Impact of Nurse's Depression on Caring Dimensions at Oncology Care Unit

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Abstract: Caring has been widely discussed in the health care professions, especially in nursing which is considered to be one of the caring professions. The care in oncology settings causes special stress of care takers especially oncology nurses. Oncology nurses see patients dieing every day due to failed treatment or late diagnosis. This incidence has negative psychological feelings on nurses. Consequently have negative implications upon the different caring dimensions in oncology settings. However, few researchers have examined this issue. Hence, the purpose of this research is to assess the impact of nurse's depression on caring dimensions at oncology Care unit. The study was conducted at oncology unit in Al Ain hospital in U.AE. Forty oncology nurses were included in the study. Three tools were used by the researcher for data collection. Oncology nurses demographic data through a structured interview schedule. Beck Depression Inventory (BDI) to measure depression of oncology nurses, and caring dimension inventory (CDI) to gather oncology nurses perceptions of caring dimension in oncology settings. The results revealed that the majority of oncology nurses were experience mild and moderate levels of depression (55% and 30% respectively). 15% of the study subjects had severe level of depression. Oncology nurses were perceived the importance of caring in all aspects of care (57.5%, 45.0%, 67.5% respectively) $P = 0.342$. Overall, results shows statistically significant positive correlation between oncology nurses depressive level and their years of experience in oncology settings ($P = 0.001$). A statistical significant difference was found between levels of depression and oncology nurses perceptions of aspects of nursing practice to be caring ($P = 0.001$).
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1. Introduction

Caring is the essence of nursing which has been widely discussed in the health care professions, especially in nursing which is considered to be one of the caring professions. Caring to be meaningful needs to be based on mutual agreement between nurses and patients as to what constitutes nurse caring behaviors. As a result, healthcare professional can enhance patients' satisfaction of care by providing appropriate caring behaviors [1,2].

The care in oncology settings causes special stress of care takers especially oncology nurses, who can see patients dying every day due to failed treatment or late diagnosis. Many studies reported that nurses who work with patients with incurable disease experience high levels of stress and burnout [3].These burnout and stress demonstrate itself in negative attitudes and behaviors such as blaming, short temper, and short attention span, these behaviors can block positive interpersonal relationships and make the goal of quality patient care almost impossible to accomplish [4,5].

On the other hand, according to investigations on this issue, the stressor on health professionals serving cancer patients are severities of patient's conditions, offering unsatisfactory care, being unable to control the results of efforts, death of patients, problems of patient's family, work load, and problems of communication with team member These sources of stress and its effect on health care professionals working with cancer patients is well known and a matter of concern. [6].

Many studies have documented the high incidence of depression in oncology nursing staff to the amount of directs patient care. Other consequences, nurses may fail to communicate necessary patient information to other providers,fail to attend to some details of care,or make contact with patient more than is clinically necessary.These incidences have negative psychological feelings on nurses but they aren't aware of it and a negative impact on care given as well[7-9].

The oncology nurse has become an integral component of the cancer –care team. In deed the literature suggests that an oncology nurse in this position is at risk of depression as dealing with distressed patients face-to-face and having responsibility for their well-being and safety [10]. That is why nurses must recognize their psychological symptoms due to stress and its negative implications upon the different caring dimensions which results in poor quality care in oncology settings.

Cancer is a major problem globally and effective cancer care services are needed to Lessen its burden on health professionals mainly oncology nurses. Oncology health services provision is not located

efficiently, resulting in few patients receiving High-quality care [11]. Furthermore, shortages of health professionals and underdeveloped services such as primary care, home care and palliative care have aggravated the problem.In spite of that there aren't adequate studies on nurse's perceptions in regard to nursing care of cancer patients in African and Asian countries [2]. As such, **this study investigates the impact of nurse's depression on caring dimensions at oncology care unit.**

Aim of the Study

The aim of the study is to:

1. Assess the degree of depression among oncology nurses.
2. Investigate the impact of nurse's depression on caring dimensions at oncology care unit.

2. Material and Methods

Design:

A cross-sectional descriptive design was used in carrying out this study.

Setting:

The study was conducted at oncology care unit in Al Ain hospital in U.AE.

Subjects:

Forty nurses who involved in providing direct patient care working in oncology setting.

Criteria for inclusion:

Nurses, who had worked on the oncology ward for at least one year, were eligible to participate. All oncology nurses who were available regular hours on both shifts/day during the period of data collection, excluding the nurses who refuse to share in the study.

Tool

Three tools were used by the researcher for data collection.

