

## Assessment of the Nursing Home Manager's Knowledge, Attitudes and Beliefs about Palliative Care and Advance Care Planning Attitudes, Saudi Arabia 2022

Munira Ali Khalid Alotaibi<sup>1</sup>, Maram safer Alhammadi<sup>2</sup>, Mazen Omar Nasser Aldhawyan<sup>3</sup>, Wael Habib Alanazi<sup>4</sup>, Shrooq khader alenazi<sup>5</sup>, Motaib Saad Alrasheedi<sup>6</sup>, Turkey Majeb Alotebi<sup>7</sup>, Khalid Saud Khalid Alsubei<sup>8</sup>, Meshal Faleh Salem Alhabradi<sup>9</sup>, Saad Mohammed H Alotaibi<sup>10</sup>, Mutlaq Bender Awaid Al-Otaibi<sup>11</sup>

### Abstract

*Background: Over the last two decades, the WHO advocated that palliative care should be considered as a public health issue, with calls for earlier integration of palliative care within the wider healthcare system to improve access and availability. Integration of palliative care into other parts of the health system, and more broadly into society itself, is supported by primary health care in Saudi Arabia, palliative care is recognized as a public health issue with the need for earlier integration in the wider healthcare system. However, research indicates that it continues to be accessed late in the course of an illness, public understanding of palliative care is limited, and common misconceptions prevail. Strategies to address this are needed in order to reduce barriers to palliative care delivery and improve access. Aim of the study: To Assessment of the nursing home manager's knowledge, attitudes and beliefs about palliative care and advance care planning attitudes in Makah al-mokarramah City, Saudi Arabia 2022. Method: Cross-sectional descriptive study has been conducted among Population in the nursing home care centers in Makah Al-Mokarramah at Saudi Arabia, the period from the April to June, 2022. Self-administered questionnaire is designed based on previous studies and frameworks Assessment of the Public knowledge, attitudes and perception of palliative care and advance care planning attitudes in primary health care. The total sample has been (200) patients. Result: Show majority of the study groups were in the age range of (>50) years were (28.0%) regarding the gender many of the respondents were male (54.0%) while female were (46.0%) regarding Nationality the majority of the respondents Saudi were (64.0%) while Non-Saudi were (36.0%) regarding the Marital status, the majority of the respondents were married status were (42.0%) while divorced were (32.0%). Conclusion: The study results reveal that there is lack of knowledge nursing home manager's about advance care planning in patients the advance care planning, Palliative care is a patient-centered, integrated approach for improving quality of life for both patients facing life-threatening illnesses and for their families. Public knowledge, attitudes and perception of palliative care and*

<sup>1</sup> Specialist Nursing, Dawadmi general hospital, Saudi Arabia.

<sup>2</sup> Specialist Nursing, Dawadmi general hospital, Saudi Arabia.

<sup>3</sup> Specialist Nursing, Dawadmi general hospital, Saudi Arabia.

<sup>4</sup> Master Degree (Psychological and Mental Health Nursing)Eradah complex for mental health - Arar, Saudi Arabia.

<sup>5</sup> Nursing technician, Alyammah hospital, Saudi Arabia.

<sup>6</sup> Nursing specialist, Hotat sudair general hospital, Saudi Arabia.

<sup>7</sup> Nursing technician, Sajer General Hospital, Saudi Arabia.

<sup>8</sup> Nursing Specialist, Eradah Complex for Mental Health- Riyadh, Saudi Arabia.

<sup>9</sup> Nursing technician, Dawadmi General Hospital, Saudi Arabia.

<sup>10</sup> Nursing technician, Dawadmi General Hospital, Saudi Arabia.

<sup>11</sup> Assistant Nurse, Al Quwayyah General Hospital, Saudi Arabia.

*advance care planning attitudes in primary health care need to improve through training using an educational with tutorship, will an increase of knowledge.*

**Key words:** *Assessment, Nursing home manager's, knowledge, attitudes, perception, palliative care, advance care, Makah, Saudi Arabia.*

## **Introduction**

Palliative care is a multidisciplinary subject, and it is particularly associated with providing medical care for patients with life-limiting diseases. It emphasizes well-being at all points of the disease trajectory on the basis of need and regardless of prognosis [1]. Until now, only a few studies have dealt with topics such as resuscitation and life-prolonging measures or advance care planning (ACP) from the patients' perspective. A previous study examined the expectations and hopes that caregivers expressed towards the palliative care team [2]. Furthermore, there are studies that have described the preferred care and death location of patients [3], preferences for communication with physicians in the last phase of life [4] and the ideas that patients have about what makes a good palliative care physician [5]. The efficacy and proportionality of a treatment should be assessed with regard to a defined therapeutic goal to determine whether such a treatment is indicated. If the death of a patient is foreseeable, patient-centred comfort terminal care that is adapted to the situation should be the aim. A "do not resuscitate" (DNR) order means that in the case of a functional cardiovascular standstill, no mechanical, medical or electrical measures should be performed to revive the patient. Furthermore, in the case of rejection of resuscitation by a patient, this decision must be respected and documented. However, many patients lack knowledge of resuscitation [3]. The handling of resuscitation policies also varies within different countries and institutions. [6]

Globally, people are living longer, and many are living with complex, chronic conditions (World Health Organization) [7]. It is estimated that by 2060 there will be an 87% increase in the number of people dying with serious health-related suffering, and immediate global action is required to integrate palliative care into health systems [8]. Although there has been increased interest in palliative care for cancer patients, the palliative care competency from primary health care workers who care for cancer patients has rarely been investigated [9]

