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Original Research Article

Effectiveness of Information, Education and Communication (IEC) Package on Biopsychosocial Variables among Suicidal Patients at Dhanvantri Critical Care Centre, Erode

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ABSTRACT

Suicide is a difficult subject to contemplate. Survivors may be reluctant to confide that the death was self-inflicted. And when others know the circumstances of the death, they may feel uncertain about how to offer help. **Objectives:** The present study was aimed to assess the effectiveness of Information, Education and Communication (IEC) Package on Biopsychosocial variables among suicidal patients at Dhanvantri Critical Care Centre, Erode. **Methods:** Pre-experimental design was used in the present study. Totally 16 samples were selected based on purposive sampling technique. Biological values, self-esteem, role function and interdependance were assessed before and after 15 days and 30 days of intervention.
Results: Finding showed the mean percentage for biological variables were 77. 86 and 94, self esteem were 33, 43 and 52, role function were 57, 66 and 73 and inter-dependance were 65, 71 and 82. Paired t test values for biological variable were 2.91, 5.11 and 0.62, self esteem was 2.27, 4 and 5.2, role function was 4.8, 6.19 and 2.82 and inter-dependance were 2.53, 4.43 and 3.54.
Conclusion: The study concluded that repeated reinforcement can enhance wellbeing of suicidal patients**.**

Key Words: IEC Package, Bio-psychosocial variables, Suicide

INTRODUCTION

"People bereaved by a suicide often get less support because it's hard for them to reach out - and because others are unsure how to help".

The grief process is always difficult, but a loss through suicide is like no other, and the grieving can be especially complex and traumatic. People coping with this kind of loss often need more support than others, but may get less. There are various explanations for this. Suicide is a difficult subject to contemplate. Survivors may be reluctant to confide that the death was self-inflicted. And when others know the circumstances of the death, they may feel uncertain about how to offer help. Grief after suicide is different, but there are many resources for survivors, and many ways you can help the bereaved, (Harvard Women's Health, 2009).

A nonfatal suicide attempt is the strongest known clinical predictor of eventual suicide. Suicide risk among self-harm patients is hundreds of times higher than in the general population. It is often estimated that about 10%–15% of attempters eventually die by suicide. However, the risk is highest during the first months and years after the attempt and appears to decline over time, (Kirsi Suominen, 2004).

A suicide attempt is a risk factor for completed suicide; the absolute risk in people followed-up for 5-37 years was 7-13%,1-6 roughly corresponding to a 30-40 times increased risk of death from suicide in those who had attempted suicide compared with the general population. These figures, however, suggest that suicide is a comparatively rare event even in a high risk group of people who have attempted suicide. It is therefore vital to identify those at highest risk of completed suicide in this group, (Dag Tidemalm, 2008).

Suicide and suicidal behaviors cause severe personal, social, and economic consequences. Despite the severity of these consequences, suicide and suicidal behaviors are statistically rare, even in populations at risk. For example, although suicidal ideation and attempts are associated with increased suicide risk, most individuals with suicidal thoughts or attempts will never die by suicide. It is estimated that attempts and ideation occur in approximately 0.7% and 5.6% of the general U.S. population per year, respectively. In comparison, in the United States, the annual incidence of suicide in the general population is approximately 10.7 suicides for every 100,000 persons, or 0.0107% of the total population per year. This rarity of suicide, even in groups known to be at higher risk than the general population, contributes to the impossibility of predicting suicide, (O'Carroll PW, 1996).

Some factors may increase or decrease risk for suicide; others may be more relevant to risk for suicide attempts or other self-injurious behaviors, which are in turn associated with potential morbidity as well as increased suicide risk. In weighing risk and protective factors for an individual patient, consideration may be given to 1) the presence of psychiatric illness; 2) specific psychiatric symptoms such as hopelessness, anxiety, agitation, or intense suicidal ideation; 3) unique circumstances such as psychosocial stressors and availability of methods; and 4) other relevant clinical factors such as genetics and medical, psychological, or psychodynamic issues, (Crosby AE, 1994).