Tool (I): Oncology Nurses Demographic Data:

This tool was a structured interview schedule for quantitative data developed by the researcher about age, marital status, nationality, qualification, years of experience and working hours /shift /day in oncology department**.**

Tool (II): Beck Depression Inventory (BDI)

This tool was developed to measure depression. The BDI contains 21 statements that cover items related to the basic symptoms of depression, such as hopelessness and irritability, as well as physical symptoms such as fatigue and weight loss. Each answer of the participants was scored on a likert scale ranging from 0 to 3 Beck (1972). Nurses considered having no level of depression if their scores ranged from 0 to 12 and to have mild level if their level ranged from 12 to 20. On the other hand, moderate depression ranged from 21 to 31 and severe depression more than 31. The validity and reliability for the Arabic version of BDI were demonstrated by Ghareeb (2000) on a sample of male and female subjects. The tool was proved to be valid and reliability coefficient ranged from 0.76 to 0.75 [12].

Tool (III): Caring Dimension Inventory (CDI)

This tool was developed by lea and Watson, [6] it consists of 25 core items of nursing practice to be caring. The items were categorized into the following 3 subscales: **psychosocial aspects of care which includes 12 items** to be caring (making a nursing record about the patient, explaining a clinical procedure, reporting a patient's condition to a senior nurse,being with a patient during a clinical procedure, being honest with a patient, listening to a patient, instructing a patient about self-care,measuring of vital signs, being technically competent with a clinical procedure, giving reassurance, providing privacy, observing the effects of a medication on a patient), **Technical aspects of care which includes 7 items to be caring** (feeling sorry for a patient, sitting with a patient, exploring patients life style, consulting with a the doctor about a patient, putting the needs of a patient first, involving a patient with his care, being cheerful with a patient), and **professional aspects of care which includes 6 items to be caring** (assisting a patient with activity of living, getting to know the patient as a person, organizing the work of others for a patient, sharing your personal problems with a patient, keeping relatives informed about a patient). Acceptance of oncology nurses on the aspects of care, indicate their agreement to items about their nursing practice as constituting caring.

Scores assigned to each item were between 1 and 5 points, grading from the least important (1) to the most important (5). The likert scale that ranges as the following: 1(not at all/never), 2 (very little), 3 (sometimes), 4 (most of the time), 5 (all of the time/ always). The higher the score, the higher agreements of 0ncology nurses perceptions of the importance of caring which should be practice for oncology patients. CDI scale scores were calculated by summing the responses of individuals to the CDI items, the final responses became on a three –points likert scale (**Always, Sometimes, Never**) for the nursing practice to be caring.

Each statement of caring was listed as follow: **Never care** = score I, **Sometimes care** = score II, **Always care** = score III. The total score for all the nursing practice to be caring were 75. The score was considered high when the total score was more than **59** while, the score was considered moderate when the total score was between **43 and 59.** The score was considered poor when the total score was lower than **43**. So the higher score indicates the higher agreements of 0ncology nurses perceptions of the importance of caring which should be practice in oncology settings.

Methods

- Permission was taken from authorized personnel in the previously mentioned hospital to conduct this study.
- Tools were structured based on the review of relevant literature. The tool was revised by 5 experts in the field of nursing to test content validity and clarity. Necessary modifications were done. The tool was test for reliability using test-retest. Alpha= (0.78).
- A pilot study was done on 5 oncology nurses to test feasibility of the tool.
- The required verbal approval from all oncology nurses were taken for carrying out the study. The researcher explained the purpose of the study to the oncology nurses; each nurse was interviewed through self report method. Time taken for completion of the questionnaire by each nurse was 25-30 minutes. The fieldwork was carried out from February 2012 to June 2012.

Statistical analysis

Data was analyzed using SPSS statistical software package. Quantitative variables are described by the mean; standard deviation (SD).Qualitative categorical variables are described by proportions and percentages. Chi-square tests are used. Statistical significance was considered at P –Value < 0.05.

3. Results

Table (1) illustrates the socio demographic characteristics of the study subjects. Around 90% of the study group's age ranges between 30 - < 40 years, with a mean age score 32.0 + 2.25. Nearly three quarters of oncology nurses (87.5%) were non-Emirate and had diploma of nursing (80%) comparing to 20% were had bachelor degree of science in nursing. As regards years of experience, 82.5% of oncology nurses had less than ten years of experience in oncology settings and only 17.5% of them had 10 years and more. The highest percentage of the studied oncology nurses (70%) working 8hrs/shift/day and the rest (30%) working 10hrs /shift/ day.

Table (2) shows the levels of depression among oncology nurses. The majority of oncology nurses were experience mild and moderate levels of depression (55% and 30% respectively). The table also revealed that 15% of the study subjects had severe level of depression. The mean score of depression was 31.75 + 8.95.

