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EXPLORATION OF NURSES' EMOTIONS: INTENSIVE THERAPY NURSES IN JORDAN

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ABSTRACT

This study aims to investigate the situations encountered by Jordanian Intensive Therapy Nurses (ITNs) and to explore the range of emotions experienced by them. Non-participant observation technique is used to detect situations encountered by ITNs, and interview technique is used to explore the range of emotions experienced.

The study was conducted in three different intensive therapy units: Adult Intensive Therapy Unit (AITU); Paediatric Intensive Therapy Unit (PITU) and Post Cardiac Therapy Unit (PCSU). Observations of situations and interviews for experienced emotions took place over three weeks.

Twenty different situations revealed fifty-two different emotions. Situations affecting nurses within intensive therapy units were categorized into five themes: technology; advanced nursing procedures; nurse-patient relationships; nurse-human relationships and working conditions. The revealed emotions were categorized into five emotional groups: professional, mutual, self-worth, disparaged and physical emotional group.

This study was the first phase of the three phases of triangulation methodology, so a recommendation was made to carry on to the next phase for deeper exploration of nurses' emotions through in-depth interviews.

Keywords: Nurse, Intensive Therapy, Emotions

INTRODUCTION

Emotions are internal factors that energise, direct and sustain behaviour (Rubin & McNeil, 1983). The six primary emotions-surprise, fear, disgust, anger, happiness and sadness can be expressed facially, while many other emotions (the terms 'emotions' and 'feelings' are used interchangeably in this study) cannot be expressed facially, e.g. the feeling of competence, confidence or guilt.

Intensive therapy units (ITUs) has stressful environments (Clarke, 1984a; Vachon & Pakes, 1985). An analysis of 23 studies was done considering stress in intensive therapy settings and non-intensive therapy settings,which showed that the level of stress experienced by ITNs was higher than that experienced by non-ITNs (Stechmiller & Cheek, 2002). Nurses in an intensive therapy context face multiple stressors. These stressors are categorised into three types: contextual, interactional and emotional. Contextual stressors originate from the ITU environment, while interactional stressors originate from nurses' interpersonal relationships with patients, patients' relatives, colleagues and physicians. Emotional stressors are the results of both contextual and interactional stressors on nurses' emotions.The experience of stress is usually described in ways associated with emotions like anger, anxiety, depression, fear, grief, guilt, jealousy and shame. This study focuses on the emotional experience of stressors within Jordanian ITNs. 'Stress emotion' as termed by Lazarus (1982) is consistent with the term emotional stressor in the current study. Contextual, interactional and emotional stressors are the result of nurses' emotional and technical care. This study proposes a relationship between stressors and the emotional changes within nurses in the intensive therapy context.

Many authors have addressed various aspects of intensive therapy nursing such as stress in ITUs

(Clarke, 1984a; Vachon & Pakes, 1985; Foxall *et al.*, 1990; White & Tonkin, 1991; Stechmiller & Cheek, 2002), coping strategies of ITNs (Clarke, 1984b; Dewe, 1987), grief (Saunders & Valente, 1994), burnout (Lipley, 1998), but none of them has addressed the emotional dimension of a nurse within the intensive therapy context.

Purpose and Objectives of the Study

The objectives of this study are:

1. Explore the emotional situations encountered by Jordanian ITNs.

2. Describe the range of emotions experienced by Jordanian nurses working in ITUs.

3. Identify a range of emotions that are highly meaningful to Jordanian ITNs

RESEARCH METHODOLOGY

This investigation was designed to compile basic data and to explore a subject which has not been studied in the intensive therapy context. The most useful and meaningful evidence for further exploration and analysis had to be identified. To do so, the multiple triangulation Mitchell (1986) methodology was used. Between-method triangulation with sequential implementation Denzin (1989) was used. Triangulation in this study consisted of three inter-related phases (this article covers the first and second phases). The first phase employed a qualitative exploratory approach using observations and interviews in order to describe the range of emotions experienced by ITNs and to formulate a questionnaire that contains the nurses' emotions in ITU. This phase would meet the first and second objectives of the current study. The second phase employed a quantitative approach using a self-reporting questionnaire (that was developed from first-phase findings), to identify the range of emotions that are highly meaningful to ITNs and will help to formulate an interview guide for the collection of data for the third phase. This phase was designed to meet the third objective. The final phase will employ a qualitative approach using in-depth interviews based on the second phase findings.

