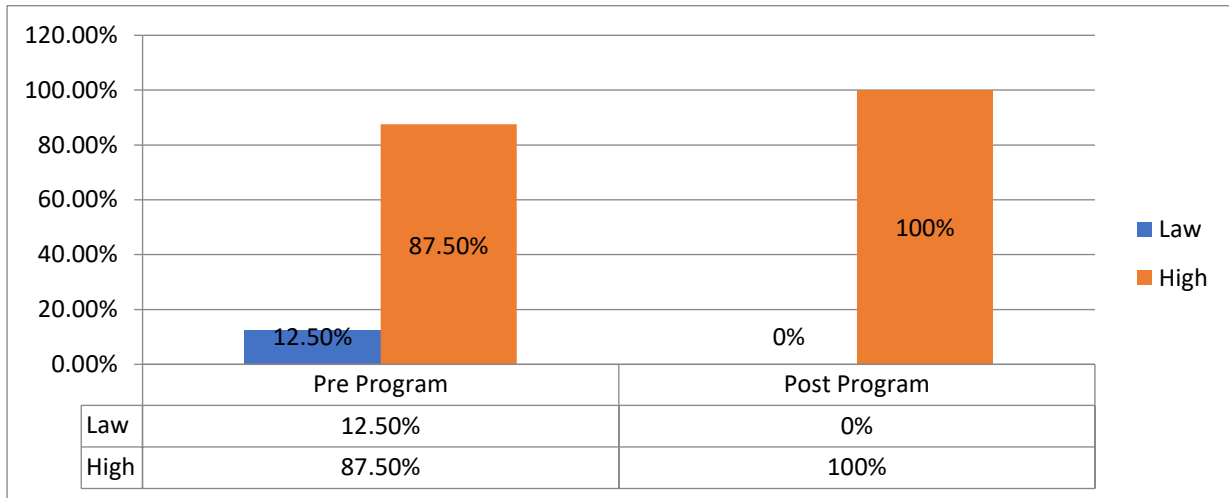


Figure (7): Percentage Distribution of Total competency among nurses regarding Palliative and End of Life pre and post Competencies Perceived Based Program (n=104).

Figure (7) clarifies that, 12.5 % of nurses had Low Competent total competency scores regarding Palliative and End of Life Perceived Based Program pre- program which improved to 100% of nurses had high total Competent scores regarding Palliative and End of Life Perceived Based Program post program with p value= 0.000

Part VI: Relations and correlations between the study variables

Table (3): Correlation between Knowledge, practices, attitude, and competency pre applying Program (N=104).

Knowledge, practices, attitude, and competency	Changes of scores of total knowledge, practices, and attitude pre- Program							
	Knowledge		Practices		Attitude		Competency	
	r	P	R	P	r	P	R	P
Knowledge	1	--	0.222	0.02	0.135	0.172	0.114	0.249
Practices	0.222	0.02	1	--	0.175	0.07	0.094	0.342
Attitude	0.135	0.172	0.175	0.07	1	--	0.056	0.569
Competency	0.114	0.249	0.094	0.342	0.056	0.569	1	--

statistically significant  $P < 0.05$  high statistically significant  $P \leq 0.001$ .

Table (3) shows that, there was significant correlation was found between Total reported practice and total knowledge and total attitude except competency pre applying Program among nurses regarding Palliative and End of Life Competencies Perceived Based Program.

Correlation between Knowledge, practices, and attitude post applying Program (N= 104).

Knowledge, practices, attitude, and competency	Changes of scores of total knowledge, practices, and attitude post program							
	Knowledge		Practices		Attitude		Competency	
	R	P	R	P	R	P	r	P
Knowledge	1	--	0.051	0.605	0.375	0.000	0.154	0.118
Practices	0.051	0.605	1	--	0.021	0.830	0.28	0.778
Attitude	0.375	0.000	0.021	0.830	1	--	0.046	0.640
Competency	0.154	0.118	0.28	0.778	0.046	0.640	1	--

statistically significant  $P < 0.05$  high statistically significant  $P \leq 0.001$ .

Table (4) shows that, there was significant correlation was found between Total Knowledge and total attitude except total reported practice and total competency post applying Program among nurses regarding Palliative and End of Life Competencies Perceived Based Program.