Public knowledge of palliative care (PC) is satisfactory in only twenty countries in, which does not include Saudi Arabia in spite of the global efforts done to enhance the public awareness of palliative care. [10] Palliative care (PC) could be defined as an approach to improve the quality of life of patients (and may be their families as well) suffering from life-threatening terminal illness, by means of prevention and relief of suffering through early identification; perfect assessment; and treatment of pain and other physical, psychosocial, and spiritual problems.[11]

The World Health Organization has promoted palliative care as being a public health issue and it was even considered by the United Nations agreements as a human right.[12] Although many governments accept this issue formally, the actual placing of PC within public health strategies and its translation into practice vary widely across the world, which is an issue related directly to the variations in the knowledge of Palliative care (PC) among both public populations and health-care providers.[13]

Despite the demand for palliative care among patients in Saudi Arabia, the development and expansion of this field have been slow. Advancements in palliative care in this country are hindered by several challenges, including an insufficient nursing workforce with palliative care specialization [14]. With a shortage of qualified local nurses, Saudi Arabia continues to rely on foreign nurses to meet the demands of its increasing population [15].

Cultural and religious backgrounds impact the attitudes toward and methods of palliative care rendered by healthcare workers as well as how patients accept a specific palliative care intervention [16]. Being the global center of the Islamic faith, with most of the population embracing Muslim culture and beliefs, Saudi Arabia may have different issues and considerations with regard to palliative care than those countries that are predominantly Christian [17].

## **Literature Review**

Several studies that were conducted to determine the public awareness and knowledge for palliative care showed low to very low awareness and knowledge toward palliative care in different countries.[18]

Study by Kozlov, et al. (2018) finding that public may claim to be aware of the term palliative care, there is an inadequate understanding of the concept, with only a fifth of the sample obtaining full scores, 14.2% of participants had no knowledge of palliative care. This is consistent with previous international, and national [10,19] literature. For example, a study undertaken in Northern Ireland that reported 19% of the 600 members of the public who completed a cross-sectional survey had no understanding of palliative care and a further 56% had very low knowledge [20] .

Etkind et al (2017) reported that based on an analysis of mortality statistics in England and Wales from 2006 to 2014, 160,000 more people annually will need palliative care by 2040, if the current mortality trend continues [21]. By 2060, an estimated 48 million people will have died with serious health-related suffering. In addition, the global burden of serious health related suffering will rapidly increase in low-income countries and among older people [22]. Further, although hospital deaths have consistently continued to increase , information related to patients' and families' experience of palliative care in a hospital setting is still limited [23]

According to a global research, public awareness of palliative care was considered satisfactory in only twenty countries all over the world till the year 2013 in spite of the global efforts done to enhance the public awareness of palliative care .[20]

Other studies showed that the palliative care knowledge level among population caring for noncancerous patients was lower than in population caring for cancer patients [24].

The development of palliative care all over the world has shown continuous and rapid progress on the delivery and improvement of palliative care. In 2011, more than half of the world's countries (58%) had at least one palliative care service, an increase of 21 (<9%) from 2006; however, palliative care was only integrated into the mainstream of care in twenty countries.[21] In Saudi Arabia, palliative care started in King Faisal Specialist Hospital and Research Center in Riyadh, Saudi Arabia, in the 90s. Since then, there were other major hospitals in Saudi Arabia that followed suit.[22] Choi and colleagues reported that nurses working in cancer units had higher scores than that working in general wards or ICUs [23], and nurses' palliative care knowledge level was significantly higher in cancer centres than in community hospitals, although the measures used to assess knowledge levels differed [25].

## **Rationale**

The researcher suggests that deficits in providers' knowledge and comfort in discussing palliative care for a difficult-to-predict disease present major barriers to referring patients with advanced from life-threatening terminal illness for palliative care. This issue is of high relevance due to the recent guidelines which emphasize the potential benefit of integrating palliative care in from life-threatening terminal illness management, indeed, the researcher highlights the need for increasing awareness of palliative care among healthcare providers, correcting misconceptions that it is only appropriate for the terminally ill. Future work

should seek to develop provider- and patient-centered interventions to reduce actionable barriers to palliative care uptake in from life-threatening terminal illness.

Aim of the study

To Assessment of the nursing home manager's knowledge, attitudes and beliefs about palliative care and advance care planning attitudes in Makah al-mokarramah City, Saudi Arabia 2022.

Objectives:

To Assessment of the nursing home manager's knowledge, attitudes and beliefs about palliative care and advance care planning attitudes in Makah al-mokarramah City, Saudi Arabia 2022.

## **Methodology**

Study design and setting:

This study is a cross sectional descriptive study

Study setting:

This study was conducted at in Nursing home Care Centers in Makah 2022

Study population and sampling:

Study participants have been recruited on Makah Al-mukarramh including Nursing home centers under supervision of Directorate of Health Affairs of Makah Al-Mukarramah in Saudi Arabia. The study has been carried out in the city of Makah Al-Mokarramah, Makah is the holiest spot on Earth. It is the birthplace of the Prophet Mohammad and the principal place of the pilgrims to perform Umrah and Hajj. The most important cities in Saudi Arabian . It is the holy city for all Muslims, and is located in the western region. It is located in the western area in Kingdom of Saudi Arabia .Contains a population around 2.578 million.

