

Prevalence of Depression among hemodialysis patients at Human Organ Transplant Center, Bhaktapur

Ms. Prabina Karki

Ms. Alisha Rijal

Everest College of Nursing

Introduction

Patients on hemo-dialysis face numerous physical and psychological stresses that result in reduced health status. Depression according to a number of surveys is the most common psychological problems in patients undergoing renal dialysis.

Depression can influence the course of CKD. Patients with depression are more likely to progress to ESRD and are more likely to initiate dialysis with higher glomerular filtration rates than non-depressed patient. The review of literature reveals rates of depression in patients with ESRD, ranging from 12% to 40% in Worldwide (Kiosses and Karathanos, 2012).

In South-East Asia, depression is the most common psychiatric disorder in people who die by suicide. The WHO has estimated that the 26% of the world's population living in the 11 countries of the WHO South-East Asia Region accounts for 39% of global suicides(WHO, 2017).

Objectives of the study

- To determine the mild depression in haemodialysis patients by using BDI.
- To find out the moderate depression in haemodialysis patients by using BDI.
- To identify the severe depression in haemodialysis patients by using BDI.
- To associate prevalence of depression with the socio demographic variables.

Research Hypothesis

- **Null Hypothesis (H_0):** There is no significant association between the demographic variables and the prevalence of depression among hemodialysis patients.
- **Alternative Hypothesis (H_1):** There will be a significant association between the demographic variables and the prevalence of depression among haemodialysis patients.

