Relationship between Communication Difficulties and Psychological Distress as Experienced by Mechanically Ventilated Patients

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Abstract: **An appropriate and effective nurse-patient communication is of the most important aspect of caring for patient connected to mechanical ventilation. Aim: To assess Relationship Between Communication Difficulties and Psychological Distress among Mechanically Ventilated Patients. Research design: A descriptive correlational design was utilized in this study. Subjects A purposive sample consisting of 66 adults male and female patients recently extubated from mechanical ventilation sample size(66) patients. Tools: Data were obtained through three main tools; Socio-demographic sheet, Communication difficulties Scale sheet, and Depression, Anxiety, and Stress scale (DASS) Results: The majority of the recently extubated patient rated extremely severe anxiety during being ventilated, half of studied sample rated moderate stress, about half of them rated severe depression as a result of presence of communication barrier. This study delineated that more than half of the study sample rated that their communication during being ventilated about physical needs, applied care, asking about health status, and communication with family member as moderate to extremely. There was a statistically significant relation between communication difficulty with depression, anxiety, and stress. Recommendations: Reinforce role of nurse to use augmented alternative communication methods with mechanically ventilated patients.**

Keywords: **Communication difficulties- - DASS-mechanically ventilated psychological distress.**

1. INTRODUCTION

Mechanical ventilation is an important life support technology that is an integral component of critical care. Mechanical ventilation can be applied as negative pressure to outside of the thorax or, most often, as positive pressure to the airway. The desired effect of positive pressure is to maintain adequate level of PaO2 and PaCO2. Mechanical ventilation is a life sustained technology, but recognition is growing that when used incorrectly, it can increase morbidity and mortality. Positive pressure ventilation is provided in intensive care unit (ICU), subacute facilities, long-term care facilities, and the home {1}.

Mechanically ventilated patients are those who depend on mechanical ventilation after critical illness, a great challenge is met to both the patient and the critical care nurses; so the intensive care unit (ICU) nurse must use a holistic approach while providing nursing care for mechanically ventilated patients. Mechanically ventilated patients need special and

comprehensive nursing care which enables to decrease the costs, length of stay, and mortality rates. The most common indication for mechanical ventilation is acute ventilatory failure with respiratory acidosis. Prior to ventilating a patient, underlying causes and alternative forms of maintaining ventilation must be considered as mechanical ventilation can have many short- and long-term complications {2}.

Weaning from mechanical ventilation depends on stability of acid-base status, the strength of respiratory muscles, and the respiratory drive to breathe. Respiratory failure may occur because of any of these. This could happen secondary to inadequate resolution of the initial problem that rendered the patient on MV, a rise of a new problem, a ventilator-associated complication, or a combination of these factors. Weaning success is defined as extubation and the absence of ventilatory support 48 hours following the extubation. Weaning failure is defined as one of the following: Failed spontaneous breathing trials (SBT); reintubation and/or resumption of ventilatory support following successful extubation; or death within 48 h following extubation{3}.

Communication represents an essential and important human need. It is a basic human right .Communication is a fundamental underpinning of all nurse-patient interactions. Through purposeful communication, the nurse can help patients to make sense of health needs, and learn how to self-manage chronic health conditions {4}.

One of the challenges for the ICU nurse ant patients is the difficulty of these patients to communicate as a result of ventilation techniques employed, which may cause them feelings of anger and disappointment, which in turn can reduce the interaction with family members and caregivers and have an impact in terms of the active participation of patients in their recovery. As well, difficulties in communicating with patients can be frustrating for members responsible for their care multidisciplinary team. Attempts to nonverbal communication of these patients tend not to be successful, causing frustration, depersonalization and insecurity. Intubated patients experience an intensified need to communicate while their ability to do so is compromised as the endotracheal tube prevents speech which makes patient agitation. So the ICU nurse should maintain the optimal communication ways with the patient to reduce anxiety and maximize the psychological support {5}.

An appropriate and effective nurse-patient communication is of the most important aspect of caring. The formation and continuation of such a relationship depends on various factors such as the conditions and context of communication and a mutual understanding between the two. During patient stay in the ICU, the psychological disturbances more frequently by patients are anxiety, stress, depression, or the so called syndrome intensive care, in whose development involved factors such as excessive noise that can interfere with sleep are and rest, the pain, the measures used for ventilation that prevent patients can communicate properly, etc. In addition, patients often develop a sense of lack of control of themselves, the main needs expressed a sense of security and "know what is happening." The experiences lived psychological disturbances may continue to produce even several months after discharge {6}.