Study Population

The study will conducted among Population in the Nursing home care centers in the Makah Al-Mokarramah at Saudi Arabia. the period from the April to June, 2022 .

Selection criteria:

Inclusion criteria

- Participant aged 20–80 years;
- Able to speak and read
- Had previously complete the survey
- We're willing to participate
- Able to provide informed consent and
- Not have suffered bereavement within the last 6 months.
- All nationalities
- Both genders.

Exclusion criteria :

- Participant who not registered for the study PHCCs
- Patients with paralysis

➤ We're not willing to participate

Sample Size:

The researcher has used 50%, moreover, based upon a confidence level 95% and margin of error of 5%. The sample size calculated using the Raosoft calculator has be 200 of the agreed to participate in the study

Sampling technique:

Systematic random sampling technique is adopted. After that, by using random number generator, then simple random sampling technique was applied to select the Nursing home. Also, convenience sampling technique will be utilized to select the participants in the study. By using systematic sampling random as dividing the total population by the required sample size; (200 ).

Sample size

The study has been conducted among Population in the Nursing home centers in the Makah Al-Mokarramah at Saudi Arabia. Participants who met the eligibility criteria were sent study information and upon receipt of the consent form, will be invited to take part in a one-off focus group or telephone/ face to face interview., The sample size will be calculated by applying Raosoft sample size calculator based on (The margin of error: 5%, Confidence level: 95%, and the response distribution was considered to be 20%) accordingly the Sample size is(190) of (Physicians/residents, register nurses, Health technician) ' in the Nursing home and adding 10 more to decrease margin of error. After adding 5% oversampling, the minimum calculated sample will be (200). Computer generated simple random sampling technique was used to select the study participants.

Data collecting tools:

The self-administered questionnaire is designed based on previous studies and frameworks Assessment of the Public knowledge, attitudes and perception of palliative care and advance care planning attitudes in primary health care in Makah al-mokarramah City, Saudi Arabia 2022. The questionnaire was developed in English. The questions were first pre-tested and were revised and finalized after it was pilot tested. Before completing the survey, participants were required to indicate their consent using a forced response question followed by the survey questionnaires. The survey is estimated to take ~8 min to complete .

To collect the information, a set of questions were constructed and developed. All questions were closed-ended, with tick boxes provided for responses; participants answered the questionnaires from the April to June, 2022 the period of study in 2022.

The questionnaire consisted of questions that

First part General and Socio demographic information. These variables included contact data (email or mobile phone number), age, date, city of birth, and smoking (yes/no). Other variables were education level, employment status, income, marital status, parental status, and number of children, and area of residence.

A questionnaire was developed that had Socio demographic data and questions related to including participants' prior the Public knowledge, attitudes and perception of palliative care and advance care planning attitudes in primary health care among the people who visited the primary health care centers. The two senior faculty members checked the questionnaire's validity and comprehension, and it was revised according to their suggestions. A pilot study was conducted on 20 primary care population to check the questionnaire understands and responses further. The results of the pilot study were not included in the final analysis.

### Data analysis

In phase one, the number of correct responses were tallied, and scores ranged from 0 (lowest knowledge) to 13 (highest knowledge). “I don’t know”/ “Not sure” responses were coded as incorrect when calculating total PaCKS scores. All survey data were analysed in SPSS v 24.0. Descriptive statistics were used to summarize the participants’ demographic factors and other variables, including participants’ prior knowledge of palliative care.

A factor analysis was undertaken on PaCKS. appropriate variables; t Tests were conducted to compare PaCKS scores across gender. An analysis of variance (ANOVA) was conducted to analyses how age, country of birth, marital status, household income, and qualifications performed on the PaCKS.

#### Data collection technique:

Researcher will be visits the selected PHCCs center after getting the approval from the ministry of health. The researcher will be obtained permission from primary health care director and participants.

After the arrival of the participants to the PHCCs center, they should go to the reception first to register and ensure the presence of the center's card, the researcher will be select participants conveniently until the target number achieves and gives the questionnaire for answering. She will be explained the purpose of the study to all participants attending the Nursing home .

#### Data entry and analysis:

The Statistical Package for Social Sciences (SPSS) software version 24.0 will be used for data entry and analysis. Descriptive statistics (e.g., number, percentage) and analytic statistics using Chi-Square tests ( $\chi^2$ ) to test for the association and the difference between two categorical variables were applied. A p-value  $\leq 0.05$  will be considered statistically significant.

#### Pilot study

A pilot study will be conducted in one PHC in the same sector due to the similarity to the target group using the same questionnaire to test the methodology of the study. As a feedback, the questionnaire will be clear and no defect will be detected in the methodology.

#### Ethical considerations

Permission from the joint program of family medicine will be obtained. Permission from the Directorate of Health Affairs of the Holy Capital Primary Health Care will be obtained. Verbal consents from all participants in the questionnaire were obtained. All information was kept confidential, and results will be submitted to the department as feedback .

