

ISSN-2394-9465 (Print) • ISSN: 2395-180X (Electronic)

Volume 2

Number 1

January-June 2016

International Journal of Psychiatric Nursing

Website: www.ijpn.co

International Journal of Psychiatric Nursing

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Print- ISSN: 2394-9465, Electronic- ISSN: 2395-180X
Frequency: Six Monthly

International Journal of Psychiatric Nursing is a double blind peer reviewed
international journal. It deals with all aspects of **Psychiatric Nursing**.

Website: www.ijpn.co

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Editor

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Institute of Medico-legal Publications
4th Floor, Statesman House Building, Barakhamba Road,
Connaught Place, New Delhi-110 001

Printed, published and owned by

Dr. R.K. Sharma
Institute of Medico-legal Publications
4th Floor, Statesman House Building, Barakhamba Road,
Connaught Place, New Delhi-110 001

Published at

Institute of Medico-legal Publications
4th Floor, Statesman House Building, Barakhamba Road,
Connaught Place, New Delhi-110 001



International Journal of Psychiatric Nursing

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Volume 2, Number 1

Jan-June 2016

A Comparative Study to Assess Physical and Psychosocial Problems among Senior Citizens Residing at Old Age Home and those with Families in Selected Urban Community Ludhiana, Punjab

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ABSTRACT

Background: The prevalence of physical and psychosocial problems among senior citizens is rising in every country of world especially in developing country such as India. This is because of lack of care among senior citizens due to environmental factors. Physical and psychosocial problems are most common among senior citizens. Therefore, a comparative study to assess physical and psychosocial problems among senior citizens residing at old age home and those with families in selected urban community

Aim: The aim of the study is to compare the physical and psychosocial problems among senior citizens residing at old age home and those with families in the selected urban community Ludhiana.

Method: A Non Experimental Descriptive Comparative research design is used to compare the physical and psychosocial problems among senior citizens residing at old age home and those with families in selected urban community Ludhiana, Punjab.

Result: Descriptive and inferential statistics was used to analyze the data. It shows that mean score (94.02) of physical and psychosocial problems of senior citizens residing with families is higher as compare to the mean score (48.46) of physical and psychosocial problems among senior citizens residing at old age home. Based on 'Z' test the difference of mean score of physical and psychosocial problems among senior citizens at old age home and those with families is statistically highly significant at $p < 0.001$ level. It is inferred that physical and psychosocial problems among senior citizens residing at old age home and with families are inter related and interdependent.

Interpretation and Conclusion: The finding inferred that senior citizens residing with families have more physical and psychosocial problems as compare to senior citizens residing at old age home. The comparison is highly significant of physical and psychosocial problems among senior citizens residing with families and at old age home. The association of physical and psychosocial problems among senior citizens residing at old age home and those with families was significant.

Keywords: *Physical and psychosocial problems, senior citizens.*

INTRODUCTION

"Age' is the acceptance of a term of years. But maturity is the glory of years".

-Martha Graham

Aging is a universal process. In the words of

Seneca "old age is an incurable disease". But more recently Sir James sterling Ross Commented" you do not heal old age, you protect it, you promote it and you extend it. These are in fact the principles of Preventive Medicine. In old age physical strength deteriorates, mental stability diminishes; money power becomes bleak coupled with negligence from

the younger generation¹.

Age is not a disease. Everything ages. This process affects objects and things as well as people. Ageing is as old as time itself. It begins with conception. It begins at the date of birth and each anniversary of that date adds another year to age. But it would be misleading to think of the ageing process only in terms of time. (Gaikwad V.- 1997)².

Decreasing strength is the general physical change in the elderly. The sociologic Issues of ageing are concerned with work, retirement, social security, health care and the response to getting old age is related to lifelong habits, diet and exercise patterns.³

As per the ICMR (Indian Council Of Medical Research) report (2002) on population projection there are 385 million people. Seventy three percent of deaths in the elderly are related to heart diseases, smoking and cancers. A study on the profile of the profile of the aged in India revealed that the ratio of urban to rural of 60+ people was 3 in 1986 but came down to 2 in 2001 and this gap was further reduced as there was relative increase in the number of rural aged population.⁴

OBJECTIVES

1. To assess physical and psychosocial problems in senior citizens residing at old age home.
2. To assess physical and psychosocial problems among senior citizens residing with families.
3. To compare the physical and psychosocial problems among senior citizens residing at old age home and those with families.
4. To find out the association of physical and psychosocial problems among senior citizens residing at old age home and those with families.
5. To find out the relationship of physical and psychosocial problems among senior citizens residing at old age home and those with families with selected socio-demographic variables.

MATERIALS AND METHODS

Non Experimental Descriptive Comparative

research design was used. The study was conducted in Vivekananda old age home and selected urban community (Jammu Colony), Ludhiana, Punjab. Population comprised of senior citizens in the age group of above 60 years. The sample size was 100 senior citizens who met the inclusion criteria which were included in the study. Purposive sampling technique was adopted for the selection of sample. C.M.I Health Questionnaire was used as a tool. It was developed by N.M Wig Dwarka Pershad, S.K Verma. The C.M.I Health Questionnaire is a four-page sheet.

Criteria for selection of sample

The senior citizens who were : (1) Willing to participate in the study . (2) In the age of 60 years and above. (3) Residing at old age homes & selected urban community (Jammu Colony) Ludhiana.

The tool used for study were as below

Part –I

Questionnaire consisted of 144 questions for assessment of physical problems among senior citizens.

Total Questions = 144

Maximum score = 144

Minimum score = 00

Each question carried two options “Yes” or “No”. There were one score for ‘yes’ answer and zero score for ‘No’ answer.

Part - II

Questionnaire consisted of 51 questions for assessment of physical problems among senior citizens.

Total Questions = 51

Maximum score = 51

Minimum score = 00

Each question carried two options “Yes” or “No”. There were one score for ‘yes’ answer and zero score for ‘No’ answer.

