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## Psychological Experiences of critically ill patients and their attitudes towards Nurses and Doctors in ICU & CCU

A thesis submitted for partial fulfillment of the requirements of clinical M.D degree in Anaesthesia.

BY

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# ***DEDICATION***

This work is dedicated to my parents and to every one who have contributed to physical and psychological patients' wellbeing .

# Acknowledgement

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# List of abbreviations

<b>KTH</b>	: Khartoum Teaching Hospital
<b>ETH</b>	: Elshaab Teaching Hospital
<b>ICU</b>	: Intensive Care Unit
<b>CCU</b>	: Coronary Care Unit
<b>HADS</b>	: Hospital Anxiety Depression score

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# *CHAPTER ONE*

## INTRODUCTION

Experiences of the critically ill patients in the ICU and CCU. is an important aspect of the quality of care and has its impact on the patient's life. The results of critical care are usually discussed in terms of survival, yet survival per se is a poor indicator of the impact of therapy for a selected disease process.

Critically ill patients in the ICU and CCU have different behaviours and attitudes towards the staff attending for them. These behaviours and attitudes are sometimes observed by the staff but often pass unnoticed.

The development of medical technology and increasing number of invasive and non-invasive monitoring systems has increased the technical aspects of care (Burffit SN and Turner JS) <sup>(1,2)</sup>. This could result in a shift of the nurse's focus, from psychological needs to more physical needs of the patient (Pearce J) <sup>(3)</sup>.

It has been suggested that not only technical life saving procedures, but also the perception and support of the patient influence the outcome of ICU <sup>(4)</sup>.

Both verbal and non verbal communication especially touching can contribute greatly to the patient's emotional stability thus being a major part of patient's care <sup>(4-6)</sup>.

On one hand psychological factors influences physical illness on the other hand physical problems e.g. head injuries may precipitate a minor or major psychological disorder. Psychotherapy sometimes relief's pain which does not respond to the commonly used pain killers. This type of pain usually has no organic origin and it has been shown that anxiety can precipitate headache and chest pain and depression can be presented with backache or muscle cramps.



# Literature review

The rapid growth of technology in the ICU has changed the nursing profession profoundly in the last 25 years <sup>(1)</sup>.

Several studies have shown that the different components of ICU setup (staff & equipment's) have an Impact on the patients' psychological wellbeing and comfort.

## **The international ICU setup(J.C Stoddart <sup>(7)</sup>):**

Intensive therapy unit is a term used to describe the management of patients who need more than what is available in the ward. The history of its development is quite short <sup>(7)</sup>.

Usually the ICU should be placed very close to the operating room. There should be one ICU bed for every 100 acute beds in the hospital. The coronary care unit (CCU) is a separate establishment but some hospitals combine the CCU with the general ICU. Ideally children should have a separate ICU <sup>(7)</sup>.

Units of 4 – 8 beds are the rule. Nursing staff can be provided on the basis of one nurse per patient day and night. The nurse

should not spend more than one year in the unit to avoid emotional strain. Every unit should have a senior doctor who is usually a consultant anaesthetist and a residing junior doctor.

All monitoring equipment and ventilators must be reliable and standardized <sup>(7)</sup>.

### **Study area setup:**

Our study area includes Khartoum Teaching Hospital (KTH) 1.C.U and Elshaab Teaching Hospital(ETH) ICU and CCU children are admitted in both ICUs apart from this and some deficient monitors they almost fulfil the essential criteria of the international ICU setup.

Several studies were done to evaluate the attitudes of doctors and nurses towards the ICU patients and to see the perception of nursing care during ICU stay.

Morse and OBrien <sup>(8)</sup> described the ICU stay as a four stage model. The first stage is characterized by the impact of the overwhelming psychological trauma and the acceptance and ultimate surrender to the professional care provided. In stage two the patient faces loss of reality when disorientation and

hallucinations become evident. At this stage patients were afraid of being left alone. In stage three slow recovery emerges and the patient feels the real fight for survival has started as reality becomes more recognizable. In this stage the patient needs more comfort and feels strongly dependent on the nurse.

ICU discharge occurs usually during the latter two stages. In stage four the patient is usually discharged to a rehabilitation center or home. During this stage the patient has to accept the consequences of the physical and psychological injuries.

Cooper<sup>(9)</sup> studied the 'intersection of technology and care' in the ICU by observing patients, relatives and nurses during a four month period. In this study it was found that for a short ICU stay (2-3 days) technical equipment was not considered a problem by patients as they regarded this equipment as a necessity to survive. However, for the patients with prolonged ICU stay (more than 3 days) the technical equipments were found frightening and was regarded as an invasion of their privacy. Feelings of insecurity were increased

if there had been a technical failure of the ventilator, especially when the nurse paid more attention to the machine than to the patient. The patients considered this unprofessional and thus possibly dangerous <sup>(10)</sup>.