The first phase involved observations and structured discussions with three ITNs working in different intensive therapy settings; Adult Intensive Therapy Unit (AITU), Paediatric Intensive Therapy Unit (PITU) and Post-Cardiac Surgery Unit (PCSU). The three ITNs were Jordanians with many years of experience in intensive therapy nursing. This period was intended to describe the range of emotions experienced by these nurses while working on intensive therapy contexts. The second phase involved 73 ITNs from three different hospitals; a public hospital, a university hospital and a private hospital. This phase aimed to identify a range of "highly meaningful feelings", as perceived by ITNs.

The current study is framed within a 'constructivist paradigm', in which knowledge and truth are the results of the perspective from which they are created by mind, and not simply discovered (Schwandt, 1994). Knowledge is an active operation in which the mind processes and forms an understanding:

"Constructivism means that human beings do not find or discover knowledge so much as construct or make it. We invent concepts, models, and schemes to make sense of experience and, further, we continually test and modify these constructions in the light of new experience" Schwandt (1994).

The 'constructivist paradigm' is a wide-ranging eclectic framework (Guba & Lincoln, 1989). It attempts to make sense of or interpret people's experience in a natural context. As a result, it was concluded that at the end of the current study, the nature of construction depends upon the different ranges of information available and on how this information is processed using statistics and mental processes. The study employs a large number of data collections, ranging from passive observation to frequent interviewing, self-reporting questionnaire and in-depth interviewing in order to build up constructive procedures based on nurses' perceived emotional experiences.

Triangulation is a process of confirmation in which each research phase confirms the previous phase. For example, the ITNs who completed the questionnaire in the second phase confirmed the questionnaire items, which were the main findings of first phase. In case of non-confirmation, majority of nurses would tick on the item as not applicable or not meaningful. Ticking the items as meaningful could be interpreted as an indicator of confirmation of previous findings. Many researchers have used triangulation for the purpose of confirmation in their studies (Mitchell, 1986; Denzin, 1989; Haase &

Mayers, 1989; Murphy, 1989; Fontana, 1996).

Table 1: Summary of research procedures

Phase	Method	Location	Participants	Objectives
First Phase	Qualitative exploratory using observations and interviews	AITU, PITU, PCSU	3	a) To describe the range of emotions experienced by ITNs. b) To formulate a questionnaire containing the nurses'emotions in ITU.
Second Phase	Quantitative using self - reporting questionnaire	Three Hospitals Public, Private, University	73	a) To identify the range of emotions that is highly meaningful. b) To formulate an interview guide for the third phase

Data Collection Methods

First phase:

Demographic data was collected in all the three phases of the investigation. It consisted of: age, gender, and marital status, number of children, children's age, education level, experience in nursing, experience in intensive therapy nursing and experience in the current position.These demographic data were expected to have an impact on nurses' work in ITU and in their responses to stressful situations.

Passive observations

The researcher collected the data by himself. This gave rise to follow-up hunches and leads that were further clarified during interviews. The researcher had been living in the same social context as the ITNs studied and this made the observation easier. The researcher was also part of the culture being studied and felt the same as the nurses in the research context (Atkinson & Hammersley, 1994; Boyle, 1994). This gave the researcher a better ability to understand and construct the reality of the emotional changes within ITNs.

The research employed interview technique directly after the observation technique. It was conducted in the same working shift for immediate validation of the situation and immediate exploration of feelings. This was to avoid dependence on nurses' memory and recalling, in which the nurse might give a logical answer rather than a real (feeling) answer.

Data collection was undertaken by the researcher using a logbook to record the situations that triggered participants' emotions. The logbook was beneficial to document the situations that occurred, the people involved and the participants' activities. This directed the questions in the interview session around the actual situation and the nurses' emotions towards everybody present in the scene, one by one.

This research used semi-structured interviews. It was a useful technique that ensured the research obtained the required data, without forgetting questions and permitting a freedom of response for the ITNs to explain the situation in their own words (Morse & Field, 1996). The current study developed the questions from the observed situations in the first phase. Interviews were conducted with a preset of open-ended questions. The participants had the freedom to express themselves. The questions were repeated if there had been a misunderstanding from the participants. The interviews were conducted using the method of Morse & Field (1996).