MAJOR FINDINGS AND RESULTS

According to age, maximum (48%) of senior

citizens residing with families and (60%) of senior citizens residing at old age home are in the age group of above 75 years. According to Gender, maximum (50%) of senior citizens residing with families and (52%) of senior citizens residing at old age home are in the female group. According to education, maximum (76%) of senior citizens residing with families and (90%) of senior citizens residing at old age home are in the illiterate group. According to marital status, maximum (68%) of senior citizens residing with families and (78%) of senior citizens residing at old age home are in the widow/widower category. According to No. of children, maximum

(26%) of senior citizens who have two children residing with families and (44%) of senior citizens who have one child residing at old age. According to financial support, maximum (78%) of senior citizens residing with families and (100%) of senior citizens residing at old age home are those who have financial support. According to Occupation, maximum (50%) of senior citizens residing with families and 80% of senior citizens residing at old age home are in the unemployed category. The senior citizens have more physical and psychosocial problems residing with families as compare to those who residing at old age home.

Section I: Demographic Characteristics of Sample

Table - 1:

Characteristics	With Families		Old age Home	
	n=50	%	n =50	%
A. Age (in years)				
a) 60-65 yrs	9	18	2	4
b) 66-70	5	10	6	12
c) 71-75	12	24	12	24
d) Above 75	24	48	30	60
B. Gender				
a. Male	25	50	24	48
b. Female	25	50	26	52
C. Education				
a. Illiterate	38	76	45	90
b. Literate	12	24	5	10
D. Marital Status				
a. Married	15	30	5	10
b. Unmarried	0	0	6	12
c. Widow/widower	34	68	39	78
d. Divorced	1	2	0	0
E. No. of Children				
a. None	4	8	1	34
b. One	9	18	22	44
c. Two	3	26	5	10
d. Above three	12	24	3	6
F. Financial Support				
a. Yes	39	78	50	100
b. No	11	22	0	0
G. Occupation				
a. Unemployed	25	50	40	80
b. Retired	7	14	10	20
c. Business	17	34	0	0
Any other	1	2	0	0

Table no. 1 depicts that it can be briefed that the senior citizens with families and in old age home. According to age group the majority of senior citizens with families (48%) are in age group of > 75 years and the majority of senior citizens in old age home (60%) are in age group of > 75 years. According to gender the majority of senior citizens with families (50%) are males and the majority of senior citizens in old age home (50%) are females. According to education the majority of senior citizens with families (76%) are illiterate and the majority of senior citizens in old age home (90%) are illiterate. According to marital status, the majority of senior citizens with families (68%) are widow/widower and the majority of senior citizens in old age home (78%) are widow/widower. According to No. of Children the majority of senior citizens with families (26%) who have two children and the majority of senior citizens in old age home (44%) who have one child. According to financial support the majority of senior citizens with families (78%) in yes category and the majority of senior citizens in old age home (100%) in yes category. According to occupation the majority of senior citizens with families (50%) are unemployed and the majority of senior citizens in old age home (80%) are unemployed.

Objective1. To assess physical and psychosocial problems in senior citizens residing at old age home.

Table 2: Physical and psychosocial problems in senior citizens residing at old age home. N= 50

Senior citizens residing at old age home			
		n	%
Physical Problemsa	≥25	50	100
Psychosocial problems	≥03	49	98

Maximum Score (Physical Problem) = 144

Maximum Score (Psychosocial Problems)=51

Table – 4: Comparative mean score of physical and psychosocial problems among senior citizens residing at old age home and those with families. N=100

Physical and Psychosocial Problems Score				
Senior citizens at Old age home = 50			Senior citizens With families n = 50	
	Mean	SD	Mean	SD
Physical & Psychosocial Problems	48.46	13.12	94.02	24.87
'Z' 11.454***				

Presence of physical Problems = ≥ 25

Presence of Psychosocial Problem = ≥03

Table No. 2 depicts the physical and psychosocial problems in senior citizens residing at old age home. It shows that 100 % of senior citizens are suffering from physical problems and 98% of senior citizens are suffering from psychosocial problems. Hence, it is concluded that senior citizens residing at old age home had physical and psychosocial problems.

Objective2. To assess physical and psychosocial problems in senior citizens residing with families.

Table 3: Physical and psychosocial problems in senior citizens residing with familes.

Senior citizens residing with families			
		n	n
Physical Problems	≥25	50	100
Psychosocial problems	≥03	49	98

Maximum Score (Physical Problem) = 144

Maximum Score (Psychosocial Problems) = 51

Presence of physical Problems = ≥ 25

Presence of Psychosocial Problem = ≥03

Table no. 3 depicts the physical and psychosocial problems in senior citizens residing with families. It shows that 100 % of senior citizens are suffering from physical problems and 98% of senior citizens are suffering from psychosocial problems. Hence, it is concluded that senior citizens residing with families had physical and psychosocial problems.

Objective 3: To compare the physical and psychosocial problems among senior citizens residing at old age home and those with families.

**Significant at $p < 0.001$ level

Maximum Score = 195

Minimum Score = 00

Table no. 4 Comparative mean score of physical and psychosocial problems among senior citizens residing at old age home and those with families.

Table no. 4 depicts the comparative mean score of physical and psychosocial problems among senior citizens residing at old age home and those with families. It shows that mean score (94.02) of physical

and psychosocial problems of senior citizens residing with families is higher as compare to the mean score (48.46) of physical and psychosocial problems among senior citizens residing at old age home. Finding inferred that senior citizens residing with families have more physical and psychosocial problems as compare to senior citizens residing at old age home.

Objective 4: To find out the association of physical and psychosocial problems among senior citizens residing at old age home and those with families.

Table - 5: Association of physical and psychosocial problems among senior citizens residing at old age home and those with families.

N=100

	Physical problems		Psychosocial problems		
	Mean	SD	Mean	SD	
Old age Home	38.38	11.14	10.08	18.21	
					r' 0.714
					df 48
					't' 7.12*
With families	69.48	3.38	24.54	8.357	
					r' 0.485
					df 48
					't' 3.89

Physical Problem Maximum Score = 144

*Significant at $p < 0.05$ level

Physical Problems Minimum Score = 0

Psychosocial Problems Maximum Score = 51

Psychosocial Problems Minimum Score = 0

Table no. 5 depicts that association between physical and psychosocial problems among senior citizens residing at old age home and with families. the relationship between physical and psychosocial is statistically significant at $p < 0.05$ level. Therefore, it is inferred that physical and psychosocial problems among senior citizens residing at old age home and with families are inter related and interdependent.

Objective:5 To find out the relationship of physical and psychosocial problems among senior citizens residing at old age home and those with

families with selected socio-demographic variables i.e Age, Gender, Education, Marital Status, No. of Children, Financial Support, Occupation.