Ashworth<sup>(11)</sup> observed nurse-patient communication and then interviewed the nurse involved. Only 14% of the total nursing time was directed to the patient. Half of this time consisted of brief informative remarks, questions, requests or support. Most of the communications by the nurses were not planned to fit the special needs of the patient.

Patients being mechanically ventilated have severe limitations in their ability to communicate that could influence the nurse-patient relationship <sup>(11)</sup>.

Burfitt et al <sup>(1)</sup> interviewed 13 patients 48 hours following ICU discharge. These patients described the nurses as attentive and vigilant. Care was described as a healing process in which life saving actions were just a part of the total healing process. Some patients indicated that the caring behavior of the nurse relieved their fears and worries in a way that they could concentrate on their healing process <sup>(1)</sup>.

Turner – JS<sup>(2)</sup> found that confidence in doctors and nurses was good. The most frequently reported unpleasant experiences were arterial blood gas sampling (48% of patients) and tracheal suctioning (30 out of 68 ventilated patients). Only 6% of patients dislike ward rounds. This study suggested that arterial lines or pulse oximetry could be used to avoid frequent arterial blood gas analysis. The need for better communication with patients is emphasized.

Richard D. <sup>(12)</sup> intensive care survivors experience considerable levels of depression and anxiety. Patients often avoid company and show less affection to their partners. In one study 45% of patients questioned at 6 months after ICU discharge, reported going out less often, 41% took part in fewer social activities and a quarter reported being irritable with their relatives. Patients also reported feeling overwhelmed in crowded places or being afraid to go out alone. Some patients described full blown panic attacks. Long term treatment is needed by 36-40% of people with panic attacks presenting for help<sup>(12)</sup>.

The commonest psychological problems in hospitalized patients complaining of non-psychiatric illnesses are anxiety and depression.

**Anxiety disorders Steven L. Dubousky<sup>(13)</sup>:**

Anxiety is abnormal fear that is out of proportion to any external stimulus. It is viewed primarily as a psychological response to internal or external stress, however some types of anxiety are independent of identifiable stress. Significant anxiety is experienced by 10-15% of the general medical outpatient's and 10% of the inpatient's<sup>(13)</sup>.

There are about 10 categories of anxiety these include panic disorders, agoraphobia, generalized anxiety disorder, obsessive – compulsive disorder, specific phobias, social phobia, acute stress, disorder, substance induced anxiety disorder, anxiety due to a general medical condition and posttraumatic stress disorder. The last category will be discussed in more details because it is relevant to our subject.

**Symptoms and signs:**

Psychological symptoms of anxiety include fatigue, irritability, insomnia apprehension, worry, fear, sense of doom

or panic headache, upset stomach and diarrhea, shortness of breath, dry mouth, palpitations and chest pain.

- Physical signs include diaphoresis, cool clammy skin tachycardia and arrhythmias , flushing and pallor <sup>(13)</sup>.

### **Posttraumatic stress disorder (PTD):**

Describes a syndrome of distress, re-experiencing, avoidance, and arousal that develops after exposure to events that involved actual death or injury or a threat to the physical integrity of one self or others. Symptoms of posttraumatic stress disorder may appear immediately after the trauma or they may be delayed for 6 months or more. Symptoms include:-

- Re-experiencing the initial trauma occurs via dreams about the trauma, feeling as if the trauma were continuing to occur, and intense distress on exposure to cues that recall the event.
- Avoidance of stimuli associated with the trauma.
- Symptoms of excessive arousal. Include insomnia, angry outbursts, hypervigilance and difficulty in concentrating.

Treatment involves discussion of the trauma as a means of achieving retroactive mastery. Group therapy is often very helpful medications e.g carbamazepine may be useful.

Treatment of anxiety: Includes psychotherapy, behavioural therapy or psychopharmacology.

**Illnesses that are commonly found in the ICU and cause anxiety:**

- Pulmonary embolism
- Bronchial asthma
- pheochromocytoma
- Epilepsy
- Hypoxia
- Hypoglycaemia
- Hypothyroidism
- porphyria
- Drugs e.g. intoxication with sympathomimetics.

**Depression (Gerald. L Kleman<sup>(14)</sup>) :**

Refers to any decrement in optimal performance, as in the slowing of psychomotor activity or the reduction of intellectual functioning. However depression covers a wide spectrum of changes in mood and affective states, it ranges in



severity from the normal mood fluctuations of every day life, sometimes called sadness to severe psychotic episodes.