2. SUBJECTS AND METHODS

This study was conducted from January to December 2017 at The ICU of the 185 Kasr Al-Aini Hospital for Burn and Emergency which consists of 12 rooms each room contains 4 beds. A descriptive correlational research design was utilized in the current study.Setting the current study was carried . A purposive sample of 66 adults male and female patients admitted to the ICU and connected with the mechanical ventilator for at least 12 hours then extubated with age ranges from 18-60 years.

Significance of the study

Through empirical observations and clinical experience in the intensive care units for many years, the investigator noticed that many of ICU patients who underwent mechanical ventilator and endotracheal tube (ETT) have many complications related to being non-vocal as in ability to talk with the physicians and nurses, inability to make decision about their care plan and inability to express their expressions and their needs with the nurses. Most patients who remember the experience of mechanical ventilation remember the discomfort of being unable to speak. The most common stressful experiences are being unable to speak. Psychological problems are attributed to a variety of factors such as inability to communicate, family absence, and weaning from the ventilator. Moreover, episodes of terror were associated with not being able to talk because of endotracheal intubation.

Tate (2012) conducted a study about anxiety and agitation in mechanically ventilated patients and revealed that, all patients exhibited agitation or described feeling anxious at least once during the study period. Patients did not use the term anxiety to describe their experience; rather, they used words linked conceptually to anxiety to describe their feelings, such as fear, panic, and frustration {7}.

Therefore, the current study is expected to highlight difficulties in communication among critically ill mechanically ventilated patients and its relation to the psychological distress. As well, this study could be beneficial in providing nurses with data base regarding this problem and these data could be utilized by health members in provision of care for such group of patients. Furthermore, this study could be beneficial in patient care as it might shorten hospital stay and safeguard patients against any life threatening complications.

Aim of the study

The aim of this study is to examine the relationship between difficulties in communication and the psychological distress as experienced by mechanically ventilated patients.

Research Questions:

To fulfill the aim of this study the following research question is formulated:

Q1: What are the communication difficulties in Mechanically Ventilated Patients?

Q2: What is the psychological distress for Mechanically Ventilated Patients?

Q3: What is the relationship between difficulties in communication and the occurrence of psychological distress among critically ill patients receiving mechanical ventilation?

Tools:

three tools were utilized for data collection These tools are:

Tool 1: Personnel Characteristics & Medical data sheet: It was developed by the investigator. It covers data such as patient's age, gender, diagnosis, days of being ventilated.

- **Tool II**: **Communication difficulties Scale** developed by the researcher. Communication difficulties scale: It will be Likert-type instrument will be used to measure patients' perceive difficulty in communication as they are intubated. It will contain 31 items related to patient needs, condition, and complains about communication with both health care providers and family member like, I found difficulty in telling Health care providers (nurse and physician) that: -

-I was hungry and I wanted to eat, I was thirsty and I wanted to drink, I wanted to urinate, I wanted to free my hand strap, I felt pain and I wanted analgesic, I felt coldness and I wanted a blanket, I felt heat, I felt difficulty in breath. Subjects are asked to use 4- point severity frequency scales range (no difficulty at all (0), Slightly difficulty (1), Moderate difficulty (2), and extremely difficulty (3). The total score ranged from 31-93. Based on review in this field like ease of communication scale for Linda Menzel{8}.   (1994) ,communication assessment tool for Patak, et al., {9}.   (2009) and patient satisfaction questionnaire (PSQ) for El-Soussi (2015). {10}.

Tool III : Depression, Anxiety, and Stress scale(DASS) Lovibond (1995): Adopted tool to measure psychological distress. This scale is self-reporting screening scale that consists of 42 items. The DASS is set of three self-report scales designed to measure the negative emotional status of depression, anxiety, and stress. Subjects are asked to use 4- point severity/frequency scales ranges (Did not apply to me at all (0), Applied to me to some degree or some of the time (1), Applied to me at considerable degree or good part of time (2), and applied to me very much, or most of the time(3). The total score for this scale range from 42-126. The higher score indicates negative emotional status. Reliability of the three subscales are considered adequate and test-retest   is likewise considered adequate with 0.71   for depression, 0.79 for anxiety and 0.81 for stress.