Gender has significant impact of physical and psychosocial problems on senior citizens residing at old age home. Occupation has significant impact of physical and psychosocial problems on senior citizens residing with families.

DISCUSSION

The findings depicts the comparative mean score of physical and psychosocial problems among senior citizens residing at old age home and those with families. It shows that mean score of physical and psychosocial problems of senior citizens residing with families is higher as compare to senior citizens

residing at old age home. Whereas these findings were supported by Bruce ML, (2002) was conducted in purposively selected state Haryana. A sample of 60 respondents 30males and 30females from ten institutes was selected randomly. Regarding psychosocial economic status of the respondent, results indicated that maximum percentage of the respondent was in the moderate to severe level of depression had natural attitude towards institution, moderate social, good health status and poor in economic status. Further results revealed that maximum percentage of the respondent's was feeling insecure in their own house, neglected by family members and wanted to meet their basic needs. Result indicated that overall institutional facilities had positive significant correlation with attitude and health status. Overall psychosocial-economic status of the respondents had positive significant correlation with attitude, leisure time schedule, social and health status of the senior citizen.⁵

IMPLICATIONS

Clinical Practice

Research based nursing practice is a need of hospital. On the basis of research the hospital nursing care practices should be modified health education should be given to senior citizens and to their care takers.

Nursing Education

Education is the key for developing of nursing profession. Nurses must be lifelong learners and they should be given opportunities for continuing education. The Psychiatric Nursing curriculum for all levels of nursing students should go for more emphasis on promotion of Health of old age population.

Nursing Research

Findings of the study will act like a catalyst to carry out more extensive research on a large population, sample in different areas of community and different old age homes. Through publication of the research findings the knowledge of physical and psychosocial problems of senior citizens can be improved which in turn helps early detection of problems, their treatment and control.

CONCLUSION

In the present study the senior citizens have more physical and psychosocial problems residing with families as compare to those who residing at old age home. The comparison is highly significant of physical and psychosocial problems among senior citizens residing with families and at old age home. The association of physical and psychosocial problems among senior citizens residing at old age home and those with families was significant. Gender has significant impact of physical and psychosocial problems on senior citizens residing at old age home. Occupation has significant impact of physical and psychosocial problems on senior citizens residing with families.

Acknowledgement: Our heartfelt thanks to all those who supported and guided during the completion of the study.

Conflict of Interest: None

Source of Funding : Self

Ethical Consideration: Permission taken from ethical committee.

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ABSTRACT

Ebola Viral Disease (EVD), a highly contagious haemorrhagic disease has today become a major public health concern in the developing countries worldwide. A cross sectional descriptive study to assess the knowledge, attitude and practice of hand hygiene for Ebola Virus Disease (EVD) among Non-academic staffs in Afe Babalola University Ado-Ekiti (ABUAD), Nigeria. This study involving 80 participants were selected by simple random sampling. Data was collected by use of questionnaires that were both self-administered and interviewer-administered depending on the respondent's literacy level. The study revealed that the respondents 12(15%) had inadequate knowledge, 21(26.2%) had moderately adequate knowledge and 47(58.7%) had adequate knowledge about EVD. Regarding attitude the respondents 11(13.7%) had unfavourable attitude, 18(22.5%) had moderately favourable attitude and 51(63.7%) had favourable attitude about EVD. On the practice of hand washing, 52(65%) used soap and water to wash their hands; out of which only 39(48.7%) washed their hands under running water. 65(81.2%) of respondents always washed their hands after using the toilet. 40(50%) of respondents always washed their hands before preparing meals while 26(32.5%) only did this sometimes. 68(85%) always washed their hands before and after eating meals like rice and beans. 48(60%) of respondents always washed their hands before feeding a baby. 28(35%) of the respondents said they always washed their hands after sneezing, 39(48.7%) sometimes washed their hands after sneezing while 13(16.2%) never washed. 53(66.2%) of respondents in our study always dried their hands after washing. 55(68.7%) of our respondents had borehole as their source of water while got their water from rain and 15(18.7%) have tankers supply water to their homes. In conclusion, the Non-Academic staffs in Afe Babalola University, Ado-Ekiti (ABUAD) have good knowledge and attitude about EVD. Their practice of hand washing is suboptimal because though they washed their hands with soap and water, they did this in basins of water instead of under running water. Health education would also improve the knowledge, attitude and practice of hand washing in this community and thereby, improve their quality of life.

Keywords: *Knowledge, Attitude, Practice, Ebola Virus Disease (EVD), Hand washing, Non-Academic Staff, Afe Babalola University Ado-Ekiti (ABUAD).*

INTRODUCTION OR BACK GROUND

Ebola virus disease (EVD) is a severe, often fatal illness in humans. Ebola, previously known as Ebola hemorrhagic fever, is a rare and deadly disease caused by infection with one of the Ebola virus species. Ebola can cause disease in humans and nonhuman primates (monkeys, gorillas, and chimpanzees)¹. Ebola viral fever, a highly contagious haemorrhagic disease has today become a major public health concern in

the developing countries worldwide. Since 1976, there have been 885,343 suspected and laboratory confirmed cases of Ebola HF in West Africa. EVD outbreaks have a case fatality rate of up to 90%. Ebola first appeared in 1976 in two simultaneous outbreaks, in Nzara, Sudan, and in Yambuku, Democratic Republic of Congo^{1,2}.

As of 27 June 2015, WHO has reported 27 541 cases, including 11 235 deaths, linked to the West

African epidemic of Ebola virus disease (EVD) that began in December 2013. Ten countries reported EVD cases. Guinea, Liberia and Sierra Leone experienced widespread and intense transmission between July 2014 and April 2015. Mali, Nigeria, Senegal, Spain, the United Kingdom, USA and Italy reported imported cases or import-related local transmission linked to the epidemic in West Africa³.