The first phase of data collection was sensitive to participating ITNs because it had observations, therefore a written informed consent was obtained from the first phase participants. Verbal consent was obtained from ITNs in the second and third phases at the beginning of the interview and the participants were informed about their right to participate or not participate in the study and the right to withdraw from the interview at any time besides the confidentiality rights. All interviews were tape-recorded with permission and were conducted within the intensive therapy setting, either in the staff rest room or in the in-charge office of the ITU. The intensive therapy managers were very helpful in allowing access to their offices for research purposes.

Second phase:

Questionnaire

The ultimate goal of the questionnaire was to identify the most meaningful feelings, as perceived by ITNs. The situations and the emotions analysed in the first phase were used to formulate the questionnaire items.

The questionnaire had two parts. Part one contained the demographic questions and part two contained the questionnaire items (Appendix 3). The questionnaire was consisted of 172 items, including 2 repeated items, in order to test the questionnaire's reliability. Each question demanded an answer on a five-point scale, as

follows: 0=not applicable, 1=not meaningful, 2=low meaningful, 3=moderately meaningful and 4=highly meaningful.

Not applicable meant that the questionnaire item was not applicable to working conditions and situations. Low meaningful meant that the emotion was less frequent and/or less intense and/or less important and/or had less impact on the nurse. Moderately meaningful meant that the emotion had moderate frequency and/or moderate intensity and/or moderate importance and/or moderate impact on the nurse. Highly meaningful means with high frequency and/or high intensity and/or high importance and/or high impact on the nurse. Each statement had two parts, one part related to the situation in ITU and the other part to the perceived emotion of ITNs in this specific situation.

Inclusion and Access: First Phase Sample

Permission was granted for data collection from the hospital authorities through formal letters. The sample of the first phase was selected from Jordanian ITNs. The ages of the participants were between 34 and 37 years.

The three participants were Muslim nurses who met the following selection criteria:

1) The participants must be working in an ITU (adult, paediatric or post-cardiac), in which the following characteristics should be maintained:

- It is a closed unit, not a ward setting;

- The unit is designed to support patients requiring mechanical ventilation;

- Most patients were admitted for mechanical ventilation;

- The average length of hospital-stay, for the majority of patients, was equal to or more than 3 days.

2) The participants must have at least six months of experience working in the same unit. This was meant to exclude ITNs under orientation process (six months was a period which suggested that ITNs could function independently in the unit).

3) Participants must not be holding managerial positions, because managers usually do not provide direct nursing care to critically ill patients.

4) Participants must be qualified -at least- with a diploma in nursing. This was meant to exclude practical and aid nurses.

Inclusion and Access: Second Phase Sample

Permission was granted for data collection by the hospital authorities, through formal letters for the second and third phases. In the second phase, all Jordanian Muslim ITNs working at three hospitals in Amman (Jordan) were included. These participants met the same selection criteria stated before.

Data Analysis: First Phase

The transcriptions of first phase interviews were read many times. Many statements were omitted such as 'I feel I have to be accurate' and 'feeling we save his life' as they were not considered to be emotions but very general words; they could not be categorised as emotions. Other examples are: 'feeling of high pressure', 'feeling of high collaboration', 'bad feeling towards the doctor' and others. On the other hand, many emotions such as feelings of anxiety, concentration, fear, relaxation, pride, empathy, comfort, and self-appreciation were accepted.

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Data Analysis: Second Phase

Data gathered by questionnaire survey during the second phase were analysed using SPSS based on frequencies and percentages. Each item of the questionnaire was coded. Then each item was entered into the computer using the following levels of meaningfulness of the emotions:

0=NA: for not applicable

1=Not: for not meaningful

2=Low: for low meaningful

3=Mod: for moderately meaningful

4=High: for highly meaningful

Data of each participant was entered into the computer accordingly. Therefore, the frequencies and percentages of data are generated.

Ethical Considerations

1. During the phases of the research the following practices were followed:

2. Official access was obtained through official letters to each of the participating hospitals.

3. Written consent forms were obtained from all participants in the first phase.

4. Anonymity and confidentiality were maintained throughout the research process.

5. All participants knew that their participation was voluntary at all times, and they had the right to withdraw from the study at any time without retribution.