Table (3) points out oncology nurses perceptions of aspects of nursing practice to be caring. Concerning the psychosocial aspects of care, 57.5% of oncology nurses always practice the psychosocial aspects of care compared to 27.5% and 15% were sometimes or never practice it respectively. As regards technical aspects of care, nearly half of oncology nurses (45%) were always caring by involving the patient with his /her care, being cheerful with a patient,sitting with a patient and feeling sorry for a patient. on the other hand, 35% of oncology nurses were sometimes caring and 20% of them never practice the technical aspects of care. Regarding the professional aspects of care, the majority of oncology nurses (67.5 %) were always practice care as keeping relatives informed, getting to know the patient as a person and being neatly dressed on duty.

It was found that no significant difference exists between the three caring dimensions for nursing practice. Oncology nurses were perceived the importance of caring in all aspects of care (57.5%, 45.0%, 67.5% respectively) $P = 0.342$.

Table (4) illustrates the relationship between levels of depression among oncology nurses and years of experience. It is shown from the table that nearly half of oncology nurses (47.5%) suffered from depression over a period of less than 5 years of experience, while 35% from the total studied sample had depression for 5 years' experience to less than 10 years. Only 17.5% of oncology nurses experience depression for 10 years and more.

Overall, table (4) shows statistically significant positive correlation between oncology nurses depressive level and their years of experience in oncology settings $P = 0.001$.

Table (5) presents the relationship between levels of depression among oncology nurses and working hours /shift /day. The findings shows that the majority of oncology nurses (65%) who had mild to moderate degree of depression were working 8hrs. /shift/ day. The rest of oncology nurses (30%) who experience depression were working 10 hrs. / Shift /day. 10 out of 30 percentage of oncology nurses were suffering from severe depression who worked for continuous 10 hours /shift / day.

Depression among oncology nurses were not proved to be positively correlated with working hrs. / Shift /day. No statistical significant difference was found ($P = 0.122$).

Table (6) shows the correlation between oncology nurses perceptions of aspects of nursing practice to be caring and levels of depression. As regards mild level of depression, the highest percentage was observed in oncology nurses (42.5% out of 55%) who always agree to practice all aspects of nursing practice to be caring in oncology settings. while oncology nurses who always / sometimes agree to practice care (12.5% and 12.5% respectively out of 30%) had a moderate level of depression. Regarding severe degree of depression, oncology nurses (10% out of 15%) who never /disagree to practice nursing care in oncology settings showed severe level of depression.

This indicates that oncology nurse's depression has an effect on their nursing care provided in oncology settings. A statistical significant difference was found between levels of depression and oncology nurses perceptions of aspects of nursing practice to be caring ($P = 0.001$).

Table (1): Socio-demographic Characteristics of oncology nurses

Demographic data	No (n = 40)	%
Age (in years)		
<30	21	52.5
30 -	15	37.5
>40	4	10.0
Mean ± SD	32.0 ± 2.25	
Nationality		
Emirates (local)	5	12.5
Non- Emirates	35	87.5
Qualification		
Bachelor degree of nursing	8	20.0
Diploma of nursing	32	80.0
Years of experience		
1 - < 5	19	47.5
5 - <10	14	35.0
10 and more	7	17.5
Working Hours /shift / day		
8 Hrs/ shift / day	28	70.0
10 Hrs /shift/day	12	30.0

Table (2): Levels of depression among oncology nurses

Levels of Depression	Frequency No (n = 40)	%
Normal (0-12)	0	0.0
Mild depression (13-20)	22	55.0
Moderate depression (21-31)	12	30.0
Severe depression (≥ 32)	6	15.0
Mean ± SD	**31.75 ± 8.95**	

Table (3): Oncology nurses perceptions of aspects of nursing practice to be caring.

Caring Dimensions for nursing practice	Oncology nurses perceptions of aspects of nursing practice to be caring						Total (n = 40)	
	Always (n = 22)		Sometimes (n = 11)		Never (n = 7)			
	No	%	No	%	No	%	No	%
Psychosocial aspects of care	23	57.5	11	27.5	6	15.0	40	100.0
Technical aspects of care	18	45.0	14	35.0	8	20.0	40	100.0
Professional aspects of care	27	67.5	7	17.5	6	15.0	40	100.0
MC*p*	0.342							

P: *p* value for Chi square test

Table (4): Relationship between Levels of depression among oncology nurses and years of experience