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**4. DISCUSSION**

Competencies Perceived based program aim to ensure that palliative care service provision and education is meeting the Standards for the Provision of Palliative Care Services .Thus the core competencies are underpinned by the standards for palliative care and by the following two principles: All patients have access to high-quality palliative care regardless of their care settings .National standards for education and practice are adapted for all palliative care providers to ensure provision of care. The competencies are expected to support ongoing improvement in knowledge, skills and attitudes among care providers and will provide guidance to organizations in designing staff development strategies. They can be used as performance indicators to assess the level of mastery which an individual has attained in a competency area (**Scott et al., 2023**).

**Part I Socio demographic data for nurses**

The present study shows that majority of nurses had 20: 30 years old. This is in the same line with (**Nurjono et al., 2022**) who conducted a study in Singapore about “A Study Protocol of Realist Evaluation of Palliative Home Care Program for Non-Cancer Patients in Singapore” and reported that the mean age was 74% of respondents were within the age ranged from 22:42.

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 single .This finding was in the same line with (**Lin et al., 2021**) who conducted a study in southern Taiwan at a general hospital about “ Nurses’ knowledge, attitude, and competence regarding palliative and end-of-life care: a path analysis” and found that 95.2 % of study were female and 77.3% were single . 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 income the current results showed that about nearly two thirds of nurses were live in rural areas, Also half of nurses' income were sufficient this is in the same line with (**Rossi et al., 2020**) who conducted a study in Meldola, Italy about “ The challenge for nutritional care in a cancer center: The need for integration between clinical nutritionist, oncologist, and palliative care physician “and reported that about three quarters of the respondent came from rural areas and three fifth of the study subjects had enough financial income .

Regarding years of experience the results of the present study showed that more than three fifth of nurses had experiences less than 5 years, These results similar with (**Boaventura et al., 2022**) who conducted a broadcast study in Brazil entitled as “Palliative care in the pre-hospital service in Brazil: experiences of health professionals” 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 three quarters of nurses had bachelor’s degree in nursing sciences this study matches with (**Wu et al., 2023**) who conducted a broadcast study in Foshan, China about “Development and validation of a questionnaire to evaluate the knowledge, attitude, behavior and care preference of family members of Chinese older adults related to palliative care.” and reported that 79.5% participants had a bachelor’s degree.

Regarding department of work the present study showed that more than one quarter of nurses were worked at Palliative care out-patient clinic , These study coming in contact with (**Jewitt et al., 2023**) who administered a study in Ontario, Canada and about “The Effect of Specialized Palliative Care on End-of-Life Care Intensity in AYAs with Cancer” and revealed that 27,6 % of respondent had working in Palliative care out-patient clinic.

Regarding nurses training toward Palliative care and training period the current study revealed that nearly three quarters of nurses had training toward Palliative care and majority of nurses had training period for one week .These study matches with (**Salameh et al., 2023**) who conducted a published study in Palestine about “Nursing Students' Understanding of Palliative Care in Palestine” 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.

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### Part II Nurses' Knowledge regarding Palliative and End of Life pre and post Competencies Perceived Based Program

Regarding total nurses' knowledge scores, the present study shows that more than one quarters of nurses had good total Knowledge scores pre-program, which there was significant improvement that all of nurses had good total Knowledge scores post program with p value= 0.000 this in the same line with (Wilson *et al.*, 2023) who conducted the study in Rochester, Minnesota, USA about "Effect of an Artificial Intelligence Decision Support Tool on Palliative Care Referral in Hospitalized Patients: A Randomized Clinical Trial" and revealed that there was significant difference in nurses' knowledge pre-post intervention. From the researcher point of view Palliative and End of Life Care Perceived Based Program can make difference in nurses' knowledge and provide information help them to increase their confidence.