Tools validity and reliability

Content validity was done to identify the degree to which the used tools measure what was supposed to be measured. Developed tools were examined by a panel of three critical care medicine and nursing experts to determine whether the included items were clear and suitable to achieve the aim of the current study. As well Reliability of the three subscales (depression, anxiety, and stress) are considered adequate and test-retest   is likewise considered adequate with 0.71   for depression, 0.79 for anxiety and 0.81 for stress.

• Tool reliability calculated using SPSS with Cronbach 's alpha value of 0.679 for the Communication Difficulties Scale tool.

Pilot Study

A pilot study was carried out on 7 patients to test the feasibility, objectivity, and the applicability of the study tools. Carrying out the pilot study gave the investigator experience to deal with the included subjects, and use the data collection tools. Based on results of the pilot study, needed refinements and modifications were done and the pilot study subjects were not included in the current study sample.

Protection of Human Rights

An official permission to conduct the study was obtained from the research ethical committee and directors of Intensive Care Units at a Cairo university hospital. Then written consents were obtained from patients to be included in the study after explanation of the nature and purpose of the study. Participation in the study was voluntary; each subject had the right to withdraw from the study . Moreover, confidentiality and anonymity of the subjects were assured through coding the study subjects in assessment tool.

Procedure:

The current study was started with obtaining the primary approval from the research ethical committee at Faculty of Nursing, Cairo University, approvals from heads of intensive care unit, then reviewing the related literature to develop different data collection tools.Written consents were obtained from the patients, then the investigator filled out patients' characteristics, and medical data utilizing tool (1). This tool required 5 minutes to be fulfilled. Then the investigator assessed the mechanically ventilated patient's stability and readiness for weaning daily before starting the weaning process through the assessment of hemodynamic status and conscious level. If the patient was sedated, the sedation should be ceased temporary to assess the readiness of weaning. After weaning and stability of patient status the researcher interviewed the patients to fulfill the tools 2&3 of communication difficulty scale and DASS, there were fulfilled in around 20-25 minutes. The patient was filling the tools by himself and sometimes the investigator read the tools items for the patient and the patient chose from 0-4 in DASS or from0-3 in Communication difficulty scale.

Statistical data analysis

The collected data were scored, tabulated and analyzed by personal computer utilizing statistical package for the social science (SPSS) program version 20. Descriptive as well as inferential statistics were utilized to analyze data pertinent to the study. The level of significance was set at p≤0.05.

3.   RESULTS

Socio demographic characteristics of the sample

Table (1) showed that, slightly more than one third of the studied sample (34.8%) their age ranged between 30 to less than 40 years old with a mean age of (36.68± 10.51), while, (3%) their age was more than 60 years old. Regarding gender more than half of the sample (65.2%) were males.

Table (2) declared that, more than one quarter of the studied sample (28.8%) their diagnosis was Principal diagnosis, while more than (90%) of them weren't ventilated before.

Stress value score

Figure (1) showed that, half of the studied sample (50%) rated their stress as moderate while they were mechanically ventilated.

Anxiety value score

Figure (2) illustrated that, most of the studied sample (95.5%) rated their anxiety level as extremely severe.

Communication difficulties about the physical needs

Table(3) showed that, more than half of the studied sample rated that, communication related to their physical needs was moderately difficult.

Communication difficulties about the **applied care**

Table(4) reported that, more than half of the studied sample (62.1%, 60.6%,51.5%,60.6% , 56.1%,54.5% and 51.5%) rated items no.2,3,4,5,6,8and9 respectively as were moderately difficult

Communication difficulties about the **health status**

Table (5) illustrated that, more than two thirds (66.7%) of the studied sample, rated item no.5 (" I wanted to know what is my case now ") as moderately difficult.

Communication difficulties with the **family member**

Table(6) showed that, more than two thirds of the studied sample (68.2%,63.6% and 62.1%) respectively rated items no.6,4and 8 as moderately difficult ,while about half of the studied sample (47.0%) and (45.5%) rated items no.2and 5 respectively as extremely difficult**.**

Table (7)

Correlations among total Anxiety scores, total Depression scores, total Stress scores and total Communication difficulties

Table (7) demonstrated that, highly significant positive correlations were found among (Communication difficulties with anxiety, depression and stress)

Also there were highly significant positive correlations among anxiety with depression and stress as well as depression with stress (r=.605, p=.02, r=.597, p=.02, r=.563, p=.0), r=.624, p=.000, r=.728, p=.000 and r=.699, p=.000) respectively.