Years of experience	Levels of depression						Total (n = 40)	
	Mild (n = 22)		Moderate (n = 12)		Severe (n = 6)			
	No	%	No	%	No	%	No	%
1 <5	15	37.5	4	10.0	0	0.0	19	47.5
5 - <10	5	12.5	7	17.5	2	5.0	14	35.0
10 and more	2	5.0	1	2.5	4	10.0	7	17.5
^{MC}p	0.001*							

p: p value for Monte Carlo test
*: Statistically significant at $p \leq 0.05$

Table (5): Relationship between Levels of depression among oncology nurses and working hours

Working hrs./shift/day	Levels of depression						Total (n = 40)	
	Mild (n = 22)		Moderate (n = 12)		Severe (n = 6)			
	No	%	No	%	No	%	No	%
8 hrs./shift/day	17	42.5	9	22.5	2	5.0	28	70.0
10 hrs./shift/day	5	12.5	3	7.5	4	10.0	12	30.0
^{MC}p	0.122							

p: *p* value for Monte Carlo test

Table (6): Relationship between Oncology nurses perceptions of aspects of nursing practice to be caring and levels of depression

Levels of depression	Oncology nurses perceptions of aspects of nursing practice to be caring						Total (n = 40)	
	Always (n = 22)		Sometimes (n = 11)		Never (n = 7)			
	No	%	No	%	No	%	No	%
Mild depression	17	42.5	4	10.0	1	2.5	22	55.0
Moderate depression	5	12.5	5	12.5	2	5.0	12	30.0
Severe depression	0	0.0	2	5.0	4	10.0	6	15.0
^{MC}p	0.001*							

p: *p* value for Monte Carlo test *: Statistically significant at $p \leq 0.05$

3. Discussion

Oncology nurses experience distress due to care giving roles, and this stress has been shown to continue over time and may be exacerbated by changes in the patient's condition.[13,14] The literature reported that the interactions with oncology patients, and the need to cope with death have been found to be major stressors. Also, the cumulative losses of their patients may lead to anger, guilt, irritability, frustration, feeling of helplessness and inadequacy, sleeplessness, and depression. [2] Moreover, the relationship between the oncology nurses and their patients for long time may lead the nurses to experience considerable depression. [15]

The study proved that, more than two thirds of an oncology nurses had depression ranging from mild to moderate level and the rest had severe degree of depression. This high prevalence can be explained by the multiple stressors mainly the emotional burden of caring and distress due to care giving roles put upon oncology nurses. This result is in line with Pierce (2007), and Mohran *et al.* (2005) who mentioned that staff working in oncology report high levels of work-related stress in acute oncology settings related to high workload and lower levels of job satisfaction[16, 17]. Moreover, Mukherjee (2009) and Dougherty (2009) supported this result as they stated that 30% of oncology staff reported instances of sickness absence,

nearly 40% indicated a desire to leave, and 17% intended to look for a new job in the next year. The most common reason given by oncology staff was work-related stress [18,19]. A report by Watts *et al.* (2010) states that more than 70% of their sample of Australian oncology nurses are experiencing moderate to severe levels of depression [20].

The present study revealed a statistical significant relationship between an oncology nurses level of depression and years of experience in oncology units. The more the depression is prevalent among oncology nurses, the less years of experience in oncology units. As the study cleared, oncology nurses who had less than 5 years' experience, appeared to have the higher scores of depression. This may be due to many facts that stress result from an imbalance between the demands of the workplace and an individual's ability to cope, the interactions with distressed patient's face–to-face that need special tolerance to deal with death and dying as a major stressors (incurable disease) and the workload which reduce nurse motivation for direct care. This result is congruent with Sherman (2004) who found that stress decreased as work experience increased [3]. Also, Wilkinson (1994) who found that high levels of depression among oncology nursing staff are higher among staff that is younger, who are less experience and more recent graduates[21]. Evidence shows oncology nurses knowledge scores were positively correlated to length of working experience and low levels of depression [22].

Obviously, the field of oncology isn't for every nurse, many nurses that come to the oncology field don't stay because the job is very stressed and depressing.

In the current study, there is no statistical difference show between level of depression and working hours among an oncology nurses. This result would give us clues about the stress experienced by oncology nurses as a qualitative experience described as a stressful job and not by quantity of the working hours. In contradiction with this result, Isikhan *et al.* (2oo4), found that stress had an important impact on the health of oncology nurses working with cancer patients and it can be reduced by decreasing working hours [23]. Also Gruafeld *et al.* (2oo5) stated that it was reinforced by the large numbers of staff who reported a serious consideration to leaving or reducing work hours in oncology units [24]. Another point of view, Einhorn *et al.* (2002) found that work demand in the form of increased documentation and supervision, considered being a greater stress than the stress of dealing with oncology patients which indirectly can lead to depression (15).