6. Verbal agreement and completion of the questionnaire were considered as participants' consent to participate in second phase of the study.

7. The participants' privacy was maintained throughout the study.

RESULTS

First Phase

Table 2: Characteristics of the first phase participants

Demographic factor	First Participant (AITU)	Second Participant (PITU)	Third Participant (PCSU)	Average
1. Age (in years)	38 Y	34 Y	36 Y	36 Y
2- Gender	Male	Female	Female	
3- Marital status :	Married	Single	Married	
4- Number of children	3	Not married	3	2
5- Age of the first child	8 Y	Nil	9 Y	8.5 Y
6- Age of the second child	7 Y	Nil	8 Y	7.5Y
7- Age of the third child	2 Y	Nil	7 Y	4.5Y
8- Educational level	B.Sc	B.Sc	Diploma	
9- Experience in Nursing	15 Y	12Y	15Y	14 Y
10- Experience in ITU	6 Y	3 Y	15 Y	8 Y
11- Experience in the current position	4 Y	3 Y	2 Y	3 Y

Table 3 : Observation and interview processes

Participant	No of Interviews	Total Duration of interviews	Observation Period	Working shifts		
				Morning	Afternoon	Night
First Participant	10	66 minutes	5 days	2	2	1
Second participant	11	88 minutes	5 days	2	2	1
Third participant	10	38 minutes	5 days	2	2	1
Total	31	192 minutes	15 days	6	6	3

The following situations were identified during observation with first-phase participants: rest time (Break time & prayer time); care for critically ill patient; care for chronically ill patient; arrival on duty; dealing with narcotics and medications; nurses' duty hand over; interaction with colleagues; interaction with physicians; interaction with other health care professionals (e.g. x-ray technician, physio-therapist); interaction with patients' relatives; care for patients undergoing invasive medical procedures; cardiac arrest; death of a patient; relief break (each nurse will look after colleague's patients during rest time); supervisor round (the head-nurse's round in different clinical areas); additional assignments (e.g. checking and topping up the emergency trolley); heavy workload (frequent cardiac arrests, engagements); light duty (the work-load less than usual, or caring for stable patients);dealing with advanced machines (cardiac monitors, ventilators) and updating self-knowledge and skills (e.g. attending lectures, workshops, etc.).

The following 52 emotions were identified by interviews from first phase participants:

Feeling of ability; achievement; activity; afraid; anger; anxiety; appreciation; attachment; attention & concentration; boredom; business; closeness; comfort; competence; confidence; cooperation; courage; control; empathy; encouragement; fear; frustration; giving; guilt; happiness; hatred; helpful; hope; Involvement; isolation; knowledgeable; needing more; non-acceptance; observed; pain; power; pride; relaxation; respect; responsibility; sadness; safety; satisfaction; self-esteem; sensitive; sorrow; suffering; tension; tiredness; trusting and upset.

The above 52 emotions were categorised into five emotional groups: professional, self-worth, mutual, disparagement and physical.

Second phase

Table 4: Overview of second phase participants and response rate

No	Item	University Hospital	Public Hospital	Private Hospital	Total
1	The number of questionnaires distributed	37	23	22	82
2	The number of participants who responded	33	21	19	73
3	The number of participants who did not respond	4	2	3	9
4	Response Rate %	89%	91%	86%	89%
5	The number of nursing staff working in ITU	46	33	34	113
Those excluded from participating in the second phase					
6	The number of nurse managers working in ITU	2	2	1	5
7	The number of staff nurses on leave	4	3	0	7
8	The number of practical nurses in ITU (two were on annual leave)	3	1	4	8
9	The number of staff nurses with less than 6 months in the current position	0	4	6	10
10	The number of expatriate nurses	0	0	1	1

The findings of this phase revealed the diversity of perceptions held by participants. The most essential findings in this second phase however, were the "highly meaningful" emotions. It is evident that 50 out of the 172 items studied were rated as highly meaningful.