Comparison of Age with anxiety, depression, stress, and communication difficulties

Table (8) indicated that, no statistical significant differences were found between age with *anxiety, depression, stress* and *communication difficulties* at (f=.98 at p =.42, f=.51 at p =.72, f=.40 at p =.80, f=.80 at p =.52) respectively.

Comparison of diagnosis by anxiety, depression, stress, and communication difficulties

Table (9) illustrated that, no significant statistical differences were found between diagnosis with anxiety, depression, and communication difficulties at (F=1.57& P=.19),(F=1.20& P=.31), (F=1.26& P=.29) respectively. While there were significant statistical differences between diagnosis and stress at (F=2.54& P= .04).

Comparison of previously being ventilated or not with anxiety, depression, stress, and communication difficulties

Table (10) indicated that there were significant statistical differences between being Previously ventilated with anxiety, depression, and stress at (T=4.07& P=.005), (T=9.25& P=.00),(T=7.65&P=.00) respectively. While no significant statistical differences were found between being previously ventilated and communication difficulties at (T=-2.06&P=.08).

**Comparison of gender by anxiety, depression, stress, communication difficulties**

Table (11) showed that, there were no significant statistical differences between Gender with anxiety, depression, stress, and communication difficulties at (T=1.54&P=.13),(T=.32&p=.75),(T=1.11&P=.27),(T=-.29&P=.77) respectively.

Table (1): Frequency distribution of the studied sample according to their age and genders (n=66)

Item	N	%
Age categories		
20 - < 30 years	20	30.3
30 - < 40years	23	34.8
40 - < 50years	14	21.2
50 - < 60years	7	10.6
≥ 60years	2	3.0
M±SD	36.68± 10.51	
Gender		
Male	43	65.2
Female	23	34.8
Total	66	100

Table (2): Frequency distribution of the studied sample according to their medical diagnosis and previously being ventilated