Budget: Self-funded

## Result

Table (1) Distribution of socio-demographic data among participant during palliative care and advance care planning in the study . (n=200)

	N	%
Age in years		
<30	54	27
30-40	46	23
40-50	44	22

>50	56	28
Gender		
Female	92	46
Male	108	54
Nationality		
Saudi	128	64
Non-Saudi	72	36
Marital status		
Single	32	16
Married	84	42
Divorced	64	32
Widow	20	10
Education level		
Uneducated	64	32
primary	62	31
Average	36	18
secondary	22	11
Postgraduate	16	8
Occupation		
Yes	152	76
No	48	24
Economic level		
Low	54	27
Medium	90	45
High	56	28
Duration of palliative care and advance care		
<5	56	28
5-10.	88	44
>10	56	28
Sources of information about palliative care		
Internet/social media	36	18
Booklets and brochures	42	21
Close friend/relative experience	64	32
Educational films	16	8
Close friend/relative	74	37

Table 1 show regarding age majority of the study groups were in the age range of (>50) years were (28.0%) while followed by age range of (<30) were (27.0%) but range (30-40) were (23.0%). Regarding the gender many of the respondents were male (54.0%) while female were (46.0%). Regarding Nationality the majority of the respondents Saudi were (64.0%) while Non-Saudi were (36.0%). Regarding the Marital status, the majority of the respondents were married status were (42.0%) while divorced were (32.0%). Regarding the Education level the majority of them had Uneducated were (32.0%) while primary were (31.0%). Regarding the occupation the majority of the respondents answers Yes were (76.0%) while No were (24.0%). Regarding economic level the majority of the respondents medium were (45.0%) while high were (28.0%) but low were (27.0%). Regarding the duration of palliative care and advance care the majority of the respondents in from (5-10) were (44.0%) while from (<5 and >10) were respectively (28.0%). Regarding sources of information about palliative care the majority of the respondents from close friend/relative were (37.0%) while Close friend/relative experience were (32.0%) but Booklets and brochures were (21.0%)

Table (2) Description the knowledge among participant during palliative care and advance care planning in primary health care

	N	%
A goal of palliative care is to address any psychological issues brought up by serious illness		
True	114	57
False	24	12
Not sure	62	31
Heard about palliative care and advance care:		
Never heard of palliative care	30	15
Only knew by name	44	22
Have a vague idea	32	16
Have a reasonable	94	47
Have a clear Knowledge about palliative care		
Yes	108	54
No	42	21
Not sure	50	25
Stress from serious illness can be addressed by palliative care		
True	122	61
False	36	18
Not sure	42	21
Palliative care can help people manage the side effects of their medical treatments		
True	110	55
False	38	19
Not sure	52	26
When people receive palliative care, they must give up their other doctors		
True	96	48



False	22	11
Not sure	82	41
Palliative care is exclusively for people who are in the last 6 months of life		
True	122	61
False	42	21
Not sure	36	18
People must be in the hospital to receive palliative care:		
True	134	67
False	48	24
Not sure	18	9
Palliative care helps the whole family cope with a serious illness		
True	134	67
False	44	22
Not sure	22	11
Palliative care is specifically for people with cancer.		
True	106	53
False	24	12
Not sure	70	35

Table 2 show the knowledge among participant patients during palliative care and advance care planning in in primary health care regarding a goal of palliative care is to address any psychological issues brought up by serious illness majority of the participant answer true were (57.0%) followed by Not sure were (31.0%) but False were (12.0%). Regarding heard about palliative care and advance care the majority of the respondents have a reasonable were (47.0%) while only knew by name were (22.0%). Regarding have a clear Knowledge about palliative care the majority of the respondents answer Yes were (54.0%) while Not sure were (25.0%) but answer No were (21.0%). Regarding stress from serious illness can be addressed by palliative care the majority of the respondents were True were (61.0%) while Not sure were (25.0%) but false were (21.0%). Regarding Palliative care can help people manage the side effects of their medical treatments the majority of the respondents answer true were (55.0%) while Not sure were (26.0%) but false were (19.0%). Regarding people receive palliative care, they must give up their other doctors the majority of the respondents answers true were (48.0%) while Not sure were (41.0%) but answer false were (11.0%). Regarding Palliative care is exclusively for people who are in the last 6 months of life the majority of the respondents answer true were (61.0%) while answer false were (21.0%) but Not sure were (18.0%). Regarding People must be in the hospital to receive palliative care the majority of the respondents answer true were (67.0%) while false were (24.0%) but not sure were (9.0%) . Regarding palliative care helps the whole family cope with a serious illness the majority of the respondents answer true were (67.0%) while false were (22.0%) but not sure were (11.0%). Regarding Palliative care is specifically for people with cancer the majority of the respondents answer true were (53.0%) while Not sure were (35.0%) but false were (12.0%)

Table (3) Description the knowledge about participant palliative care .

	N	%
A goal of palliative care is to improve a person's ability to participate in daily activities		
True	98	49
False	50	25
Not sure	52	26
Palliative care is designed specifically for older adults .		
True	126	63
False	46	23
Not sure	28	14
Palliative care is a team-based approach to care		
True	132	66
False	56	28
Not sure	12	6
Palliative care encourages people to stop treatments aimed at curing their illness		
True	138	69
False	48	24
Not sure	14	7
A goal of palliative care is to help people better understand their treatment options		
True	114	57
False	42	21
Not sure	44	22

Table 3 show the knowledge about participant palliative care regarding a goal of palliative care is to improve a person's ability to participate in daily activities the majority of the participant answer true were (49.0%) while Not sure were (26.0%) but False were (25.0%). Regarding Palliative care is designed specifically for older adults the majority of the respondents answer true were (63.0%) while false were (23.0%) but not sure were (14.0%). Regarding Palliative care is a team-based approach to care the majority of the respondents answer true were (66.0%) but answer false were (28.0%) while Not sure were (6.0%) . Regarding Palliative care encourages people to stop treatments aimed at curing their illness the majority of the respondents were True were (69.0%) but false were (24.0%) while Not sure were (25.0%) . Regarding a goal of palliative care is to help people better understand their treatment options the majority of the respondents answer true were (57.0%) while Not sure were (22.0%) but false were (21.0%).