As at 25 October 2014, the World Health Organization (WHO) reported a total of 10,141 suspected cases and 4,922 deaths⁴. The first case in Nigeria was a Liberian-American, who flew from Liberia to Nigeria's commercial capital Lagos on 20 July, 2014. He became critically ill upon arriving at the airport and died five days later. On 19 August, 2014, the doctor who treated him also died of EVD. The first person reported to be infected in the spread to Sierra Leone was a tribal healer. Her body was washed for burial and this appears to have led to infections in women from neighbouring towns⁵. On 29 July, 2014, Sierra Leone's only expert on haemorrhagic fever, died after contracting Ebola at his clinic in Kenema⁵. On 29 August, Senegalese Minister of Health announced the first case in Senegal⁶. In August 2014, an outbreak of EVD was reported in the Democratic Republic of Congo^{7,8}. The index case was a pregnant woman who prepared bush meat from an animal that had been killed by her husband. As at October 20, 2014, a total of 66 cases of EVD, including 49 deaths, have been connected to this outbreak⁴. Many of the areas seriously affected by the outbreak were areas of extreme poverty⁹. Other factors responsible for the spread of EVD include reliance on traditional medicine and cultural practices involving physical contact with the deceased, especially death customs such as washing and kissing¹⁰. Some hospitals lack basic supplies and are understaffed, increasing the chance of staff contracting the virus themselves. In August 2014, the WHO reported that ten per cent of the dead have been health care workers¹¹.

So far, there is no study in Nigeria which examined the awareness and knowledge of EVD. The only source of reference in West Africa was the study in Sierra Leone¹². In the study 97% had heard of Ebola and believed in the existence (97%), with only 53% knowing the number to call to report suspected EVD cases or ask questions about the disease¹¹. In Sierra Leone, comprehensive knowledge of EVD prevention

was generally low. In the study, one-third of the respondents believed that EVD was transmitted by air or through mosquito bites¹³.

MATERIAL & METHODS

Study Objective

To assess the existing knowledge, attitude and practice of hand hygiene for Ebola Virus Disease (EVD) among Non-academic staffs in Afe Babalola University Ado-Ekiti (ABUAD), Nigeria.

Study design

A cross-sectional descriptive study design.

Setting of the Study

The study was conducted in Afe Babalola University, Ado-Ekiti (ABUAD). It is a Federal-Government licensed, Non-profit private university located in the state of Ekiti, Nigeria.

Study Population

Study respondents were drawn from the Non-faculty staffs of Afe Babalola University, Ado-Ekiti (ABUAD).

Data Collection and Analysis

From the 134 Non-faculty staffs only 80 samples were selected by simple random sampling. Purpose of study was explained and obtained informed consent forms each participant. Data collection was done on weekdays for a period of three consecutive weeks. Data was collected by use of questionnaires that were both self-administered and interviewer-administered depending on the respondent's literacy level. A questionnaire comprising open ended and closed ended questions was used. The questionnaire had different sections including socio-demographic data, knowledge on EVD, attitude towards EVD and practices of hand hygiene. Structured closed questions offering a dichotomous choice of 'yes' or 'no' as well as a Likert rating scale ranging from strongly agree to strongly disagree were used. The Likert scale was reduced to the nominal level by combining all agree and the disagree responses into accept and reject. The questionnaires were given to the respondents to complete and collected at the same time to ensure compliance. Data were analyzed using computer

statistical software SPSS 15.0 for windows.

FINDINGS

Table 1: The socio-demographic parameters of the respondents showed: Four age groups were involved in the study, they include age groups 20-29, 30-39, 40-49 and 50 and above. 21(26.2%) persons were within 20-29 years age group, 27(33.7%) respondents made up the 30-39 years age group, 20(25%) and 12(15%) persons made up the 40-49 years, 50 years and above age group respectively. A total of 56(70%) males and 24(30%) females took part in the study. The respondents had different occupations represented, these included Professional Non-Faculty 9(11.2%), Secretarial/Clerical 14(17.5%), Technical/Para-Professional 29(36.2%), Information Technology 13(16.2%) and Service & Maintenance 15(18.7%). Of the respondents 22(27.5%) persons were single and 58 (72.5%) were married. 80(100%) were Christians whilst no person was in other religion. In educational attainment included, primary, secondary, tertiary and postgraduate and those who had no academic attainment at all, they were 10(12.5%), 22(27.5%), 31(38.7%) and 17(21.2%) person respectively for each group.

Table1: Socio-demographic parameters.

Demographic variables	Frequency	Percentage
Age		
20-29	21	26.2
30-39	27	33.7
40-49	20	25
50 and above	12	15
Gender		
Male	56	70
Female	24	30
Occupation		
Professional Non-Faculty	9	11.2
Secretarial/Clerical	14	17.5
Technical/Para-Professional	29	36.2
Information Technology	13	16.2
Service & Maintenance	15	18.7
Marital Status		
Single	22	27.5
Married	58	72.5
Separated	0	0
Divorced	0	0
Widowed	0	0
Religion		
Christianity	80	100
Islam	0	0
African traditional religion	0	0
None	0	0
Educational attainment		
Primary	10	12.5
Secondary	22	27.5
Tertiary	31	38.7
Post graduate	17	21.2
None	0	0

Table 2: Knowledge of EVD

S.No	Level of Knowledge	Pretest	
		Frequency	%
1.	Inadequate (below 50%)	12	15
2.	Moderately adequate (51% - 75%)	21	26.2
3.	Adequate (76% - 100%)	47	58.7
	Total		80

Table 2 shows that of the respondents 12(15%) had inadequate knowledge, 21(26.2%) had moderately adequate knowledge and 47(58.7%) had adequate knowledge about EVD.

The present study findings were similar to the findings of,

SS Oladimeji Am et.al (2015) conducted a study during the outbreak to assess Healthcare workers (HCWs) EVD-related knowledge and practices. Result showed that a total of 112 health facilities with 637 HCWs were recruited. Mean age of respondents was 40.1 ± 10.9 years. Overall, 72.5% had good knowledge; doctors knew most. However, only 4.6% of HCWs reported good practices. 16.6% reported having been trained in identifying suspected EVD patient(s); 12.2% had a triaging area for febrile patients in their facilities. Higher proportions of HCWs with good knowledge and training reported good practices. HCWs with EVD-related training were three times more likely to adopt good practices.

Table 3 shows that of the respondents 11(13.7%) had unfavourable attitude, 18(22.5%) had moderately favourable attitude and 51(63.7%) had favourable attitude about EVD.