### Part III Nurses' Attitude regarding Palliative and End of Life pre and post Competencies Perceived Based Program

Regarding total nurses' attitude scores, the present study shows that more than one fifth of nurses had negative total attitude pre- program, which was significant improved to all of nurses had positive total attitude scores post program with p value= 0.000. This finding is in agreement with (Jewitt *et al.*, 2023) who conducted the study in Ontario, Canada about "The Effect of Specialized Palliative Care on End-of-Life Care Intensity in AYAs with Cancer" and revealed that 88.3% of nurses' total attitude scores had positive attitude and there was significant change of mean scores of total attitude post applying pre-post intervention and also, (Mazanec *et al.*, 2021) who conducted a study in Duarte, California about "Preparing Advanced Practice Registered Nursing Students to Provide Primary Palliative Care" and reported that half of the studied nurses' had positive total attitude scores toward caring for dying patients. From the researcher points of view this might be due to the fact that training provides the opportunity to create awareness and have more information for participants who involved in the training to have favorable attitude in this regard.

### Part IV Nurses' reported practice regarding Palliative and End of Life pre and post Competencies Perceived Based Program

As Regarding total nurses' practices scores, the present study shows that more than one fifth of nurses had Unsatisfactory total practices scores pre- program, which was significant improvement that all nurses had Satisfactory total practices scores post program with p value= 0.000. This finding is in agreement with (Jewitt *et al.*, 2023) who conducted the study in Ontario, Canada about "The Effect of Specialized Palliative Care on End-of-Life Care Intensity in AYAs with Cancer" and revealed that 76.2% of respondents had satisfactory total practices scores after the implementation of program.

Also, this results was in agreement with (Kassam *et al.*, 2021) who conducted the study in Toronto, ON, Canada about "Impact of Palliative Care Involvement on End-of-Life Care Patterns Among Adolescents and Young Adults With Cancer: A Population-Based Cohort Study" and revealed that majority of respondents had satisfactory total practices scores after the implementation of program. From the researcher points of view this might be due to the effective role of program which lead to improve nurses reported practice.

### Part V Nurses' perceived competencies regarding Palliative and End of Life pre and post Program

Regarding total nurses' perceived competencies scores the present study shows that nearly one fifth of nurses had Low Competent total perceived competencies scores pre- program, which was significant improvement that all nurses had high Competent total perceived competencies scores post program with p value= 0.000. This finding is in agreement with (Zhang *et al.*, 2023) who conducted the study in Shenzhen, China about "Analysis of the current status of community nurses' spiritual care competencies and the factors: A descriptive cross-sectional analysis" and revealed that 86.2% of respondents had high Competent total perceived competencies scores.

### Part VI: Relations and correlations between the study variables

Regarding Correlation between total Knowledge, total attitude, total reported practice and total competency pre-applying program, the present study shows that, there was significant correlation was found between Total knowledge, total attitude and total reported practice except competency pre applying Program. This finding was consistent with the findings of (Patarroyo-Aponte *et al.*, 2023) who conducted a study in University of Texas Health Science Center at Houston, USA



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about " The Role of Palliative Care Consultation in Withdrawal of Life-Sustaining Treatment among ICU Patients Receiving Venovenous Extracorporeal Membrane Oxygenation (VV-ECMO): A Retrospective Case-Control Study " and illuminated that there was highly positive correlation between nurses' knowledge ,attitude and practice.

In Addition, the current study finding was comparable with (**Muhammad *et al.*, 2022**) who conducted a study in Faculty of Pharmacy , Turkey, about "Knowledge, attitude, practice and perceived barriers regarding COVID-19among health-care professionals" and found a positive correlation between nurses' knowledge, attitude, and practice. Furthermore, (**Yeung *et al.*, 2020**) who conducted a study in Hong Kong (SAR), China about " Palliative Liver Radiotherapy (RT) for Symptomatic Hepatocellular Carcinoma (HCC) ", and cited that knowledge affects the practice of preventive measures. From researcher point of view this may be due to the fact the successive educational sessions using different educational strategies and continuous evaluation improving nurses' knowledge additionally, palliative care education helps nurses felt comfortable in providing care to dying children and their families.