Item	N	%
Diagnosis		
Cerebral haemorrhage	19	28.8
burn	11	16.7
I O(intestinal obstruction)	18	27.3
brain trauma	8	12.1
Respiratory distress	10	15.2
Previously being ventilated		
Previously ventilated(No)	60	90.9
Previously ventilated (Yes)	6	9.1
Total	66	100.0
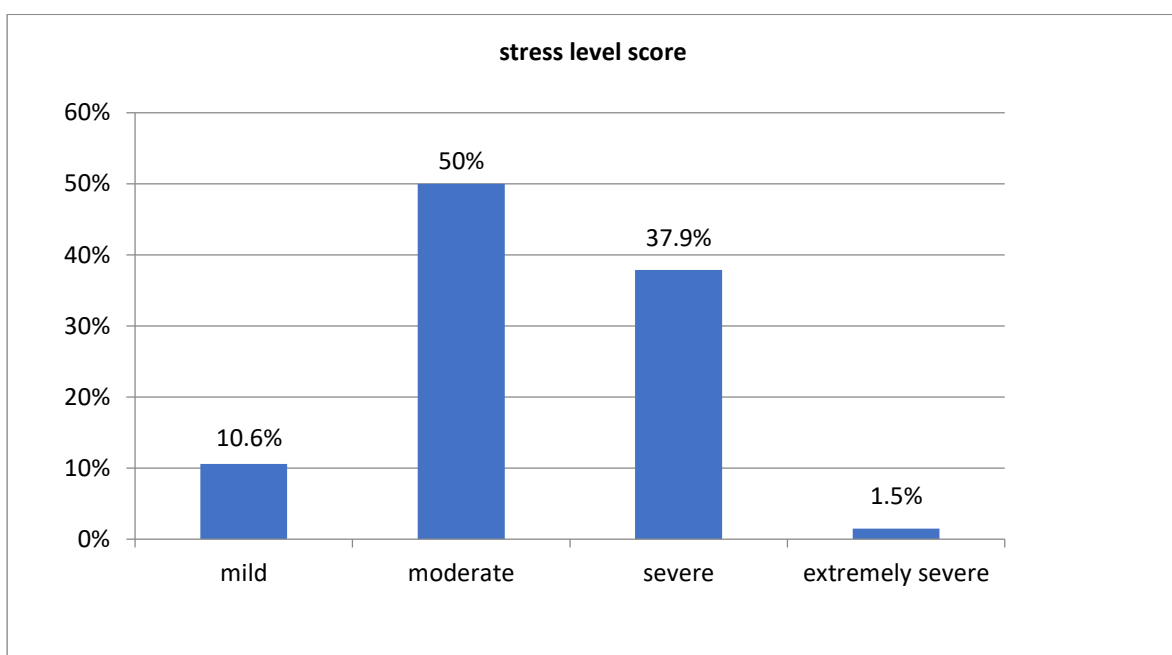
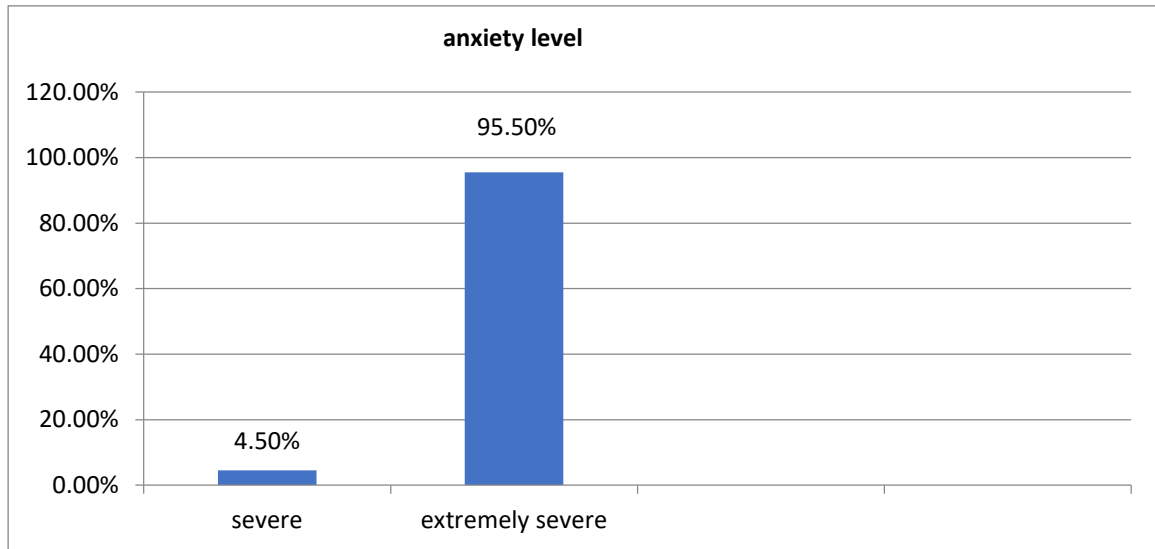**Fig (1) : frequency distribution of the studied sample stress level**

Fig (2): frequency distribution of the studied sample anxiety level.

Table (3): Frequency distribution of the studied sample Communication difficulties about their physical needs (n=66).

Physical needs items	no difficulty		slightly difficulty		moderate difficulty		extremely difficulty	
	N	%	N	%	N	%	N	%
1.I was Hungry and I wanted to eat	1	1.5	19	28.8	39	59.1	7	10.6
2.I was thirsty and I wanted to drink	0	0	14	21.2	36	54.5	16	24.2
3.I wanted to urinate	0	0	17	25.8	34	51.5	15	22.7
4.I wanted to pass stool	1	1.5	6	9.1	38	57.6	21	31.8
5. I wanted to sleep	0	0	12	18.2	39	59.1	15	22.7

Table (4): Frequency distribution of the studied sample related to Applied care Communication difficulties (n=66).

Applied care items	no difficulty		slightly difficulty		moderate difficulty		extremely difficulty	
	N	%	N	%	N	%	N	%
1.I wanted to raise the bed	0	0	9	13.6	28	42.4	29	43.9
2..I wanted to down the bed	0	0	10	15.2	41	62.1	15	22.7
3..I want the calmness	1	1.5	7	10.6	40	60.6	18	27.3
4. I wanted to free my hand strap	1	1.5	11	16.7	34	51.5	20	30.3
5. I wanted to take a shower	0	0	6	9.1	40	60.6	20	30.3
6. I wanted Lighting higher	1	1.5	8	12.1	37	56.1	20	30.3
7. I wanted Lighting lower	4	6.1	7	10.6	32	48.5	23	34.8
8..I wanted to change my position	0	0	12	18.2	36	54.5	18	27.3
9. I wanted to change my clothes	0	0	9	13.6	34	51.5	23	34.8