Table (4) Description the attitudes among participant during palliative care and advance care planning in primary health care

Attitude	Agree		Neutral		Disagree		%	Chi-square	
	N	%	N	%	N	%		X <sup>2</sup>	P-value
	1. Advanced care planning is important to patients who are	130	65	48	24	22		11	84.67

diagnosed with life-threatening diseases.									
2. Advanced care planning can reduce the end-of-life care decisional crisis.	110	55	36	18	54	27	76.00	44.680	0.000
3. Advanced care planning can improve patients' and families' satisfaction about end-of-life care.	134	67	44	22	22	11	85.33	105.640	0.000
4. Advanced care planning reduces the likelihood of futile treatment at the end of life.	140	70	46	23	14	7	87.67	128.680	0.000
<b>Attitudes about palliative care and advanced care planning and patient responses</b>									
5. Advanced care planning can destroy patients' sense of hope.	126	63	42	21	32	16	82.33	79.960	0.000
6. Advanced care practice is the physician's responsibility	134	67	44	22	22	11	85.33	105.640	0.000
7. Most patients want to know about their diagnosis, prognosis, and available care options	100	50	46	23	54	27	74.33	25.480	0.000
8. Most patients with advanced cancer, if asked, want to discuss their wishes for end-of-life care with clinicians.	126	63	36	18	38	19	81.33	79.240	0.000

Table (4) show the attitudes among participant during palliative care regarding the advanced care planning is important to patients who are diagnosed with life-threatening diseases the majority of participant agree were constitutes (65.0%) followed by neutral were (48.0%), while a significant relation were P-value=0.000, and  $X^2$  (95.320) while % of finding (84.67), regarding the advanced care planning can reduce the end-of-life care decisional crisis the majority of participant agree were (55.0%) followed by disagree were (27.0%), while a significant relation were P-value=0.000, and  $X^2$  (44.680) while % of finding (44.680), regarding advanced care planning can improve patients' and families' satisfaction about end-of-life care the majority of participant agree were (67.0%) followed by neutral were (22.0%), while a significant relation were P-value=0.000, and  $X^2$  (105.640) while % of finding (85.33), regarding advanced care planning reduces the likelihood of futile treatment at the end of life the majority of participant agree were constitutes (70.0%) followed by neutral were (23.0%), while a significant relation were P-value=0.000, and  $X^2$  (128.680) while % of finding (87.67).

Regarding the attitudes about palliative care and advanced care planning and patient responses show regarding advanced care planning can destroy patients' sense of hope the majority of participant agree were constitutes (63.0%) followed by neutral were (21.0%), while a significant relation were P-value=0.000, and  $X^2$  (79.960) while % of finding (82.33), regarding the advanced care practice is the physician's responsibility the majority of participant agree were (67.0%) followed by disagree were (22.0%), while a significant relation were P-value=0.000, and  $X^2$  (105.640) while % of finding (85.33), regarding most patients want to know about their diagnosis, prognosis, and available care options the majority of participant agree were (50.0%) followed by disagree were (27.0%), while a significant relation were P-value=0.000, and  $X^2$  (25.480) while % of finding (74.33), regarding most patients with advanced cancer, if asked, want to discuss their wishes for

end-of-life care with clinicians. the majority of participant agree were constitutes (63.0%) followed by disagree were (19.0%), while a significant relation were P-value=0.000, and  $X^2$  (79.240) while % of finding (81.33).

Table (5) Description the perception among participant during palliative care and advance care planning in primary health care

perception	Yes		No		I do no		%	Chi-square	
	N	%	N	%	N	%		$X^2$	P-value
1. Giving nursing care to the dying person is a worthwhile learning experience.	86	43	64	32	50	25	55.50	9.880	0.007
2. Death is not the worst thing that can happen to a person	104	52	74	37	22	11	57.50	51.640	0.000
3. I would be uncomfortable talking about impending death with the dying person.	68	34	82	41	50	25	46.50	7.720	0.021
4. Nursing care for the patient's family should continue throughout the period of grief and bereavement.	90	45	76	38	34	17	53.50	25.480	0.000
5. I would not want to be assigned to care for a dying person	122	61	42	21	36	18	70.00	69.160	0.000
6. I upset when the dying person I was caring for gave up hope of getting better.	74	37	66	33	60	30	52.00	1.480	0.477
7. I upset when the dying person I was caring for gave up hope of getting better.	134	67	34	17	32	16	75.00	102.040	0.000
8. It is difficult to form a close relationship with the family of the dying person.	74	37	38	19	88	44	59.00	19.960	0.000
9. The family should be involved in the physical care of the dying person.	104	52	64	32	32	16	60.00	39.040	0.000