Table 3: Attitude of EVD

S.No	Level of Knowledge	Pretest	
		Frequency	%
1.	Unfavourable (below 50%)	11	13.7
2.	Moderately favourable (51% - 75%)	18	22.5
3.	Favourable (76% - 100%)	51	63.7

The present study findings were similar to the findings of,

Iliyasu G et.al (2015) conducted a cross sectional study on knowledge, attitude and practice (KAP) of Ebola Virus Disease (EVD) among adults of the general population and healthcare workers (HCW) in three states of Nigeria, namely Bayelsa, Cross River and Kano states. The result showed the overall median percentage KAP scores and interquartile ranges (IQR) were 79.46% (15.07%), 95.0% (33.33%) and 49.95% (37.50%) respectively. Out of the 1035 respondents, 470 (45.4%), 544(52.56%) and 252 (24.35%) had good KAP of EVD defined using 80%, 90% and 70% score cut-offs respectively. Independent predictors of good knowledge of EVD were being a HCW, reporting 'moderate to high fear of EVD' and 'willingness to modify habit'.

Table 4 shows that the Practice of hand washing shows that 15(18.7%) of respondents said they always washed their hands first thing in the morning, 36(45%) did this sometimes while 29(36.2%) never washed their hands first thing in the morning. 65(81.2%) of respondents always washed their hands after using the toilet, 11(13.7%) only did this sometimes while 4(5%) never washed their hands after using the toilet. 40(50%) of respondents always washed their hands before preparing meals while 26(32.5%) only did this sometimes and 14(17.5%) never washed their hands before preparing meals. 68(85%) always washed their hands before and after eating meals like rice and beans, 11(13.5%) did this sometimes while 1(1.2%) never did this. 4(5%) of respondents always washed their hands before and after drinking water, soda and alcoholic beverages, 17(21.2%) only did this some of the time while 59(73.7%) never washed their hands at this time. 48(60%) of respondents always washed their hands before feeding a baby, 27(33.7%) did this some of the time while 5(6.2%) never washed their hands before feeding a baby. 28(35%) of the respondents said they always washed their hands after sneezing, 39(48.7%) sometimes washed their

hands after sneezing while 13(16.2%) never washed. 7(8.7%) said they washed their hands after handling Naira notes, 15(18.7%) said they did this sometimes while 58(72.5%) never did this. 56(70%) said they washed their hands at the end of the day, 18(22.5%) did this sometimes while 6(7.5%) never did this.

52(65%) of respondents indicated that they used soap and water to wash their hands, 28(35%) used only water without soap to wash their hands.

41(51.2%) of respondents washed their hands in a basin of water while 39(48.7%) washed their hands under running water.

53(66.2%) of respondents in our study always dried their hands after washing, 23(28.7%) dried their hands sometimes while 4(5%) never dried their hands. 55(68.7%) of our respondents had borehole as their source of water, 5(7.5%) got their water from tap, 4(5%) got their water from rain and 15(18.7%) have tankers supply water to their homes.

Table 4: Practice of EVD

	Always		Sometimes		Never	
Do you wash your hands	Frequency	%	Frequency	%	Frequency	%
First thing in the morning	15	18.7	36	45	29	36.2
After using the toilet	65	81.2	11	13.7	4	5
Before preparing meals	40	50	26	32.5	14	17.5
Before/after eating	68	85	11	13.7	1	1.2
Before/after drinking	4	5	17	21.2	59	73.7
Before feeding a baby	48	60	27	33.7	5	6.2
After sneezing	28	35	39	48.7	13	16.2
After handling Naira	7	8.7	15	18.7	58	72.5
At the end of the day	56	70	18	22.5	6	7.5
How do you wash your hands	Frequency			%		
With water only	28					
Soap and water	52			35		
Ash and water	-			65		
Sand and water	-					
How respondents washed their hands	Frequency			%		
In a basin of water	41			51.2		
Under running water	39			48.7		
Do you dry your hands after washing	Frequency			%		
Always	53			66.2		
Sometimes	23			28.7		
Never	4			5		
Respondents' sources of water:	Frequency			%		
Borehole	55			68.7		
Tap	6			7.5		
Rain	4			5		
Tanker	15			18.7		

The present study findings were similar A study on washing hands with water alone is significantly less effective than washing hands with soap in terms of removing germs. Although using soap in hand washing breaks down the grease and dirt that carry most germs, using soap also means additional time consumed during the massaging, rubbing and friction to dislodge them from fingertips and between the fingers, in comparison with just using water for hand washing (**Samuel et al., 2005**).

A study carried out among school children in Ghana showed that 88.3% of them washed their hands with soap after visiting the toilet (**Steiner-Asiedu et al., 2011**). 2.3% of mothers studied in an observational research washed their hands with soap, a further 6.7% washing them with soapy water and 16.3% with water alone (**Hsu, 2010**).

A study on health workers where running tap water with antiseptic soap were most commonly used for hand washing (68.4%) (**Ekwere and Okafor, 2013**). In another study, 67.4% of respondents washed their hands with soap and running water, 15.1% used running water alone (**Pritchard and Raper, 1996**). A study among health care workers in a tertiary institution in South Western Nigeria dries their hands after washing (**Ekwere and Okafor, 2013**).

CONCLUSION

In conclusion, the Non-Academic staffs in Afe Babalola University, Ado-Ekiti (ABUAD) have good knowledge and attitude about EVD. Their practice of hand washing is suboptimal because though they washed their hands with soap and water, they did this in basins of water instead of under running water. Health education would also improve the knowledge, attitude and practice of hand washing in this community and thereby, improve their quality of life.

Acknowledgement: It is my pleasure and privilege to express my deep sense of gratitude to Dr. Oyeleye, Head of the department, College of Nursing, Afe Babalola University, Ado-Ekiti (ABUAD) for the constant guidance, highly instructive suggestions, precious advice, inspiration and encouragement at each and every step of this study.

Conflict of Interest: The author declares that there is no conflict of interests regarding the publication of this paper.

Source of Funding: Self

Ethical Clearance: Ethical clearance was obtained from the Ethics Committee of Afe Babalola University, Ado-Ekiti (ABUAD) and the participants of the study prior to the interview.

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Knowledge about Ageing Process and Attitude Towards Elderly: Need for Geriatric Nursing- a Cross Sectional Survey

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ABSTRACT

Ageing is an inevitable dimension of life and is a consistent process. A cross sectional survey was conducted at Sree Gokulam Nursing College, Trivandrum campus among nurses to state the need for geriatric nursing. Nurses who gathered to attend a workshop on Geriatric Care were enrolled by purposive sampling technique for the study, after getting informed consent. Main objectives of the study were to assess the knowledge regarding ageing process and attitude towards elderly, to find out the correlation between knowledge regarding ageing and attitude towards elderly. Descriptive and inferential statistical techniques were used to analyze the data. Results elicited majority of the subjects had good knowledge regarding ageing (71%), and favorable attitude towards elderly (52%) & also a positive correlation ($r=0.87$) between knowledge about ageing and attitude towards elderly. The need for geriatric nursing can be projected out by the study findings.