Conceptual framework

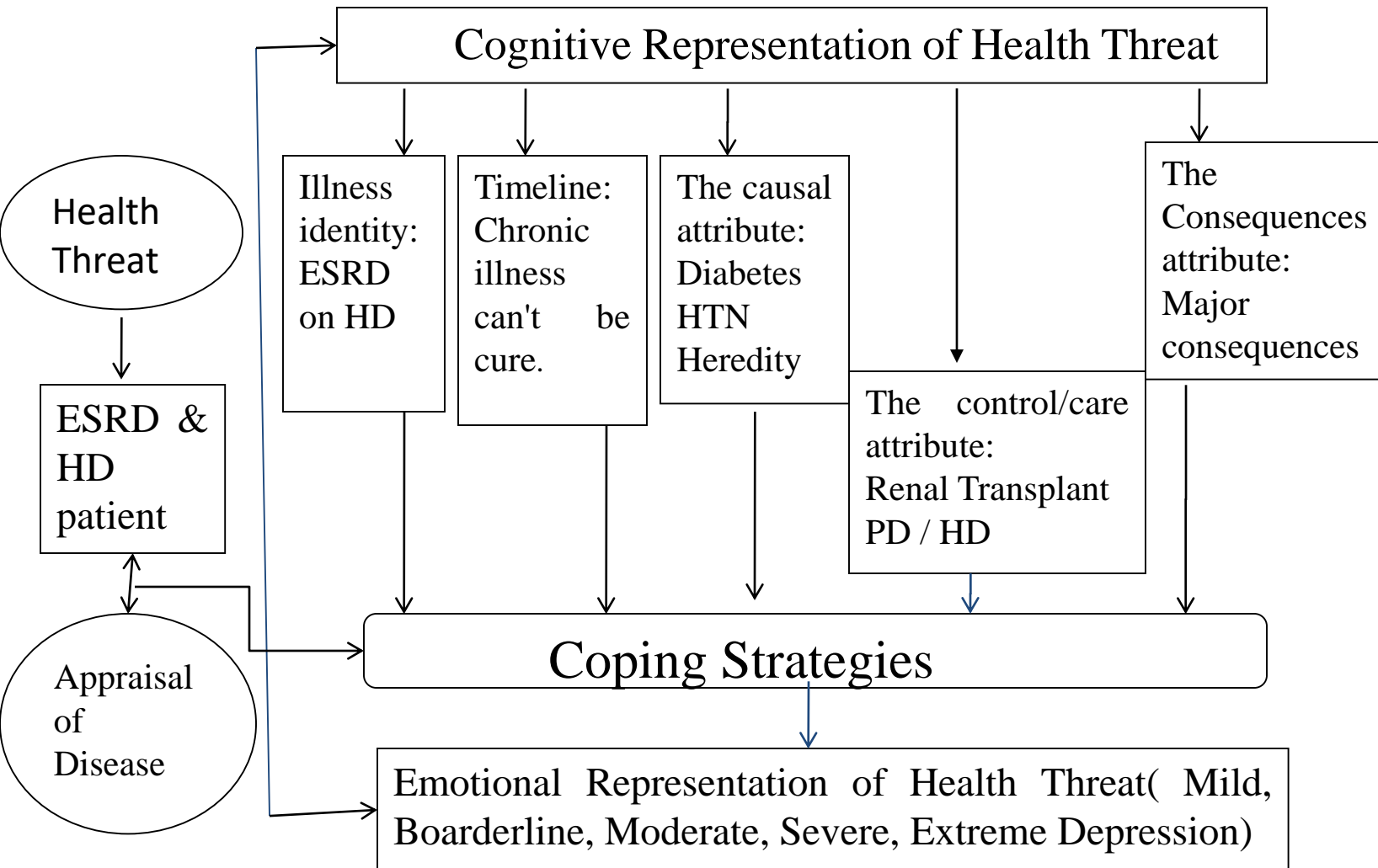


Fig 1: Theoretical framework on Prevalance of depression among haemodialysis patients.

Operational Definitions

- **Prevalence** : Prevalence is a measurement of depression in haemodialysis patients affected by the disease at a data collection time.
- **Depression** : Depression is a mood disorder that causes a persistent feeling of sadness & loss of interest which will be identified by using BDI. It is categorized as

1-10 Normal	11-16 Mild depression
17-20 Boarderline clinical depression	21-30 Moderate depression
31-40 Severe depression	>40 Extreme depression
- **Hemodialysis patients:** Patients of above 18 years of all gender diagnose with ESRD & continuously taking haemodialysis service for at least 2 times a week from last one month.

Research Methodology

RESEARCH DESIGN

Descriptive cross-sectional design



STUDY SETTING

Human Organ Transplant Center



Patients belonging to age group of above 18 yrs diagnosed with ESRD receiving hemodialysis



**SAMPLING
TECHNIQUE**
Non-probability
purposive sampling



SAMPLE



**SAMPLE
SIZE(150)**



CRITERIA



INDEPENDENT VARIABLE

Sociodemographic data

DEPENDENT VARIABLE

Prevalence of Depression
among Hemodialysis patients.

TOOL

Section A: Demographic Variables
Section B: Beck Depression Inventory

DATA COLLECTION PROCEDURE

DATA ANALYSIS AND INTERPRETATION

Descriptive and Inferential Statistics.

Results and Discussion

Table 1: Demographic information

n = 150

Characterstics	Frequency	Percentage(%)
1.Age		
a. 18-30yrs	39	26
b. 31-42yrs	47	31.3
c.43-55yrs	39	26
d. >55yrs	25	16.7
2.Gender		
a.Female	56	37.3
b.Male	94	62.7

Table 2: Demographic information**n = 150**

Characterstics	Frequency	Percentage(%)
3. Ethnicity		
a.Brahamin	16	10.7
b.Chhetri	30	20
c.Janajati	82	54.7
d.Others	22	14.7
4. Religion		
a.Hindu	114	76
b.Buddhist	24	16
c.Muslim	2	1.3
d.Others	10	6.7

Table 3: Sociodemographic information

n = 150

Characterstics	Frequency	Percentage(%)
5.Educational Status		
a.Literate	117	78
b.Illiterate	33	22
6.Marrital Status		
a.Married	117	78
b.Unmarried	28	18.7
c.Divorce	0	0
d.Widow	5	3.3

Table 4: Sociodemographic information

n = 150

Characterstics	Frequency	Percentage(%)
-----------------------	------------------	----------------------

7.Previous Occupation

a. Student	18	12
b. Farmer	30	20
c. BaideshikRojgar	23	15.3
d. Others	79	52.7

8.Family

a. With Family	142	94.7
b. Alone	8	5.3

Table 5: Socio-demographic variables

n = 150

Characterstics	Frequency	Percentage(%)
9. Family Monthly Income		
a.< Rs.5000	31	20.7
b.Rs.5000 – 10000	24	16
c.Rs.10000 – 20000	29	19.3
d.>Rs.20000	66	44

Table 6: Health related results**n = 150**

Characterstics	Frequency	Percentage(%)
10. Hypertension	136	90.7
11. Diabetes	15	10
12. Cardiac disease	16	10.7
13. Family history of mental illness	5	3.3

Table 7: Types of depression among HD patients

n = 150

Types of Depression	Frequency	Percentage(%)
1. No depression (1 – 10)	28	18.7
2. Mild depression (11 – 20)	66	44
3. Moderate Depression (21 – 30)	39	26
4. Severe Depression (> 31)	17	11.3