Regarding correlation between total knowledge, total attitude , total reported practice and total competency post program, the current study shows that, there was no significant correlation was found between total reported practice , total knowledge and total competency post applying Program This finding was consistent with the findings of (**Takahara *et al.*, 2020**) who conducted a study in Tokyo, Japan. about " The impact of age and comorbidity in advanced or recurrent biliary tract cancer receiving palliative chemotherapy " and found that there was no statistically significant correlation between level of knowledge and practice. **On the contrary with (Ahmed *et al.*, 2022)** who conducted a study in Zagazig University, Zagazig about " Palliative Effect of Resveratrol against Nanosized Iron Oxide-Induced Oxidative Stress and Steroidogenesis-Related Genes Dysregulation in Testicular Tissue of Adult Male Rats" and showed a strong positive correlation between participants' knowledge and their practice in post and follow up periods.

### 5. CONCLUSION

**Based on the results of the present study and research hypothesis, the following conclusion includes**

The Results of this study concluded that after the implementation of the program.it was founded that there was a statistically significant positive effects on improving the total knowledge, total attitude total reported practice and total competency scores, Positive correlation between total knowledge, total attitude except total reported practice and total competency post program implementation, and no significant relation between demographic characteristics and total knowledge level, total reported practice, total attitude, total competency among the studied sample pre and post program implementation except income in total knowledge level and place of residence in total attitude level among studied sample.

### 6. RECOMMENDATIONS

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

- Continuity of adopting and application of competency-based program in different health care setting and collaboration with other organizations and institutions to improve knowledge and practice of nurses.
- Applying other program as educational program, instructional intervention or training to improve health care provider performance and crisis intervention.
- 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.
- Further research: Train nurses in a wide range of facilities and settings provide educational support and help maintain stable nursing workforce.

### 7. 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. The coordination and

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collaboration of palliative care services remains one of the most essential parts that can be delivered at different levels of complexity. Terminally ill patients and their families move between particular settings and healthcare agencies so needing help and supervision from an integrated multidisciplinary team who are familiar with their condition by paying attention to their physical, mental, social, spiritual and emotional parts of care for life limiting or life-threatening conditions (**Morey et al., 2021**).

In order to evaluate achievement of competency perceived program the effectiveness of performance evaluations depends on the competencies that were chosen. Because In recent years, evaluation of nurse performance is the most attractive studies for researchers. The nursing competency was assessed from different researchers using comprehensive tool for assessing nurses' performance and actual delivery of care to patients. It arranged into six subsections: psychosocial group, physical, general, communication, and professional implications, or skills of competency include communication skills, caring, patient safety/illness, legal aspects and ethical practice, leadership and management skills, problem solving skills, decision making skills, and team work (**Mills et al., 2020**).

The present study aims to assess the effect of competencies perceived based program for nurses' regarding palliative and end of life care through the following objectives:

- 1) Assessing nurses' Knowledge, Attitude and reported practice toward palliative and end of life care.
- 2) Designing and planning competencies perceived based program for nurses' regarding palliative and end of life care
- 3) Evaluating the effect of competencies perceived based program for nurses' regarding palliative and end of life care

**Research Hypothesis**

After applying competencies perceived based program the nurses' Knowledge, Attitude and reported practice will be improved.

**Methodology Research design:**

A quasi-experimental study design was used for conducting the study (pre/post-test).

**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:**

**One tool was used to collect the data:** Structural interviewing questionnaire sheet was developed by researcher after reviewing of national and international related literature and it consisted of five parts:

**1<sup>st</sup> part** concerning with Socio demographic data for nurses 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:** Nurses' Knowledge regarding palliative care which includes Importance, Philosophy and need for palliative care.

**3<sup>rd</sup> part:** Nurses' Attitude related to palliative care as I think that Palliative care is given only for dying patient.

**4<sup>th</sup> part:** Reported practice was conducted to assess nurses' practice regarding Palliative and End of Life Care as Listen with empathy when providing care.

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**5<sup>th</sup> part:** Thirty-seven items questionnaire under five explicit domains related to perceived competencies was modified and administered amongst this group such as Communication skills, Leadership skills and behavior, Managing change, Professional development and lifelong learning, Financial management, Relationship Management and collaboration. (Rafeek et al., 2004).