Keywords: Attitude, Cross sectional survey, Geriatric nursing, Ageing, Elderly.

INTRODUCTION

The only unswerving aspect in human life is the process of Ageing. As days pass on, there is an increase in the course of age and at the same time a decrease in the course of life. Ageing is an inevitable dimension of life which happens to all living things including 'homosapiens', irrespective of caste, color, creed, race, sex and nationality. A demographic revolution is underway throughout the world, over the years. The population of elderly is increasing in all countries of the world without any change or delay.

Globally, there are an estimated 605 million people aged 60 years and above. One out of every ten persons is 60 years or above. By 2050, one out of five will be 60 years or older and by 2150, one out of three persons will be 60 years or older. The number of centenarians is projected to increase 15-fold from approximately 145,000 in 1999 to 2.2 million by 2050¹.

Although the population of the elderly is increasing in all countries of the world, until the early 80s, the demographic transition was mostly viewed as a phenomenon of the developed countries.

Literature has however shown that the great majority (two-thirds) of those over 60 years of age live in the developing world; and that the proportion is rising steadily and will reach nearly three-quarters by the 2030s². As the age advances, there is decline in physical functions of the elderly. In general, most organ systems demonstrate an age-related decline of about 0.5% per year³.

Improvement in health care facilities has brought about longevity which is considered as one of the greatest achievement of the 20th century. With increasing age however, there are also many health problems, often chronic, which the elderly have to cope with. These diseases often require hospitalization in health care facilities, where they are cared for by nurses and other health care providers⁴. Deprivation for physical health has been related to various comorbidities in several longitudinal studies⁵.⁶ As ageing process proceeds diseases affecting them do varies, Indian scenario also has been the same. Various studies projected different morbidities among geriatric population^{7, 8, 9, 10, 11}.

The current demographic and health utilization

trends strongly indicate a rapidly increasing demand for nurses who are well qualified to care for older adults. Nurses have a pivotal role as providers of care to the older people and are in a unique position to influence the quality of care. Various functions of nurses that can contribute to the optimum health and overall wellbeing of the older people include supportive, restorative, educative, life-enhancing and managerial¹². Cultivation of positive attitudes towards older adults and specialized knowledge about aging and the health care needs of older adults are of utmost priorities for nurses. It has been suggested that attitudes can influence an individual's behavior and that people with a positive attitude towards anyone will have more positive thoughts about them¹³.

Nurses can play a pivotal role in health promotion and risk reduction. Every 35 minutes, an older adult dies due to falling, according to the National Council on Aging. Reports of elder abuse – intentional or neglectful acts by a caregiver or other trusted individual – are on the rise, although many cases remain untold¹⁴. Hence there is a need to seek out the knowledge regarding care of elderly and attitude towards ageing process and geriatric population.

MATERIALS & METHODS

This was a cross sectional study carried out at Sree Gokulam Nursing College campus, Trivandrum, India. The institution is under the aegis of Sree Gokulam Medical College & Research Foundation and offers both the postgraduate and the undergraduate nursing programs. Using purposive sampling technique, 186 nurses who gathered to participate in a one day workshop regarding Geriatric Care on October 1st 2015 were enrolled for the study. An informed consent was obtained from each subject after explaining the objectives of the study and ensuring confidentiality. Pre validated self-administered questionnaires were used to obtain the data. The knowledge questionnaire (Ageing process facts questionnaire) was developed by the researcher after extensive literature review and for assessing the attitude, a standardized tool (Kogans attitude towards older people) with minor modifications was used. The content validity was established by circulating the tool among various subject experts. Information was obtained regarding socio demographic data of the study subjects, their knowledge about ageing and

attitude regarding care of elderly. The attitude was assessed on a Likert five-point scale, ranging from 'strongly agree' to 'strongly disagree'. The total score was further categorized as Un-favorable, neutral and favorable attitude as per the scores obtained. Total Knowledge score was also categorized as poor, average and good as per the score obtained by the subjects. SPSS trial version 20.0 was used to analyze the data. Both descriptive (mean, S.D., range) and inferential statistics (Pearson Correlation test) was used.

RESULTS

a. Demographic profile of the subjects

The mean age of study subjects were 24.93 with SD 2.21 and range from 22 to 31 years, majority of the subjects have qualification of Bachelors in nursing (61.34%), mean year of experience was 1.9 years with SD 2.03 and majority of subjects working in private sector (96.8%)

b. Knowledge regarding ageing process.

Table 1

Categorization of knowledge scores	Frequency and percentage
Poor knowledge	71 (38%)
Average knowledge	39 (21%)
Good knowledge	76 (41%)

Table 1 shows the correct responses given by the subjects regarding care of elderly for the various questions in descending order. For majority of the questions, more than 40% of the subjects gave the correct answer. Even though most of the subjects (41%) had good knowledge regarding care of elderly, more or less similar percentage of subjects (38%) had poor knowledge regarding care of elderly. Whereas 21% of subjects had average knowledge regarding the same.

Attitude towards older people

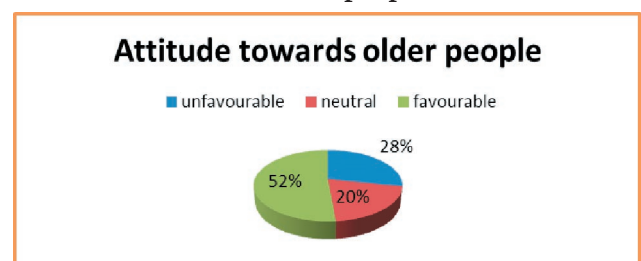


Figure 1: Attitude of subjects towards elderly

Figure 1 depicts attitude of the nurses towards elderly in detail. Majority of the subjects (52%) had favorable attitude towards elderly. 20% subjects had neutral attitude and 28% had negative attitude towards elderly.

c. Correlation between Knowledge and attitude

Correlation between knowledge regarding ageing process and attitude towards older people was assessed using Pearson Correlation Coefficient. The computed r value showed a statistically significant correlation between knowledge and attitude regarding care of elderly ($r=0.87$). Thus it can be inferred that as the knowledge increases, the attitude became more favorable or positive.