Table 5: Groups of Highly Meaningful Emotions Experienced by ITNs

Sl. No.	Emotional Group	Emotions
1	Professional	Attention and concentration, competence, confidence, control, trust, courage, encouragement, responsibility, self esteem
2	Self worth	Appreciation, happiness, pride, respected, satisfaction, relaxed
3	Mutual	Closeness, empathy and sympathy
4	Disparagement	Anger, busy, fear, guilt, sadness, non-acceptance, sorry, suffering
5	Physical	Ability, activity

DISCUSSION

The current study answers the first objective by exploring the situations encountered by ITNs, there were twenty situations as presented in the finding section. These situations can be divided into five themes:technology; advanced nursing procedures; nurse-patient relationships; nurse-human relationships and working conditions.

There are fifty emotions explored in the first phase as presented in the finding section. These emotions are categorized into five emotional groups: profesional; self-worth, mutual, disparaged and physical group.

Professional Emotions are emotions related to the competency level of ITNs, including the following: attentiveness and concentration, achievement, competence, confidence, control, cooperation, trust, courage, encouragement (by something), knowledgeablilty, power, responsibility and self-esteem. For example: 'Feeling of self-confidence when transferring a patient out of an ITU'.

Self-Worth Emotions are emotions related to the internal satisfaction of ITNs. They include the following: appreciation, comfort, happiness, helpful, hopeful, pride, respect, safety, satisfaction and relaxation. For example: 'Feeling of happiness when transferring a patient out of an ITU'.

Mutual Emotions are emotions related to ITNs' empathetic relationship with patients. They include the following: attachment closeness, empathy and sympathy, involvement, giving, being sensitive. For example: 'Feeling of closeness to a patient who has complications'.

Disparagement Emotions are emotions related to the tension of ITNs. They include the following: afraid of, anxiety, anger, boredom, business, fear, frustration, guilt, hatred, isolation, need more, non acceptance, observed (being), pain, sadness, tension, tiredness, upset, sorrow and suffering. For example: Feeling of sadness towards a chronically ill patient with poor prognosis.

Physical Emotionsare Emotions related to the ITNs' physical ability to perform nursing care. They include the following: ability and activity. For example: 'Feeling of ability when arriving on duty'(they are excluded from the study becuase they do not represent a psychological state).

Nursing literature presents many professional emotions, such as feeling of competence and feeling of control when nurses relieve their patient's pain (Davidson & Jackson,1985; Nagy, 1998). Feeling of

acquired professional learning (Vachon & Pakes,1985) supported the existence of these emotions in nurses. The professional emotions in current study may have a role in nurses' competency level in their way towards professionalism.

Some nursing literature reveals many disparagement emotions such as: feelings of sadness when a patient die (Davidson & Jackson,1985), feelings of anger, frustration (Zuppa, 1983) and feelings of fear of death (Davidson & Jackson, 1985), feelings of embarrassment and fear (Lawler, 1991) in student nurses when bathing a patient, feelings of failure, guilt and shame (Flinn *et al*., 1975) when patients commit suicide. (Smith, 1992) also reported feelings of depression, anxiety, fear, frustration, and guilt feelings in many situations such as medical wards and surgical wards. These disparagement feelings which usually traumatised nursing students also traumatise ITNs.

The mutual emotions are of a high value for ITNs because they exert high pressure on their emotions in order to provide quality care. (Benner, 1984) spoke about a certain level of involvement that is necessary for expert nurses in emotional situations. The mutual emotions are changing over time to meet the needs of both the nurse and the patient.

In self-worth emotions, the nursing literature focuses on opposite emotions such as feeling of helplessness and hopelessness in death situations (Zuppa,1983) and feeling of anxiety when patient complains of pain (Nagy, 1998). These are within the scope of disparagement emotions. The current study observed many self-worth emotions such as happiness, pride and self-appreciation (table 5). These emotions were considered to be of high value for the nurses' retention in nursing and for their personal achievement.

CONCLUSION

To summarize, most of the ITNs in the current study were looking to achieve professionalism in their work. Many of them obtained this level, in which they became more self-competent and self-confident in working with intensive therapy patients and operating advanced machines, and other nurses were still in early stage of the professionalization process. This raises the question, "What would happen to nurses' emotions due to their work in the ITUs?" Further explorations of emotional groups became a necessity for deeper understanding of the phenomenon of emotional changes within ITNs.

RECOMMENDATIONS

The current study recommends that the study must proceed to the third phase in which a deeper understanding of the phenomenon of emotional changes may be uncovered.

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