Table (5) show the perception among participant during palliative care and advance care planning in primary health care show regarding giving nursing care to the dying person is a worthwhile learning experience the majority of participant answer Yes were (43.0%) followed by No were (32.0%), while a significant relation were P-value=0.007, and  $X^2$  (9.880) while % of finding (55.50), regarding death is not the worst thing that can happen to a person the majority of participant answer Yes were (52.0%) followed by No were (37.0%), while a significant relation were P-value=0.000, and  $X^2$  (51.640) while % of finding (57.50), regarding I would be uncomfortable talking about impending death with the dying person the majority of participant answer No were (41.0%) followed by Yes were (34.0%), while a significant relation were P-value=0.021, and  $X^2$  (7.720) while % of finding (46.50), regarding nursing care for the patient's family should continue throughout the period of grief and bereavement the majority of participant answer Yes were (45.0%) followed by No were (38.0%), while a significant relation were P-value=0.000, and  $X^2$

(25.480) while % of finding (53.50), regarding would not want to be assigned to care for a dying person the majority of participant answer Yes were (61.0%) followed by No were (21.0%), while a significant relation were P-value=0.000, and X<sup>2</sup> (69.160) while % of finding (70.00), regarding upset when the dying person I was caring for gave up hope of getting better the majority of participant answer Yes were (37.0%) followed by No were (33.0%), while no significant relation were P-value=0.477, and X<sup>2</sup> (1.480) while % of finding (52.00), regarding upset when the dying person I was caring for gave up hope of getting better the majority of participant answer Yes were (67.0%) followed by No were (17.0%), while a significant relation were P-value=0.000, and X<sup>2</sup> (102.040) while % of finding (75.00), regarding difficult to form a close relationship with the family of the dying person the majority of participant answer I do no were (44.0%) followed by Yes were (37.0%), while a significant relation were P-value=0.000, and X<sup>2</sup> (19.960) while % of finding (59.00), regarding The family should be involved in the physical care of the dying person the majority of participant answer Yes were (52.0%) followed by No were (32.0%), while significant relation were P-value=0.000, and X<sup>2</sup> (39.040) while % of finding (60.00)

Table 6 Distribution of the relation of participant about the knowledge, attitude and perception of palliative care

Items		Data		Score		Chi-square	
		N	%	Range	Mean±SD	X <sup>2</sup>	P-value
knowledge	Weak	99	49.5	0-15.	7.49±2.723	63.49	<0.001
	Average	87	43.5				
	High	14	7.0				
Attitude	Negative	14	7.0	8-24.	17.115±3.631	146.205	<0.001
	Positive	186	93.0				
Perception	Negative	47	23.5	2-18.	11.160±3.299	55.125	<0.001
	Positive	153	76.5				

Table 6 Distribution of the relation of participant about the knowledge, attitude and perception of palliative care regarding the knowledge the most of participants weak knowledge were (49.0%) followed by average were (34.5%) but high were (7.0%) while heave a significant relation were P-value <0.001 and X<sup>2</sup> 63.49, regarding the score Mean+ SD (7.49±2.723), while Range (0-15), regarding attitude the most of participants positive attitude were (93.0%) followed by negative were (7.0%) while heave a significant relation were P-value <0.001 and X<sup>2</sup> 146.205, regarding the score Mean+ SD (17.115±3.631), while Range (8-24), regarding the perception the most of participants positive perception were (76.5%) followed by negative perception were (23.5%) while a significant relation were P-value <0.001 and X<sup>2</sup> 55.125, regarding the score Mean+ SD (11.160±3.299), while Range (2-18).

Figure (1) Distribution of the relation of participant about the knowledge, attitude and perception of palliative care

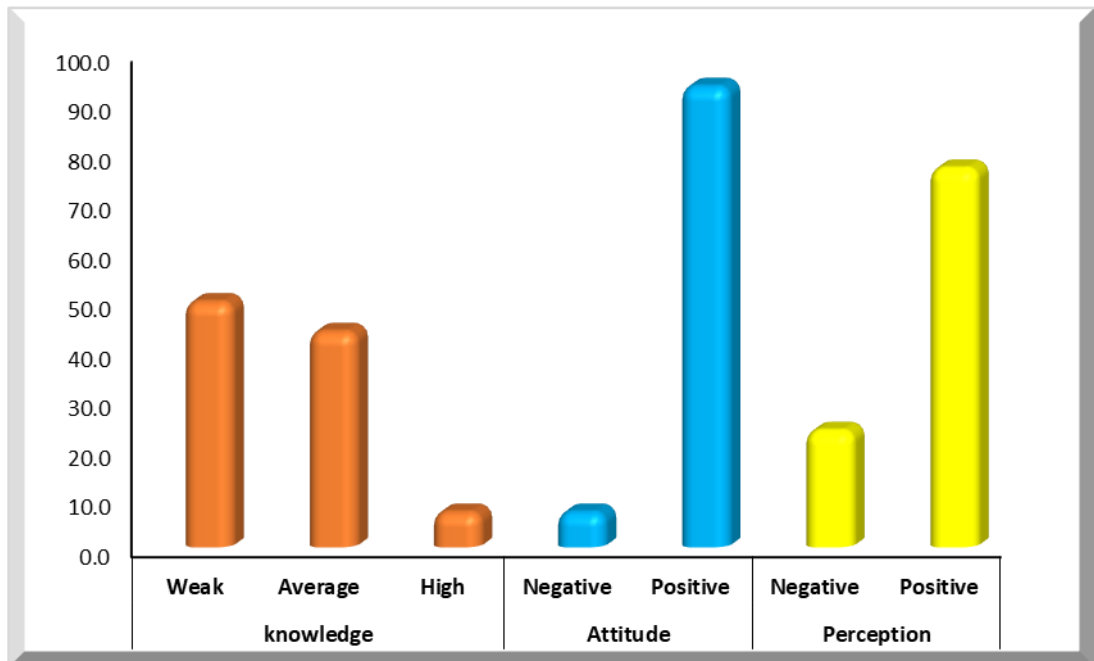


Table (7) Correlation between knowledge, attitude and perception during palliative care .