DISCUSSION

Along with the rise in population of elderly age group, the morbidity rate is also tremendously worsening in Indian scenario. As nurses are the most core people who cares them eminently, to assess their knowledge and attitude concerns was directed through this study.

Even, there is no distinct subject as Gerontological Nursing in the Indian undergraduate and post graduate nursing curricula. The topic of geriatric care is taught to the students only as a unit along with other nursing subjects such as Psychiatric Nursing, medical surgical nursing, and advanced nursing practice. The elderly people are admitted and being provided care along with other adult patients in the wards. Participants in the current study demonstrated fairly good level of knowledge and attitude towards care of elderly people. In other studies, the mean knowledge score regarding aging has been reported to be average among the nursing students^{15, 16}. Lack of knowledge and interest in the issue has also been reported in some research studies¹⁷. Many researchers have recommended evaluating and revising the contents of the courses to ensure that the knowledge, skills and attitudes required to work with older people are accorded appropriate value and attention¹⁸.

Ethical Clearance- Sree Gokulam Nursing College Institutional Ethical Committee clearance has been obtained prior to the study.

Acknowledgment- Nil

Conflict of Interest- Nil

Source of Funding- Self

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A Questionnaire-based Survey of Patients' Knowledge Regarding Psoriasis

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ABSTRACT

Aim: The study was aimed to investigate the patients' knowledge regarding psoriasis and the association of knowledge score with the selected socio-demographic variables.

Methods and materials: A cross-sectional descriptive design was adopted for the study. Two hundred patients diagnosed with psoriasis completed a 25-item questionnaire concerning the knowledge regarding different aspects of their disease condition. The study was carried out at a tertiary care referral hospital, Puducherry, India. Knowledge was assessed by Psoriasis Knowledge Assessment Questionnaire (PSAQ) which was prepared for the study. Data were collected through face-to-face interviews.

Results: The results of the study showed that 104(52%) subjects had inadequate knowledge related to their disease, 82(41%) subjects had moderately adequate level of knowledge whereas only 14(7%) subjects had adequate knowledge regarding their disease. There was a significant association between the knowledge score with the income of the subjects.

Keywords: Psoriasis, knowledge, Psoriasis Knowledge Assessment Questionnaire (PSAQ)

INTRODUCTION

Psoriasis is a chronic inflammatory, stress related skin disease, which while potentially controllable, cannot be cured. Treatment is long term and requires continuous effort by the patient. Knowledge regarding psoriasis helps patients to decide in the treatment and control of their disease. A greater awareness of the nature of their disease may reduce anxiety and stress which are also known to aggravate psoriasis (Swanbeck G, Jobling R, 1984)¹.

Psoriasis is universal in occurrence. Genetic and environmental factors greatly influence the clinical development of psoriasis. The world wide incidence varies considerably. Estimates of occurrence of psoriasis in different parts of the world vary from 0.1%-2.8% (Ferrandraz et al, 2001; Joel et al, 2005)².

Patients with psoriasis often have unambiguous ideas about the causes, controllability, consequences and expected time-course of their disease (Fortune

et al, 2002)³. Many of the difficulties experienced by patients with psoriasis make demands that outstrip the coping measures of patient and their family or social network.

Living with psoriasis can be difficult and can affect different aspects of quality of life. Poor adherence to prescribed treatment is also a major problem in this patients group. Knowledge about the pathogenesis and treatment of psoriasis may increase the patient's perception of control and attention to aggravating factors and may thus increase patient's compliance with treatment and positive lifestyle habits.

MATERIALS & METHODS

A cross-sectional descriptive survey was carried out among 200 patients diagnosed with psoriasis attending JIPMER (Jawaharlal Institute of Post-graduate Medical education & Research), hospital, Puducherry, India. Participants were selected by convenience sampling according to the inclusion

criteria. Subjects of both sex and who belonged to the age group of 18 to 65 years were included in the study. In addition to the socio-demographic data sheet, knowledge was assessed by Psoriasis Knowledge Assessment Questionnaire (PKAQ) which was prepared for the study. PKAQ consisted of twenty five statements pertaining to knowledge related to basic facts on psoriasis (9 items), triggering factors (5 items), treatment aspects (4 items) and knowledge related to disease process (7 items). The study participants were requested to give "true, false or do not know" responses. Cronbach alpha test was applied to assess the reliability of this instrument. The reliability score was 0.80 and found to be reliable for assessing the knowledge on psoriasis. The correct response was scored as "1". An incorrect and do not know responses were scored as "0". The score ranged from 0 to 25. Ethical clearance was obtained from Institute Ethics committee (humans) of JIPMER, Puducherry, India. The subjects were assured of confidentiality.

RESULTS

The data were analysed by using both descriptive and inferential statistics. The data for the categorical variables on the socio-demographic factors were expressed as frequency and percentage. To calculate the responses in the individual items in knowledge questionnaire, frequency and percentage were used. The overall scores in knowledge were expressed as mean with standard deviation. The association between knowledge and the socio-demographic variables were carried out by using Independent Students't-test or one way analysis of variance with Scheffe's multiple comparison tests based on the number of groups. All statistical analysis was carried out at 5% level of significance and P value <0.05 was considered as statistically significant.

Out of 200 subjects participated in the study, 52(26%) subjects were aged between 41-50 years, 48(24%) of the subjects were aged between 20 to 30 years and 47(23.5%) of the subjects were aged between 31-40 years of age. With respect to gender, a majority of the subjects 141(70.5%) were males. 161(80.5%) of the subjects were married and 135(67.5%) of the subjects were from a rural area.

Item-wise distribution of responses obtained from the study participants based on Psoriasis Knowledge

Assessment questionnaire were shown in **table 1**.

The overall level of knowledge on psoriasis among the study participants showed that out of 200 subjects, 104(52%) subjects had inadequate knowledge related to their disease, 82(41%) subjects had moderately adequate level of knowledge whereas only 14(7%) subjects had adequate knowledge regarding their disease (**table 2**).

The mean knowledge score was compared with certain socio-demographic variables such as age, gender and educational status. The result of one-way ANOVA test and independent t-test revealed that there was no significant difference between the knowledge score and the above mentioned variables except for the variable of income of the subjects. Subjects with above 4000 rupees of monthly income were having higher knowledge score than with the subjects with less than 2000 rupees of income (**table 3**).