### Results:

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

- Regarding nurse's total Knowledge the study results shows that, 27.9% of nurses had good total Knowledge scores with Mean  $\pm$  SD 1 23.42 $\pm$ 2.53 pre-program which improved to 100% of nurses had good total Knowledge scores with Mean  $\pm$  SD 31.03 $\pm$ 1.36 post program with p value= 0.000
- Regarding nurse's total Attitude the study results shows that, 23.1% of nurses had negative total attitude scores with Mean  $\pm$  SD 72.33 $\pm$ 11.20 pre-program which improved to 100% of nurses had positive total attitude scores with Mean  $\pm$  SD 79.12 $\pm$ 4.75 post program with p value= 0.000
- Regarding nurse's total reported practice the study results clarifies that, 21.2% of nurses had Unsatisfactory total practices scores with Mean  $\pm$  SD 22.54 $\pm$ 2.14 pre-program which improved to 100% of nurses had satisfactory total practices scores with Mean  $\pm$  SD 24.91 $\pm$ 1.15 post program with p value= 0.000
- Regarding nurse's total Perceived Competences the study results clarifies that, 12.5 % of nurses had Low Competent total competency scores with Mean  $\pm$  SD 72.87 $\pm$ 5.05 pre-program which improved to 100% of nurses had high total Competent scores with Mean  $\pm$  SD 93.50 $\pm$ 7.05 post program with p value= 0.000
- Regarding the correlation between Nurses' Total Knowledge and total attitude There was significant correlation was found between Total Knowledge and total attitude except total reported practice and total competency level post applying Program.
- Regarding the Relation between Nurses' Total reported practice, total knowledge and total attitude There were significant relations was found between Total reported practice and total knowledge and total attitude except competency pre applying Program.
- There was no significant relationship was found between total Knowledge level and nurse's demographic characteristics except income pre applying Program.
- There was no significant relationship was found between total reported practices level and nurse's demographic characteristics pre applying Program.
- There was no significant relationship was found between total attitude level and nurse's demographic characteristics except place of residence pre applying Program.
- There was no significant relationship was found between total competency level and nurse's demographic characteristics pre applying Program.

### REFERENCES

- [1] **Ahmed, M.M.; Hussein, M.M.A.; Saber, T. and Abd-Elhakim, Y.M. (2022):** Palliative Effect of Resveratrol against Nanosized Iron Oxide-Induced Oxidative Stress and Steroidogenesis-Related Genes Dysregulation in Testicular Tissue of Adult Male Rats. International journal of environmental research and public health 2,1,19.
- [2] **Alipanga, B. and Kohrt, B.A. (2022):** Competency-based pre-service education for clinical psychology training in low- and middle-income countries: Case study of Makerere University in Uganda. Frontiers in psychology journal 3, 13, 924.
- [3] **Boaventura, J.R.; Pessalacia, J.D.R.; Ribeiro, A.A.; de Souza, F.B.; da Silva Neto, P.K. and Marinho, M.R. (2022):** Palliative care in the pre-hospital service in Brazil: experiences of health professionals. BMC palliative care journal 21, 4,16.

**International Journal of Novel Research in Healthcare and Nursing**

 Vol. 11, Issue 1, pp: (338-358), Month: January - April 2024, Available at: [www.noveltyjournals.com](http://www.noveltyjournals.com)