Table 8 : Association between prevalence of depression and socio-demographic variables

Characterstics	Yes		No		Chi-square	P value
	Frequency	%	Frequency	%		
1.Age						
a. 18-30yrs	34	22.66	5	3.33	6.71	0.82
b. 31-42yrs	38	25.33	9	6	df = 3	NS**
c.43-55yrs	34	22.66	5	3.33		
d. >55yrs	16	10.66	9	6		
2.Gender						
a.Female	47	31.33	9	6	0.39	0.52
b.Male	75	56	19	12.66	df = 1	NS**
3. Ethnicity						
a.Brahamin	12	8	4	2.66	2.48	0.47
b.Chhetri	22	14.66	8	8.66	df = 3	NS**
c.Janajati	69	46	13	2		
d.Others	19	12.66	3			

n = 150

Table 9 : Association between prevalence of depression and socio-demographic variables

Characterstics	Yes		No		Chi-square	P value
	Frequency	%	Frequency	%		
4. Religion						
a.Hindu	95	63.33	19	12.67	4.65	0.19
b.Buddhist	20	13.33	4	2.67	df = 3	NS**
c.Muslim	1	0.67	1	0.67		
d.Others	6	4	4	2.67		
5.Educational						
Status	94			15.33	0.34	0.55
a.Literate	28	62.67	23	3.33	df = 2	NS**
b.Illiterate		18.67	5			

n = 150

Table 10: Association between prevalence of depression and socio-demographic variables

Characterstics	Yes		No		Chi-square	P value
	Frequency	%	Frequency	%		
6.Marrital Status						
a.Married	92	61.33	25	16.67	3.16 df = 2	0.22 NS**
b.Unmarried	26	17.33	2	1.33		
c.Divorce	0	0	0	0		
d.Widow	4	2.67	1	0.67		
7.Previous Occupation						
a. Student	15	10	3	2	0.87 df = 3	0.22 NS**
b. Farmer	23	15.33	7	4.67		
c. BaideshikRojgar	18	12	5	3.33		
d. Others	66	44	13	8.67		

n = 150

Table 11 : Association between prevalence of depression and socio-demographic variables

n = 150

Characterstics	Yes		No		Chi-square	P value
	Frequency	%	Frequency	%		
8.Family						
a. With Family	114	76	28	18.66	1.940	0.164
b. Alone	8	5.33	0	0	df = 1	NS**
9. Family Monthly Income						
a.< Rs.5000	28	18.67	2	2	3.687 df = 3	0.298 NS**
b.Rs.5000 – 10000	21	14	2	2		
c.Rs.10000 – 20000	23	15.33	6	4		
d.>Rs.20000	50	33.33	16	10.67		

Table 12: Association between prevalence of depression and health related results

n = 150

Characterstics	Yes		No		Chi-square	P value
	Frequency	%	Frequency	%		
10. Hypertension	11	7.33	3	2	0.07	0.78
	111	74	25	16.67	df = 1	NS**
11. Diabetes	112	74.67	23	15.33	2.36	0.12
	10	6.67	5	3.33	df = 1	NS**

Table 13 : Association between prevalence of depression and health related results

n = 150

Characterstics	Yes		No		Chi-square	P value
	Frequency	%	Frequency	%		
12. Cardiac disease	108	72	26	17.33	0.449 df = 1	0.503 NS**
	14	9.34	2	1.33		
13.Family history of mental illness	119	79.34	26	17.33	1.551 df = 1	0.212 NS**
	3	2	2	1.33		

Table 14: Association between prevalence of depression and health related results**n = 150**

Characterstics	Yes		No		Chi-square	P value
	Frequency	%	Frequenc y	%		
14. Family History of CKD	105	70	25	16.77	0.204	0.651
	17	11.33	3	2	df = 1	NS**
15. Duration of hemodialysis						
a. <1yrs	45	30	10	6.67	7.294	0.63
b. 1 – 3yrs	55	36.67	8	5.33	df = 3	NS**
c. 4 – 6yrs	15	10	9	6		
d. >6yrs	7	4.67	1	0.67		

Conclusion:

- ❖ The result of this study showed that most of the patients undergoing hemodialysis patients are depressed.

Recommendation :

- ❖ This study can be done in large scale population to generalize the findings in similar setting hospital. This study alerts us to diagnosis of depression to improve psychological and quality of life for those patients.

THANK-YOU

!!!