Symptoms of depression includes:

- Depression of mood i.e feeling sad, low, blue and gloomy; .
- inability to experience pleasure (anhedonia) .
- loss of energy, fatigue, lethargy .
- retardation of speech, thought, and movement.
- Changes in appetite, usually insomnia.
- Body complaint, almost every organ system may be involved. Complaints include headache, backache muscle cramps, nausea and vomiting .
- Agitation (increased motor activity experienced as restless).
- Slowed thinking .
- Feeling of helplessness .
- Difficulty in concentration .
- Suicidal attempts <sup>(14)</sup> .

There are two groups of depression, the bipolar group are depressed patients with manic episodes and the unipolar group with only recurrent episodes of depression <sup>(14)</sup>.

### **Aeitiology :**

- Genetic inheritance .
- Life events and environmental stress .
- Personality factors for example the hystericals are at more risk to have depression.
- Childhood loss and separation.

### **Treatment :**

It includes drug treatment e.g. tranquilizers ,tricyclic antidepressants and monamine oxidase inhibitors, ECT and psychotherapy .

### **Psychological morbidity in the ICU (Sheila Adam <sup>(15)</sup>):**

Psychological disturbances associated with intensive care includes sensory imbalance and disorientation .Patients may be confused ,restless ,incoherent ,agitated or have hallucinations .There may be frank delirium(intensive care unit psychosis),or acute anxiety disorder.

There are numerous frightening or unpleasant stimuli such as pain ,the presence of endotrachial tube,disconnection from the ventilator,and sounding of syring pump and monitor alarms.

Patients may find the environment noisy ,lacking in privacy, confined and isolated.They may find it difficult to distinguish the passage of time .Management is aimed at prevention of these problems.Staff should emphasis a clear difference between day and night by changing the ambient light.

Patients need repeated explanations about what is happening to them .Family participation in care is encouraged.

If the patient became disturbed correctable causes such as catheter infection should be thought. Sedation or strong tranquillizers may be needed. Agitation is usually self limiting.

Out of 50 patients admitted to the ICU eleven patients (22%) had psychological problems after hospital discharge. Most of these patients complained of fear, other problems were related to ability to concentrate, depression and hallucinations.

Seven patients would have appreciated professional help from their family doctor or psychologist (J Aofhuis)<sup>(16)</sup>.

Many scales are used by psychiatrists and psychologists to evaluate the psychological effects of diseases in non psychiatric hospital departments. But the commonest one used is (HADS) scale.

**Hospital anxiety depression score (HADS):**

This structured questionnaire was conducted with the guardians of the patients so as to study the psychological impact of the disease. It is a self-rating scale. The questionnaire was read loudly and explained for illiterate guardians participating in the study.

It is a 14 item self-rating scale, 7 concerned with anxiety and 7 with depression. It is designed specially for use in non psychiatric hospital departments. The items on the scale are all concerned with the psychological symptoms of neurosis; this makes the scale suitable for use inpatients with concurrent illness. The (HADS) anxiety scale had a specificity of 78% and a sensitivity of 87%. The (HADS) depression scale had a specificity of 94% and a sensitivity of 67%.

The validity of the scales was also tested by examining the correlation of the subscale scores and psychiatric global

score. The correlation were + 0.7 for depression and 0.74 for anxiety. The scales appear therefore to be a reasonably valid measure of anxiety and depression.

(HADS) seems to be the best instrument available for simple evaluation of psychological interventions in patients with physical illness.

The (HADS) scale is valid for the use as a screening instrument in non psychiatric units and although initially have been developed for use in hospital settings, can be usefully employed in community settings of countries to screen for mental morbidity.

The scoring system is as follows:

0 – 3 considered as mild or normal anxiety and depression, while 4 –7 as moderate and 8 or above as severe anxiety or depression.

# Methodology

This study was performed In Khartoum Teaching Hospital (KTH) and Elshaab Teaching Hospital(ETH) in the period from June to December 2000. It includes 100 patients from two intensive care units (I.C.U) and one coronary care unit (C.C.U) . children were excluded.

Data was collected using two different self structured questionnaires one for the I.C.U & C.C.U patients and the other for the staff looking after the I.C.U & C.C.U patients.

Hospital anxiety and depression score (HADS) was also used to evaluate the psychological status of the critically ill patients. This scale will be discussed in the literature review.

Data was collected within one week of patients I.C.U & C.C.U admission. Most of the data was collected while patients were staying in the I.C.U or C.C.U, some of the data was collected in the intermediate care unit or in the ward.

Data was collected by Dr. Huda M. Ali (The researcher)

Statistical analysis was performed by computer using the Statistical Program for Social Science (SPSS/PC).