- [4] **Ersek, M. and Ferrell, B. (2022):** Palliative and End-of-Life Needs of People Receiving Care in Nursing Homes. *J Hosp Palliat Nurs journal* 24, 17,48.
- [5] **Frommelt, K.H. (1991):** The effects of death education on nurses' attitudes toward caring for terminally ill persons and their families. *The American journal of hospice & palliative care* 8, 37,43.
- [6] **Hansen, M.B.B.; Groenvold, M.; Adersen, M.; Jensen, H.; Ibfelt, E.H.; Petersen, M.A.; Neergaard, M.A.; Moller, H. and Olesen, T.B. (2023):** Palliative care need screening and specialised referrals fell during the COVID-19 pandemic: a nationwide register-based study. *BMJ supportive & palliative care public health journal* 10, 22, 749.
- [7] **Jewitt, N.; Rapoport, A.; Gupta, A.; Srikanthan, A.; Sutradhar, R.; Luo, J.; Widger, K.; Wolfe, J.; Earle, C.C.; Gupta, S. and Kassam, A. (2023):** The Effect of Specialized Palliative Care on End-of-Life Care Intensity in AYAs with Cancer. *Journal of pain and symptom management* 65, 22,32.
- [8] **Kassam, A.; Gupta, A.; Rapoport, A.; Srikanthan, A.; Sutradhar, R.; Luo, J.; Widger, K.; Wolfe, J.; Earle, C. and Gupta, S. (2021):** Impact of Palliative Care Involvement on End-of-Life Care Patterns Among Adolescents and Young Adults With Cancer: A Population-Based Cohort Study. *Journal of clinical oncology : official journal of the American Society of Clinical Oncology* 39, 26,15.
- [9] **Laabar, T.D.; Saunders, C.; Auret, K. and Johnson, C.E. (2023):** Socially, Culturally and Spiritually Sensitive Public Health Palliative Care Models in the Lower-income Countries: An Integrative Literature Review. *Indian journal of palliative care* 29, 15,27.
- [10] **Lin, H.Y.; Chen, C.I.; Lu, C.Y.; Lin, S.C. and Huang, C.Y. (2021):** Nurses' knowledge, attitude, and competence regarding palliative and end-of-life care: a path analysis. *PeerJ journal* 12,9, e11864.
- [11] **Mazanec, P.; Ferrell, B.; Malloy, P.; Virani, R. and Cormack, C. (2021):** Preparing Advanced Practice Registered Nursing Students to Provide Primary Palliative Care. *Nurse educator journal* 46, 21,24.
- [12] **Mills, J.A.; Middleton, J.W.; Schafer, A.; Fitzpatrick, S.; Short, S. and Cieza, A. (2020):** Proposing a re-conceptualisation of competency framework terminology for health: a scoping review. *Human resources for health journal* 12,18, 15.
- [13] **Morey, T.; Scott, M.; Saunders, S.; Varenbut, J.; Howard, M.; Tanuseputro, P.; Webber, C.; Killackey, T.; Wentlandt, K.; Zimmermann, C.; Bernstein, M.; Ernecoff, N.; Hsu, A. and Isenberg, S. (2021):** Transitioning From Hospital to Palliative Care at Home: Patient and Caregiver Perceptions of Continuity of Care. *Journal of pain and symptom management* 62, 23,41.
- [14] **Muhammad, K.; Saqlain, M.; Muhammad, G.; Hamdard, A.; Naveed, M.; Butt, M.H.; Khan, S.; Ismael, N.S.; Khan, Z. and Karatas, Y. (2022):** Knowledge, Attitude, and Practices (KAPs) of Community Pharmacists Regarding COVID-19: A Cross-Sectional Survey in 2 Provinces of Pakistan. *Disaster medicine and public health preparedness journal* 16, 14,72.
- [15] **Nurjono, M.; Liaw, K.; Lee, A.; Vrijhoef, H.J.M.; Koh, L.H.; Tan, M.; Ng, F.L. and Oh, H.C. (2022):** A Study Protocol of Realist Evaluation of Palliative Home Care Program for Non-Cancer Patients in Singapore. *International journal of integrated care* 9, 22, 7.
- [16] **Parikh, R.B.; Sedhom, R.; Ferrell, W.J.; Villarin, K.; Berwanger, K.; Scarborough, B.; Oyer, R.; Kumar, P.; Ganta, N.; Sivendran, S.; Chen, J.; Volpp, K.G. and Bekelman, J.E. (2023):** Behavioural economic interventions to embed palliative care in community oncology (BE-EPIC): study protocol for the BE-EPIC randomised controlled trial. *BMJ open journal* 9, 13, e069468.
- [17] **Patarroyo-Aponte, G.; Shoar, S.; Ashley, D.M.; Noorbaksh, A.; Patel, D.; Young, A.Y.; Akkanti, B.H.; Warner, M.T.; Patarroyo-Aponte, M.M.; Kar, B.; Gregoric, I.D.; Ha, C. and Patel, B. (2023):** The Role of Palliative Care Consultation in Withdrawal of Life-Sustaining Treatment among ICU Patients Receiving Venovenous Extracorporeal Membrane Oxygenation (VV-ECMO): A Retrospective Case-Control Study. *The American journal of hospice & palliative care* 10,49, 9.