Suicide can isolate survivors from their community and even from other family members. There's still a powerful stigma attached to mental illness (a factor in most suicides), and many religions specifically condemn the act as a sin, so survivors may understandably be reluctant to acknowledge or disclose the circumstances of such a death. Family differences over how to publicly discuss the death can make it difficult even for survivors who want to speak openly to feel comfortable doing so. The decision to keep the suicide a secret from outsiders, children, or selected relatives can lead to isolation, confusion, and shame that may last for years or even generations. In addition, if relatives blame one another - thinking perhaps that particular actions or a failure to act may have contributed to events - that can greatly undermine a family's ability to provide mutual support.

"Suicide can shatter the things you take for granted about yourself, your relationships, and your world," says Dr. Jordan. Many survivors need to conduct a psychological "autopsy," finding out as much as they can about the circumstances and factors leading to the suicide, in order to

develop a narrative that makes sense to them. While doing this, benefit from the help of professionals or friends who are willing to listen — without attempting to supply answers - even if the same questions are asked again and again.

Suicide is a difficult subject to contemplate. Survivors may be reluctant to confide that the death was self-inflicted. And when others know the circumstances of the death, they may feel uncertain about how to offer help. Grief after suicide is different, but there are many resources for survivors, and many ways you can help the bereaved. (Harvard Women's Health, 2009)

- It is estimated that over 100,000 people die by suicide in India every year. India alone contributes to more than 10% of suicides in the world.
- The suicide rate in India has been increasing steadily and has reached 11.2 (per 100,000 of population) in 2011 registering 78% increase over the value of 1980.

Research suggests that suicide survivors find individual counseling (see "Getting professional help") and suicide support groups to be particularly helpful. There are many general grief support groups, but those focused on suicide appear to be much more valuable. In a small pilot study that surveyed 63 adult suicide survivors about their needs and the resources they found helpful, 94% of those who had participated in a suicide grief support group found it moderately or very helpful, compared with only 27% of those who had attended a general grief group. The same study found that every survivor who had the opportunity to talk one-on-one with another suicide survivor found it beneficial. These results were published in the journal Suicide and Life-Threatening Behavior (July 2008).

Statement of the Problem

Effectiveness of Information, Education and Communication (IEC) Package on Biopsychosocial variables among suicidal patients at Dhanvantri Critical Care Centre, Erode

Objectives

- To assess the effectiveness of Information, Education and Communication (IEC) package on Biopsychosocial variables among suicidal patients in experimental.
- To correlate biopsychosocial variables among suicidal patients in experimental and group before and after Information , Education and Communication (IEC) package
- To correlate selected demographic variables and biopsychosocial variables among suicidal patients in experimental and group before and after Information, Education and Communication (IEC) package.

Hypotheses

H_1: There is significant effectiveness of Information, Education and Communication (IEC) package on Biopsychosocial variables among suicidal patients in experimental group.

H_2: There is significant correlation between Biopsychosocial variables among suicidal patients in experimental group before and after Information, Education and Communication (IEC) package.

H_3: There is significant association between the selected demographic and Biopsychosocial variables among suicidal patients in experimental and group before and after Information, Education and Communication (IEC) package.

METHODS

Research Approach

An evaluative approach was considered as the appropriate measure to evaluate the Effectiveness of Information,

Education and Communication (IEC) Package on Biopsychosocial variables among suicidal patients.

Research Design

Pre experimental one group pre test and post test was used

Research Setting

The study was conducted in Dhanvantri Critical Care Centre, Erode.

Sample: The sample consisted of 16 suicidal patients admitted in Dhanvantri Critical Care Centre, Erode.

Sampling Technique: Non probability purposive sampling technique was used to select the sample

Development of Tool

Section A: Socio demographic variables of the samples

Section B: Observational rating scale on Biological variables

Section C: Rosenberg self esteem scale

This is a 10 item Likert scale with items answered on a four point scale- from strongly agree to strongly disagree. Score between 15-25 are considered average.

Section D: Sherryl H. Goodman role functioning scale

This is a 4 item Likert scale with items answered on a seven point scale- with minimum level of functioning to optimum level of functioning.