Correlations			
		Knowledge	Attitude
Attitude	r	0.701	
	P-value	<0.001*	
Perception	r	0.727	0.718
	P-value	<0.001*	<0.001*

Table(6) and figure(2,3,4) Show that is a significant positive correlation between knowledge and attitude were  $r= 0.701$  and  $p\text{-value} =0.001$  while is a significant positive correlation between knowledge and perception were  $r=0.727$  and  $p\text{-value} =0.001$  and a significant positive correlation between attitude and perception were  $r=0.718$  and  $p\text{-value} =0.001$

Figure (2) Correlation between attitude and knowledge

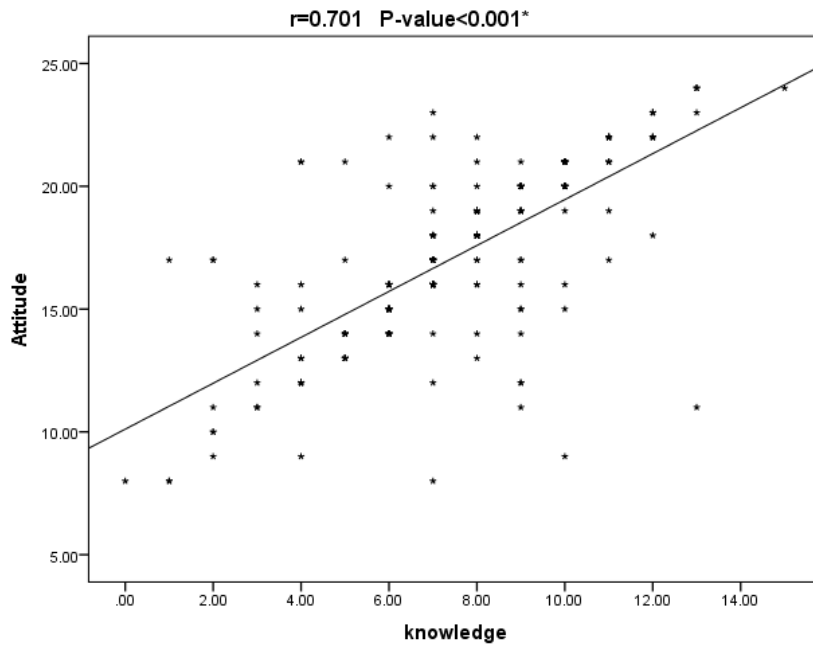


Figure (3) Correlation between perception and knowledge

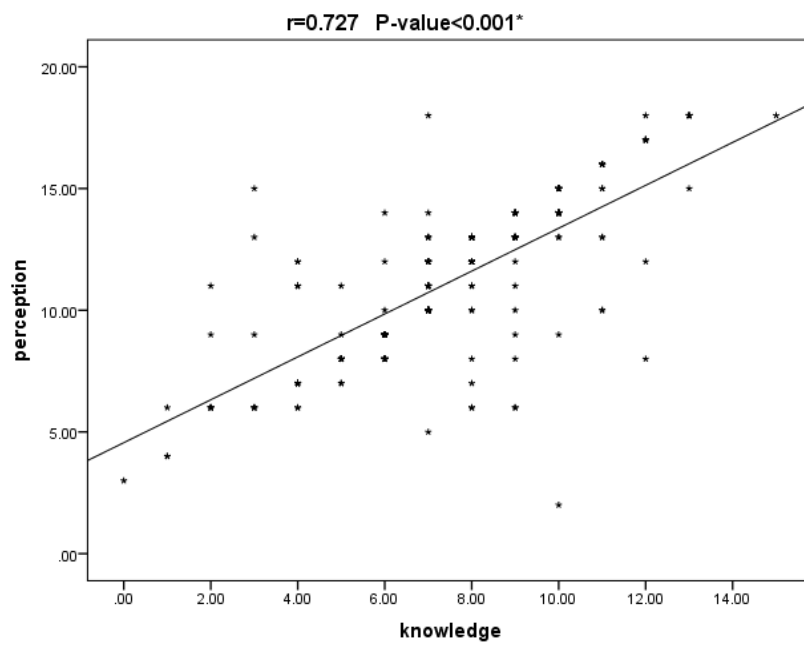
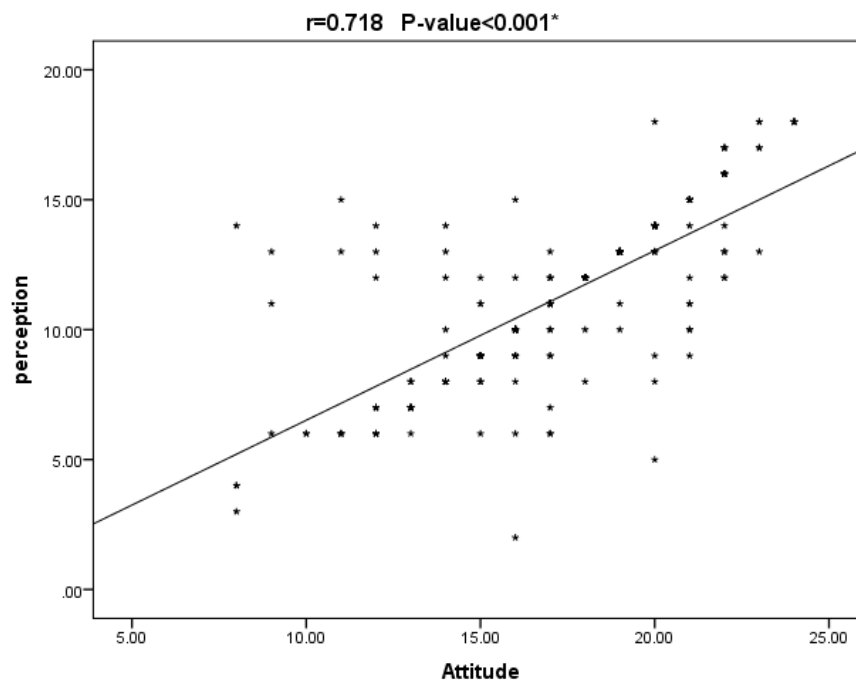