# Objectives

1. To study the psychological impact of admission of critically ill patients to the I.C.U & C.C.U, on the patients themselves.
2. To study psychological set up and support available to critically ill patients in the I.C.U and C.C.U .
3. To evaluate the staff (Doctors and Nurses) views about psychological issues in the I.C.U & C.C.U.

# Recommendations

1. Communication channels between psychiatric units and intensive care units should be developed as a matter of priority.
2. Educational programmes for intensive care doctors and nurses are required in order to enhance psychiatric patient care.
3. Intensive follow up clinics should be established to assure continuity of physical and psychological care after hospital discharge of critically ill patients.
4. If possible patients should be prepared psychologically for their ICU admission .
5. Noise in the ICU should be minimized as much as possible.
6. Further researches are needed to verify these findings.



# Conclusion

It can be concluded from this study that:

1. Most of the cases admitted to the ICU and CCU are acute cases.
2. The emotional needs for the majority of patients in the ICU and CCU are not met as a routine practice in our ICUs.
3. Sleeping disorders are common among ICU and C.CU patients.
4. Noise is the commonest cause of sleeping disorders in our ICU and CCU
5. The majority of the staff are not trained in psychological care of the critically ill patients .
6. Anxiety is the commonest psychological problem in our ICU and CCU .
7. There is no proper psychological set up in our intensive care units.

# Results

- The sample size was 100 patients admitted to the ICU and C.U.U in the period from June to December 2000.
- Children were excluded .
- The majority of patients (30%) were in the age group (41-50).
- Males were (58%) more than females (42%) .
- The majority of cases (97%) were acute cases i.e admitted from the emergency departments and theatre, while a minority of cases (3%) were chronic cases i.e admitted from the ward.
- Fourteen per cent of the patients did not remember what happened during their short ICU or CCU stay, and they were excluded from the study.
- Eighty six per cent of patients would have remembered their ICU stay.
- Of those who did have memories of their stay (86%) the majority 93% were admitted for the first time to the ICU &

CCU, while 7% admitted twice, no patient was admitted more than two times.

- Sixty eight per cent (out of the 86% of the studied population) of patients reported that they were reassured by nurses sometimes, 29% reassured always and 3% were never reassured by the nurses.
- Seventy per cent of patients were reassured sometimes by the doctors and 30% were always reassured by them.
- Most patients 72.% mentioned that the technical procedures done by the staff were not explained for them, while 28% mentioned that those procedures were explained for them.
- Of those patients experiencing sleeping disorders during their ICU or CCU stay (69%), 59.% associated this with noise, 19% with pain and 22% with the combination of pain plus noise.
- Of those patients who experience sleeping disorder, 32% use sedative drugs, 23.7% did not use them, while 44.3% did not know whether they had been given sedation's or not.

- On admission to the ICU or CCU 33.7% felt normal, 17.4% were sad, 10.5% were fearful and 38.4% were anxious.
- Only 1% of patients had past history of mental disorders and 5% had family history of mental disorders.
- Eighty seven point two per cent of patients thought that the services in the ICU & CCU were adequate, 10.5% thought they were poor and 2.3% thought that they were very poor.
- Ninety eight per cent of the patients reported that the staff in the ICU & CCU was helpful and 2% thought they are not much caring.
- Ninety four point two per cent of patients felt grateful towards the ICU & CCU staff and 5.8% felt normal.
- Ten point five per cent of the patients could not understand most of the items of HADS whatever explained for them so they were excluded from the following results.
- Of those who understood HADS items (89.5%) 58% were normal, 20 had some sort of anxiety, 15% depression and 7% had anxiety depression disorder.

- Of those with anxiety disorders only 10% had severe anxiety. 75% had normal anxiety and 15% had moderate anxiety .
- Of those with depressive disorders. No one had severe depression, 69% had normal depression and 31% had moderate.
- Fifty per cent of the staff had training in psychiatry and psychology, 80% had been trained in critical care and 68% reported that their training did not include psychological care of the critically ill patients.
- Fifty five per cent of the staff reported that it is important to let one member of the family beside the ICU patient and 80% thought that psychological care is as important as physical care.
- Asked about the reaction taken towards patients who develop psychological disorder during their icu & CCU stay, 70% of the staff will call the specialist, 26% will comfort and help the patient, then call the specialist and 4% will give psychotropic medications.

- Sixty eight percent of the staff thought that psychological support in the ICU & CCU can be provided by referring patients to psychiatric clinics, 25% by organizing periodic visits for psychiatric team, and 7% thought that such support can be provided by training the staff about psychological care.
- Hundred percent of the staff recommended to have some sort of psychological training for ICU & CCU staff.

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