Section E: Singelis self construals scale

This is a 4 item Likert scale with items answered on a four point scale – from totally disagree to totally agree.

Plan for Data Analysis

The data were analysed by using both descriptive and inferential statistics

- Background information of the subject were described by percentage distribution
- Mean, standard deviation and paired 't' test was used to find the relationship between pre-test and post test scores on Biopsychosocial variables among suicidal patients.
- Chi square test was used to find out the relationship between selected variables of suicidal patients with their post test scores.

RESULTS

Section A: Distribution of suicidal patients according to their demographic variables revealed that, 62.5% of them were in the age group of 25 -40 years, 63% of them were female and 81.25% of the suicidal patients were hindus. However similar percentage (37.5% and 37.5%) had high school education and self employment respectively. 56.5 % of them living in nuclear family,75% of them had previous history of suicide, 69% of them married and 65.75% of them had family history of suicide.

Section B: Frequency and percentage distribution of biological variable, self esteem, role function and inter-dependance among suicidal patients.

Table 1: Frequency and percentage distribution of biological variable among suicidal patients.

Level of biological variable among suicidal patient	Pre test		Post test – I		Post test - II	
	(F)	(%)	(F)	(%)	(F)	(%)
Normal range	15	64	16	100	16	100
Abnormal Range	1	6	0	0	0	0

All suicidal patients (100%) biological variables were in normal range during posttest I and II. 64% of suicidal patients during pretest were in normal range.

Table 2: Frequency and percentage distribution of self esteem among suicidal patients.

Level of self esteem among suicidal patient	Pre test		Post test – I		Post test – II	
	(F)	(%)	(F)	(%)	(F)	(%)
Low	9	57	4	25	1	6
Average	7	43	12	75	14	88
High	0	0	0	0	1	6

Majority of suicidal patients self esteem during post test I (75%) and posttest II (88%) were in average. But during pretest

majority (57%) of patients were in low self esteem.

Table 3: Frequency and percentage distribution of Role Function among suicidal patients.

Level of Role Function among suicidal patient	Pre test		Post test - I		Post test – II	
	(F)	(%)	(F)	(%)	(F)	(%)
Minimum	6	38	4	25	1	6
Optimum	10	62	12	75	15	94

Majority of suicidal patients role function during pretest (62%), post test I (75%) and posttest II (88%) were in optimum level.

Table 4: Frequency and percentage distribution of level of interdependence among suicidal patient.

Level of interdependence among suicidal patient	Pre test		Post test – I		Post test – II	
	(F)	(%)	(F)	(%)	(F)	(%)
Inadequate	0	0	0	0	0	0
Moderate	3	19	1	6	0	0
Adequate	13	81	15	94	16	100

Majority of suicidal patients' inter-dependance during pretest (81%), post test I (94%) and posttest II (100%) were in optimum level.

Section- C: Mean, SD and mean percentage of biopsychosocial variables among suicidal patients.

Table 5: Mean, SD and mean percentage of behavioural variables, Self esteem, Role functions and Inter-dependence among suicidal patients.

Areas	Pre test			Post test – I			Post test - II		
	Mean	SD	Mean %	Mean	SD	Mean %	Mean	SD	Mean %
Biological variable	7.68	1.44	77	8.56	1.41	86	9.37	1.02	94
Self - esteem	13.37	3.63	33	17.06	3.71	43	20.87	3.46	52
Role function	16	4.53	57	18.37	4.31	66	20.43	3.24	73
Inter- dependence	33.56	6.89	65	37.06	5.05	71	40.18	5.23	82

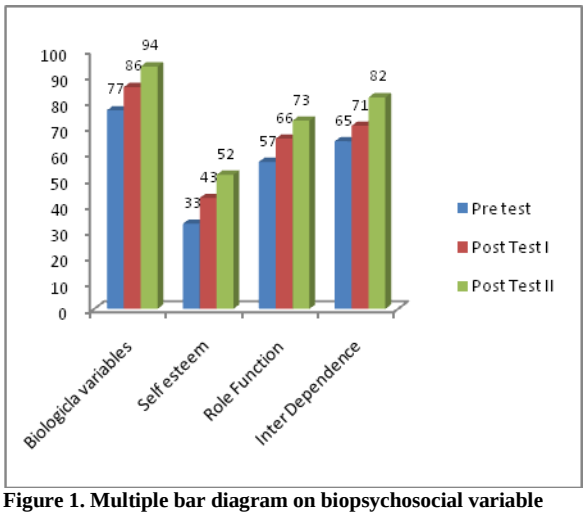

Figure 1. Multiple bar diagram on biopsychosocial variable among suicidal patients.