Figure (4) Correlation between perception and attitude



## Discussion.

Whilst the findings indicate the public may claim to be aware of the term palliative care, there is an inadequate understanding of the concept.[26] However, since that time that palliative care was introduced, there were very few articles that tackled on this subject matter, particularly on the public knowledge, attitudes and perception of palliative care and advance care planning attitudes. This study showed socio-demographic data among participant age majority of the study groups were in the age range of (>50) years were (28.0%), the gender many of the respondents were male (54.0%), nationality the majority Saudi were (64.0%), the Marital status married status were (42.0%), the Education level the majority had Uneducated were (32.0%), occupation the majority of the respondents Yes were (76.0%), duration of palliative care and advance care the majority of the respondents in from (5-10) were (44.0%) (See table 1)

On our study only (49.0%) of the sample obtaining weak knowledge scores . The current study identified 49.0% of participants had no knowledge of palliative care. This is consistent with previous international [24,27], and national [16, 28] literature. Based on the results of this study, public knowledge of palliative care was low at 49.0%. This 49.0% rate is significantly lower compared to the public awareness of palliative care found in Sweden (59%),[29] Japan (63.1%),[30] Northern Ireland,[31] and even Italy (23.5%).[32] Based on the Worldwide Palliative Care Alliance Global Atlas of Palliative Care at the End of Life published in 2014, Saudi Arabia is categorized as Group 3 a country, which is characterized by a patchy scope, not well supported, and donor-dependent palliative care program, with number of hospice-palliative care services and are often limited to Palliative Care center in major hospitals and home-based care.[34] Currently, there is no hospice-palliative care center in the entire kingdom. In practice, there is still a strong family bond that exists in Saudi Arabia that it is oftentimes considered a taboo to put a family member, particularly the older members of the family, in a hospice or a home for the aged centers unlike in the Western countries .

Regarding the relation of participant about the knowledge, attitude and perception of palliative care the knowledge the most of participants weak knowledge were (49.0%)



followed by average were (34.5%) but high were (7.0%) while have a significant relation were P-value <0.001 and X<sup>2</sup> 63.49, regarding the score Mean+ SD (7.49±2.723), while Range (0-15) (See table 6)

In addition, these study showed positive attitudes were (93.0%) attitudes towards palliative care. Participants reported educational needs for management, program, and counseling services they had received education in hospice, palliative, they displayed significantly higher confidence than their counterparts without such education. Participants' attitude level was similar to that found in other studies conducted in Korea and Saudi Arabia. [26]

In our study showed regarding attitude the most of participants positive attitude were (93.0%) followed by negative were (7.0%) while have a significant relation were P-value <0.001 and X<sup>2</sup> 146.205, regarding the score Mean+ SD (17.115±3.631), while Range (8-24)(See table 4,6)

According to Collins [35] one of the potential contributing factors to this is the general public's perception and level of knowledge about palliative care. Despite respondents in the current study advocating the need to hold open conversations about palliative care in society, they had concerns about the social taboo of talking about death and fear of causing upset. Qualitative comments highlighted that the public's exposure to palliative care was centered on the end of life period with the introduction of specialist health care professionals and services. For example, if the public view palliative care as predominately for people diagnosed with non-curative cancer this may lead to a false impression that this service is not appropriate for themselves or their loved ones. The need therefore for public health campaigns to recognize this disparity in what palliative care is seen to offer, from the public's perspective, needs to be recognized and responded to.[35]

In our study showed regarding the perception the most of participants positive perception were (76.5%) followed by negative perception were (23.5%) while a significant relation were P-value <0.001 and X<sup>2</sup> 55.125, regarding the score Mean+ SD (11.160±3.299), while Range (2-18). (See table 5,6)

## **Conclusion**

People are ready to talk about death and dying and palliative care and advance care has increased knowledge. A combination of top-down and bottom-up initiatives can increase knowledge, to support people towards shared decisions which align with peoples of life wishes and preferences. The findings resonate with and reinforce knowledge of people are ready to talk about death and dying, and palliative care has acutely increased awareness of this topic. Participants advocate the adoption of a public health framework and acknowledge the need for a combination of initiatives across levels to increase knowledge, and service utilization. This would encourage preparation of advance care plans and support health professionals and people towards shared decisions which closely align with peoples of life wishes and preferences.

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