Table (5): Frequency distribution of the studied sample related to their Communication difficulties health status (n=66).

health status items	no difficulty		slightly difficult		moderately difficult		extremely difficult	
	N	%	N	%	N	%	N	%
1.I felt pain and I wanted analgesic	0	0	8	12.1	37	56.1	21	31.8
2.I felt coldness and I wanted a blanket	1	1.5	9	13.6	28	42.4	28	42.4
3.I felt heat	0	0	6	9.1	41	62.1	19	28.8
4.I felt difficulty in breath	0	0	8	12.1	27	40.9	31	47.0
5.I wanted to know what is my case now	0	0	9	13.6	44	66.7	13	19.7
6. I wanted to know the expected time to be extubated.	0	0	8	12.1	35	53.0	23	34.8
7. I wanted to know what is the date and time now.	1	1.5	7	10.6	43	65.2	15	22.7
8. I wanted to know when can I go back to home	0	0	7	10.6	40	60.6	19	28.8

Table (6): **Frequency distribution of the studied sample related to their communication difficulties with Family members(n=66).**

Family members	no difficulty		slightly difficult		moderately difficult		extremely difficulty	
	N	%	N	%	N	%	N	%
1.I Complain from pain	0	0	8	12.1	34	51.5	24	36.4
2. I Complain from nursing	0	0	12	18.2	23	34.8	31	47.0
3. I Complain from the given care	1	1.5	5	7.6	38	57.6	22	33.3
4. I Complain from bad treatment	0	0	5	7.6	41	62.1	20	30.3
5. Asked about my work	0	0	9	13.6	27	40.9	30	45.5
6. Asked about sons and relatives	0	0	8	12.1	45	68.2	13	19.7
7. Asked if the physician told them when can I remove the Endotracheal tube.	0	0	8	12.1	37	56.1	21	31.8
8.Asked if the physician told them about my case.	0	0	5	7.6	42	63.6	19	28.8
9.Asked if the physician told them when can I go back to home.	0	0	7	10.6	37	56.1	22	33.3

Table (7): correlations among total Anxiety scores, total Depression scores, total Stress scores and total Communication difficulties scores. (n=66)

Variables		Total Depression scores	Total score	Stress	Total Communication difficulties scores
Total Anxiety scores	r	.624**	.728**		.605**.
	p	.000	.000		.02
Total Depression scores	r		.699**		.597**.
	p		.000		.02
Total Stress scores	r				.563**.
	p				.03

**. High Correlation is significant at the 0.05 level (2-tailed).

Table (8): Comparison of age with anxiety, depression, stress, and communication difficulties(n=66).

Variables	Age					F	P
	20-<30 M±SD	30-<40 M±SD	40-<50 M±SD	50-<60 M±SD	≥60 M±SD		
Total anxiety score	23.35±4.84	25.91±4.76	25.35±4.04	24.85±4.41	27.00±4.24	.981	.424
Total depression score	24.00±4.29	25.21±5.69	24.00±5.73	26.71±4.46	26.00±2.82	.511	.728
Total stress score	23.15±4.38	24.60±4.93	24.85±4.25	23.71±4.95	23.71±4.95	.400	.808
Total communication difficulty score	65.95±11.05	68.91±10.70	64.28±9.14	70.85±6.56	70.50±10.60	.805	.527

Table (9): Comparison of diagnosis with anxiety, depression, stress, and communication difficulties (n=66).

Variables	Diagnosis					F	P
	Trauma M±SD	Burn M±SD	I.O M±SD	Brain tumor,hge M±SD	Hydrocephalus M±SD		
Total anxiety score	22.94±4.56	24.72±4.26	25.73±3.84	27.25±4.65	25.40±5.71	1.576	.192
Total depression score	23.66±5.07	23.18±3.51	24.84±4.93	26.75±5.92	26.80±5.82	1.203	.319
Total stress score	22.11±4.08	23.18±3.99	24.15±4.76	26.62±4.50	26.50±3.92	2.547	.048
Total communication difficulties score	68.83±9.06	67.81±8.36	69.10±9.62	60.37±14.22	66.00±10.24	1.264	.294

Table (10): Comparison of previously being ventilated or not with anxiety, depression, stress, and communication difficulties (n=66).