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- [18] **Perez-Cruz, P.E.; Undurraga, E.; Arreola-Ornelas, H.; Corsi, O.; Jiang Kwete, X.X.; Krakauer, E.L.; Rosa, W.E. and Knaul, F.M. (2023):** Bridging gaps to universal palliative care access in Chile: serious health-related suffering and the cost of expanding the package of care services. *Lancet regional health. Americas journal* 12, 19, 100425.
- [19] **Rafeek, R.N.; Marchan, S.M.; Naidu, R.S. and Carrotte, P.V. (2004):** Perceived competency at graduation among dental alumni of the University of the West Indies. *Journal of dental education* 68, 81,8.
- [20] **Rosa, W.E.; Rajagopal, M.R.; Bhadelia, A.; Jones, K.F.; Khanyola, J.; Knaul, F.M.; Marston, J. and Spence, D. (2023):** Racism and casteism: global chasms of access to palliative care and pain relief. *BMJ supportive & palliative care journal* 13, 57,60.
- [21] **Rossi, R.; Serra, P.; Suzzi, M.; Guerra, D.; Bilotta, S.; Ricci, M.; Pallotti, M.C.; Ibrahim, T.; Frassinetti, G.L.; Zavoi11u, V.; Nanni, C.; Altini, M. and Maltoni, M. (2020):** The challenge for nutritional care in a cancer center: The need for integration between clinical nutritionist, oncologist, and palliative care physician. *Current problems in cancer journal* 13, 44, 100618.
- [22] **Salameh, B.; Ayed, A.; Fashafsheh, I.; Alrazeeni, D.M.; Batran, A. and Ahmed, F. (2023):** Nursing Students' Understanding of Palliative Care in Palestine. *Critical care nursing quarterly journal* 46, 20,16.
- [23] **Scott, M.A.; Andazola, J.; Smith, T.; Castillo Smith, A.; de la Rosa, I. and Michael, J. (2023):** Structural competency in New Mexico: Moving outside of medical education. *Global public health journal* 18, 21,763.
- [24] **Takahara, N.; Nakai, Y.; Saito, K.; Sasaki, T.; Suzuki, Y.; Inokuma, A.; Oyama, H.; Kanai, S.; Suzuki, T.; Sato, T.; Hakuta, R.; Ishigaki, K.; Saito, T.; Hamada, T.; Mizuno, S.; Kogure, H.; Tada, M.; Isayama, H. and Koike, K. (2020):** The impact of age and comorbidity in advanced or recurrent biliary tract cancer receiving palliative chemotherapy. *Journal of gastroenterology and hepatology* 35, 18,35.
- [25] **Wilson, P.M.; Ramar, P.; Philpot, L.M.; Soleimani, J.; Ebbert, J.O.; Storlie, C.B.; Morgan, A.A.; Schaeferle, G.M.; Asai, S.W.; Herasevich, V.; Pickering, B.W.; Tiong, I.C.; Olson, E.A.; Karow, J.C.; Pinevich, Y. and Strand, J. (2023):** Effect of an Artificial Intelligence Decision Support Tool on Palliative Care Referral in Hospitalized Patients: A Randomized Clinical Trial. *Journal of pain and symptom management* 12,10,30
- [26] **Wu, X.; Li, X.; Su, T.; Liang, J.; Wang, L.; Huang, Q.; Zhang, J.; Wang, S.; Wang, N. and Xiang, R. (2023):** Development and validation of a questionnaire to evaluate the knowledge, attitude, behaviour and care preference of family members of Chinese older adults related to palliative care. *Nursing open journal* 10, 63,86.
- [27] **Yeung, C.S.Y.; Chiang, C.L.; Wong, N.S.M.; Ha, S.K.; Tsang, K.S.; Ho, C.H.M.; Wang, B.; Lee, V.W.Y.; Chan, M.K.H. and Lee, F.A.S. (2020):** Palliative Liver Radiotherapy (RT) for Symptomatic Hepatocellular Carcinoma (HCC). *Scientific reports journal* 9, 10, 1254.
- [28] **Zhang, X.; Ba, L.; Xu, J.; Xie, S.; Tu, J.; Yang, X. and Liu, H. (2023):** Analysis of the current status of community nurses' spiritual care competencies and the factors: A descriptive cross-sectional analysis. *Nursing open journal* 10, 33,66.