In the current study, the results revealed no significant difference between the three aspects of caring dimensions for nursing practice. An Oncology nurses perceived the importance of caring in the psychosocial, technical, and professional aspects of care. This may be due to the fact that caring as the performance of basic nursing care activities are in accordance with Maslow's hierarchy of needs and the life-saving purpose of professional actions. Also nurses should demonstrate their technical skills and scientific knowledge to meet basic needs of the patients before they proceed to address the emotional and affective aspects of caring. Also, this result could be related to the fact that oncology nurses may establish a long-term care relationship so they may develop more consistent perceptions regarding the importance of caring behaviors.

The findings differ from a large number of earlier studies which showed that nurses did not concur on the importance of caring behaviors [21,25, 26]. These studies demonstrated that oncology nurses tend to stress the more qualitative dimensions of care and underrate physical care issues, which are perceived by patients as more essential. However, it seems that there are exceptions to this pattern because other study results clearly indicate that clinical skills are still valued and respected by a proportion of nurses. For example, Keane *et al.* 's and Azizzadeh *et al.* 's studies explored perceptions of caring by nurses using the Care-Q instrument; they found that nurses viewed competent clinical expertise as the most important component of a nurse-patient caring interaction [27,25].Also, Dowling found that nurses' technical skills were alluded to by nurses interviewed as a contributing factor to the closeness of their relationship. When the patient trusted the nurse's competence with regard to their technical skills, they wanted that nurse to care for them [28]. In a recent theoretical account on caring, researcher supported the notion that helping patients with big (e.g. pain relief) or little (e.g. hair dressing) things regarding their physical care is an important element of the caring process [20].

To sum up, based on the findings of this study regarding caring, nurses agree on the importance of caring regardless the aspects of caring.

One of the most important results of this study is the statistical significant relationship found between level of depression and an oncology nurses perceptions of aspects of nursing practice to be caring. It was found that an oncology nurses who always practice all aspects of caring with cancer patients suffering from mild degree of depression. This means that nurse's level of depression had its serious impact on all aspects of nursing practice to be provided for cancer patient. There is a link between nurse's psychological distress and their perceptions of aspects of nursing practice to be caring. Oncology nurses

were not aware for their depressive symptoms and its effect on their quality of care provided to cancer patients.

This result congruent with Given *et al.* (2005) who stated that nurses reported levels of depressive symptoms that in many instances has its effect on nursing practice to be caring. [(10)]. Consistent with *Radwin et al.* (2005) who found that oncology nurses were efficient for caring of cancer patient, but they had an uncaring response due to routine practice for many years in oncology units [(8)]. Furthermore, heavy workload has dramatically reduced nurse motivation and the time allotted for direct care, which in turn lead to problems in patient care as a result of may diminish in the quality of care provided.

The study refines understanding of the relationship between aspects of nursing practice to be caring and degree of depression. The study revealed that aspects of nursing practice to be caring were affected conversely by degree of depression and oncology nurses not aware of outcomes. In the light of the above findings, it is obvious that working in oncology settings has its negative impact on nurse's psychological state. Consequently, have negative implications upon the different caring dimensions in oncology setting.

Conclusion

- The present study revealed a statistical significant relationship between an oncology nurses level of depression and years of experience in oncology units.
- The present study proved a positive statistical significant correlation between oncology nurses levels of depression and the aspects of nursing practice to be caring for cancer patients.

Recommendations

- All oncology nurses should be members of Oncology Nursing Society (ONS). Their initial goals were to provide a forum for discussing practice issues in cancer nursing and to develop mechanisms for nurses to contribute to this evolving specialty.
- Continuing education programs about the concept of quality in order to help oncology nurses meet the caring expectations of oncology patients. Seminars, workshops, symposiums should be planned related to the issues of quality care.
- Psychotherapy to reduce negative feelings among nursing staff, speaking with staff nurses to ventilate their feelings and reflect their feedback and existing coping skills.
- Teach stress management techniques to help oncology nurses to assess their strength points and limitations.

Suggested research

The practical approach to the concept of caring requires that both the patients and the nurses interpretations of caring be examined. It is imperative that nurses validate with the patients that their care needs are being met.

Limitations of the study

The findings of the present study need to be considered in the light of several methodological limitations. The study sample produced unconvinced sampling for oncology nurses and different hospital settings and thereby disregarded the possibility that perceptions of caring were influenced by the context. Therefore the findings cannot be generalized to other oncology patients or institutes.

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