Variables	previously being ventilated		T	P
	No M±SD	Yes M±SD		
Total anxiety score	25.50±4.33	19.33±3.44	4.074	.005
Total depression score	25.43±4.83	18.16±1.16	9.249	.000
Total stress score	24.70±4.24	18.00±1.67	7.651	.000
Total communication difficulty score	66.63±10.11	73.83±7.90	-2.067	.079

Table (11): Comparison of gender by anxiety, depression, stress, communication   difficulties (n=66)

Variables	Gender			
	Male M±SD	Female M±SD	T	P
Total anxiety score	26.13±4.60	24.30±4.52	1.546	.129
Total depression score	25.04±5.04	24.62±5.14	.317	.753
Total stress score	24.91±4.30	23.65±4.60	1.107	.274
Total communication difficulties score	66.73±12.1	67.58±8.99	-.293-	.771

4. DISCUSSION

Socio demographic characteristics of the subjects:

The present study delineated the dominance of males, especially in the age group reflecting young and middle adulthood. This finding was merely in agreement with that of, TEAM Study Investigators (2015). who conducted a study entitled "early mobilization and recovery in mechanically ventilated patients in the ICU: a bi-national, multi-centre, prospective cohort study. *Critical Care*, *19*(1), 81. and found that, more than half of the studied sample were men and old adults. From the investigator's point of view, the dominance of males in this age category could be the rationale of increased incidence of road traffic accidents. In this regards the Egyptian Central Agency for public Mobilization and statistics (CAPMAS) reported that, a total of 14,403 road accidents in Egypt led to death of 6226 people and the injury of 24,154 others in 2014 (CAPMAS reported 14,403 road accidents in Egypt in 2014,2015).

Regarding to the medical diagnosis it was the principal diagnosis for more than quarter of the studied sample; this finding was consistent with TEAM Study Investigators. (2015).

Stress level score

In the current study, half of the studied sample rated their stress experience during being ventilated as moderate, this was congruent with Samuelson, (2011) who conducted study entitled "Adult intensive care patients' perception of endotracheal tube-related discomforts" A prospective evaluation, as patients describing their ETT experience during their ICU stay, 88% rated their discomfort as moderately stressful. My point of view is that communication barrier (endotracheal tube) and insufficient time for the health care provider to communicate with the non vocally patient put the patient in stress about his status.

Anxiety level score

Regarding this study, most of the studied sample expressed extremely severe anxiety during being ventilated; this is congruent with Tate, et al., (2012) who conducted a study entitled" Anxiety and agitation in mechanically ventilated patients" this study reported that all patients described their feeling of anxious at least once during the study period. The researcher point of view is that as a result of failing communication with the health care provider lead the patient to be severely anxious.

Communication difficulties during being ventilated

This study delineated that, more than half of the studied sample rated their communication during being ventilated ranged from moderate to extremely difficult . This was incongruent with khalaila et, al.(2011) who mentioned in their study (communication difficulties and psychoemotional distress in patients receiving mechanical ventilation) that the vast majority of the study sample rated the communication as quite to extremely difficult. This could be due toconnection of the studied patients to mechanical ventilation that made them difficult to communicate vocally.

Correlation of communication difficulties with depression, anxiety and stress

There were highly significant correlations among the communication difficulty scores with anxiety, depression, and stress. This result were in agreement with (khalaila et, al.2011) who conducted a study on(communication difficulties and psychoemotional distress in patients receiving mechanical ventilation) and revealed that, patients' responses were rated from moderate to high levels of psychoemotional distress as being unable to speak. This was incongruent with patak et, al (2004) who mentioned in their study of (Patients' reports of health care practitioner interventions that are related to communication during mechanical ventilation) that 62% of patients reported a high level of frustration in communicating their needs while being mechanically ventilated.

There were a strong correlations among depression, anxiety and stress .The intercorrelations between DASS dimensions reveal high and positive values ,this was in agreement with João, Maria, Aida and Manuel(2011) who conducted a study entitled (depression, anxiety and stress in primary health care users) and mentioned that, there was a strong association between depression, anxiety and stress.