Mean, standard deviation and mean percentage of biopsychosocial variables among suicidal patients depicts that when compare to pretest values, posttest values are gradually increased in all parameters.

Multiple bar diagram on biopsychosocial variable like, biological variable, self esteem, role function and inter-dependance were gradually increased from pretest to posttest I & II.

Section - D: Effectiveness of Information, Education and Communication (IEC) Package on Biopsychosocial variables among suicidal patients.

Table 6: Paired t test value of behavioural variables, Self esteem, Role functions and Inter- dependence among suicidal patients.

Areas	t test value		
	Pre test and posttest I	Pretest and posttest II	Posttest I and Post test - II
Biological variable	2.91	5.11	0.62
Self – esteem	2.27	4	5.2
Role function	4.8	6.19	2.82
Inter- dependence	2.53	4.43	3.54

Significant P > 0.05

Paired t value on biopsychosocial variables showed that there is highly significant effectiveness were present between pretest and posttest II biological, role function and

inter-dependance variables whereas self esteem were found highly effective between posttest I & II.

Section – E: Co-relation between effectiveness of Information, Education and Communication (IEC) Package on Biopsychosocial variables among suicidal patients.

Table 7 : Correlation Co efficient of behavioural variables, Self esteem, Role functions and Inter- dependence among suicidal patients.

Suicidal patients	Posttest I –r^1	Posttest II - r^2
Biological variable and self esteem	-0.10	-0.36
Biological variable and role function	0.10	-0.23
Biological variable and interdependance	-0.14	-0.33
Self esteem and role function	0.38	0.54
Role function and interdependence	-0.028	0.23
Interdependence and self esteem	-0.51	0.35

Significant P > 0.05

Table 7 showed that there were positive relationship among self esteem, role function and inter-dependence and there were negative relationship between biological and other variables.

DISCUSSION

Information, Education and Communication (IEC) package on Biological variables among suicidal patients in experimental group were found highly effective during pretest and posttest II (t = 5.11, Table value - 2.13, df; 15, level of significance; 5%).

Information, Education and Communication (IEC) package on Self esteem among suicidal patients in experimental group were found highly effective during posttest-I & II (t = 5.2, Table value - 2.13, df; 15, level of significance; 5%).

Information, Education and Communication (IEC) package on Role function among suicidal patients in experimental group were found highly effective during pretest posttest- II (t = 6.19, Table value - 2.13, df; 15, level of significance;5%).

Information, Education and Communication (IEC) package on Inter - dependence among suicidal patients in experimental group were found highly effective during pretest posttest- II (t = 4.43, Table value - 2.13, df; 15, level of significance; 5%).

There is no significant relationship between suicidal patients with the demographic variables like, age, gender, religion, education, employment, type of family, previous history of suicide, marital status and family history of suicide and posttest scores on bio-psychosocial variables among suicidal patients. .

CONCLUSION

- Suicide is the burning problems in the world irrespective of age, gender, religion, education, employment, marital status, type of family and past and family history of suicide.
- Comparing to single interventional strategies, multi interventional strategies like Information Education Communication Package were highly effective on biological, self esteem, role function and inter dependence.
- The study concluded that multi interventional studies with repetitive reinforcement improves quality of life of suicidal patients and prevents the relapse

Recommendations

The study recommends,

- ✓ To compare the effectiveness of IEC Package among selected demographic variables like gender, education, marital status and type of family.

- ✓ To investigate phenomenological phenomena of suicides before and after IEC Package.

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