Comparison of age with communication difficulty, depression, anxiety, and stress

Also, this study indicated no significant statistical differences were found between age with communication difficulty, depression, anxiety, and stress. This finding was congruent with Teris Cheung and Paul (2015) in study of depression, anxiety and symptoms of stress among Hong Kong nurses, according to age with depression while contradicted by age with anxiety and stress. The researcher's interpretation was that all the ages studied were adult and can communicate easily under normal conditions and not with a barrier for communication while during being ventilated all the ages are equal in a barrier of communication.

Comparison of diagnosis with communication difficulty, depression, anxiety, and stress.

There were no significant statistical differences were found between diagnosis with communication difficulty, depression, anxiety, and stress. This finding were contradicted with Teris and Paul (2015) in study of depression, anxiety and symptoms of stress among Hong Kong nurses, reported that, studied sample with chronic illness was two times more likely to experience depressive symptoms than those without. A chronic illness was significantly correlated with anxiety symptoms; chronic illness was more likely to report stress.

Comparison of gender by anxiety, depression, stress, and communication difficulties.

This study reported no significant statistical differences between Gender with anxiety, depression, stress, and communication difficulties .These results were supported by Mohammad (2016) who reported that, findings of his study showed that, there was no interactional effect of gender on stress, anxiety and depression in his study entitled "Stress Anxiety and Depression Among Science and Arts Students". My interpretation was that, the gender has no effect on communication, stress, anxiety and depression but the condition of the patient and the presence of a barrier could affect.

5. CONCLUSION

The present study concluded that the highest score of psychological distress reported by the patients who were intubated was anxiety then depression while the lowest score was the stress.

This study demonstrated that highly significant correlations were found among(Communication difficulties scores and Total Anxiety scores) ,(Communication difficulties scores and Total Depression scores),(Communication difficulties scores and Total Stress scores),(total anxiety scores and total depression scores), (total anxiety scores and total stress score), (total depression scores and total stress score) .

6. RECOMMENDATIONS

- The hospital should use different communication methods with ventilated patients as they were afraid and irritable and developed psychological distress just like: pen and paper, lip reading, word or picture chart, head nods, and alphabetic boards,as caregivers currently make little to no use of the communication methods for patients in the ICU

-Ask simple yes/no questions to which he/ she can nod or shake his/her head.

-more studies should be directed to this field to decrease patients psychological distress.

-develop an algorithm for a structured approach of assistive communication devices with mechanically ventilated patients.

REFERENCES

[1] M.Cairo, (2015). *Pilbeam's Mechanical Ventilation-E-Book: Physiological and Clinical Applications*. Elsevier Health Sciences.

[2] L.Sole, G.Klein & J.Moseley (2013). *Introduction to Critical Care Nursing6: Introduction to Critical Care Nursing*. Elsevier Health Sciences.

[3] Y. Khalil, E.Ibrahim, A.Shabaan, M.Imam, &E. Behairy, (2012). Assessment of risk factors responsible for difficult weaning from mechanical ventilation in adults. *Egyptian*

[4] C.Arnold& U.Boggs,(2015). *Interpersonal Relationships-E-Book: Professional Communication Skills for Nurses*. Elsevier Health Sciences.

[5] P.Gómez-Carretero, V.Monsalve, F.Soriano, &J. De Andrés, (2007). Emotional disorders and psychological needs of patients in an Intensive Care Unit. *Medicina intensiva*, *31*(6), 318-325.

[6] V.Shafipour, E.Mohammad, & F.Ahmadi, (2014). Barriers to nurse-patient communication in cardiac surgery wards: a qualitative study. *Global journal of health science*, *6*(6), 234.

[7] A.Tate, D.Dabbs, A.Hoffman, E.Milbrandt, &B.Happ, (2012). Anxiety and agitation in mechanically ventilated patients. *Qualitative health research*, *22*(2), 157-173.

[8] L.Menzel,(1994). *Communication-related responses of ventilated patients* (Doctoral dissertation, Case Western Reserve University).

[9] L.Patak, A.Wilson-Stronks, J.Costello, M.Kleinpell, A.Henneman, C.Person, & B.Happ, (2009). Improving patient-provider communication: a call to action. *The Journal of nursing administration*, *39*(9), 372.

[10] H.El-Soussi, M.Elshafey, Y.Othman, &A.Abd-Elkader, (2015). Augmented alternative communication methods in intubated COPD patients: Does it make difference. *Egyptian Journal of Chest Diseases and Tuberculosis*,*64*(1), 21-28.