Knowledge regarding basic facts related to psoriasis

The results of the study suggested that 157(78.5%) subjects were aware of the fact that psoriasis is not contagious, 177(88.5%) of the subjects knew that psoriasis affects the entire skin, 139(69.5%) of them said that psoriasis affects both men and women. Most of the subjects 120(60%) told that psoriasis may begin at any age. But, only 51% of the subjects knew the fact that the disease is not curable. Nearly, 119(59.5%) subjects did not know about psoriatic arthritis. Further, 118(59%) of the subjects did not know the influence of genetic factors for causing of the disease.

Knowledge on triggering factors related to psoriasis

146(73%) of the subjects did not know that infection is one of the triggering factors for those patients who had already affected by the disease. Only, 91(45.5%) of the subjects were aware that certain drugs induce psoriasis. Further, 135(67.5%) subjects were not aware that injury triggers psoriasis. 96(48%) of the subjects were aware that stress also aggravates the disease. Overall, the study subjects had inadequate knowledge on triggering factors.

Knowledge regarding disease process related to psoriasis

Nearly, 129(64.5%) of the subjects did not know that psoriasis affects palms and soles. Majority, 149(74.5 %) of them possessed the wrong concept that psoriasis damages the brain. The fact that the disease is not transmitted by sharing food was known to 134(67%) of the subjects, whereas 142(71%) of them had wrongly understood that psoriasis is a sexually transmitted disease. Further, 112(66%) of the subjects had a misconception that diet restrictions by avoiding certain food items may give cure and 108(54%) of them were aware of nail psoriasis. Overall, majority

of the subjects had many misconceptions regarding the disease process.

Knowledge related to treatment of psoriasis

98% of subjects were aware that moisturizers are important to prevent dryness of the skin. 170(85%) subjects did not know about phototherapy and 137(68.5%) subjects were unaware that certain drugs which are used for the treatment of psoriasis can have side effects.

Table 1: Distribution of Responses to each of the items of Psoriasis Knowledge Assessment Questionnaire (N=200)

Sl. No	Statements	True	%	False	%	Don't know	%
1	Psoriasis is contagious	10	5	157	78.5	33	16.5
2	Psoriasis may begin at any age	120	60	18	9	62	31
3	Psoriasis can affect the entire skin	177	88.5	15	7.5	8	4
4	Psoriasis affects both men and women	139	69.5	27	13.5	34	17
5	Psoriasis is a curable disease	43	21.5	102	51	55	27.5
6	The exact cause of psoriasis is known	18	9	94	47	88	44
7	Psoriasis can be associated with joint pain	81	40.5	70	35	49	24.5
8	Specific food intake or restrictions may cure psoriasis	57	28.5	88	44	55	27.5
9	In Psoriasis skin cells are multiplying too slowly	79	39.5	99	49.5	22	11
10	Injury to the skin may cause psoriasis to appear at that site in persons already having psoriasis	64	32	100	50	35	17.5
11	Psoriasis never occurs in the nails	73	36.5	108	54	19	9.5
12	Certain drugs may increase the severity of psoriasis in persons already having psoriasis	91	45.5	46	23	63	31.5
13	Certain infections may increase the severity of psoriasis in persons already having psoriasis	54	27	77	38.5	69	34.5
14	Stress plays no role in Psoriasis	58	29	96	48	46	22
15	Psoriasis increases in winter	78	39	105	52.5	17	8.5
16	Having close blood relatives affected with psoriasis determines to great extent whether a person will have psoriasis or not	42	21	125	62.5	33	16.5
17	Psoriasis never occurs in the palms and soles	76	38	71	35.5	53	26.5
18	Psoriasis damage brain	28	14	51	25.5	121	60.5
19	Psoriasis is transmitted through sharing food	15	7.5	134	67	51	25.5
20	Psoriasis is transmitted among sexual partners	24	12	58	29	118	59
21	Photo/ light therapy is useful in treating psoriasis	30	15	28	14	142	71
22	Oral medications are useful in Psoriasis	168	84	8	4	24	12
23	Certain drugs which are used to treat Psoriasis may have side effects	63	31.5	88	44	49	24.5
24	Psoriasis is seen all over the world	118	59	10	5	72	36
25	Treatment of Psoriasis can include moisturizers	196	98	0	0	4	2

Table 2: Subjects' knowledge on different aspects of psoriasis (N=200)

Knowledge on psoriasis	Level of knowledge					
	Inadequate		Moderately adequate		Adequate	
	Number of subjects	Percentage (%)	Number of subjects	Percentage (%)	Number of subjects	Percentage (%)
Basic facts	81	40.5	59	29.5	60	30
Triggering factors	134	67	32	16	34	17
Treatment aspects	128	64	62	31	10	5
Disease process	130	65	60	30	10	5
Over all knowledge	104	52	82	41	14	7

Table - 3: Association of the subjects' knowledge with socio-demographic variables (N=200)

Variables	Categories	Number of subjects	Mean	S.D	F value/t-value	P value
Age in years	20 - 30	48	12.8	3.8	F=2.18	0.091 (N.S)
	31 -40	47	12.2	3.4		
	41 -50	52	13.2	3.9		
	'51	53	11.4	4.1		
Gender	Male	141	12.4	3.7	t=0.03	0.861 (N.S)
	Female	59	12.3	4.3		
Income in rupees	'2000	128	11.9	3.9	F=3.69	0.027* (S)
	2001 - 4000	36	12.9	3.8		
	>4000	36	13.7	3.6		
Educational Status	Illiterate	28	11.3	3.5	F=1.33	0.259 (N.S)
	Primary	46	12.4	3.9		
	Middle	52	12.3	4.1		
	Secondary	56	12.6	3.8		
	Graduates	18	13.9	3.8		

* Significant at $p < 0.05$ level, N.S - Not significant

DISCUSSION

Psoriasis is a common skin disorder that needs a long-term management. Drugs may result in exacerbation of a preexisting psoriasis, in induction of psoriatic lesions on clinically uninvolved skin in patients with psoriasis. Many researchers have stated that all dermatologists and physicians who care for patients with psoriasis should be aware that their patients may have an insufficient understanding of

their disease (Dika et al., 2006; Farber EM and Nall L., 1993)4, 5. Hence, every effort should be made to help patients fully comprehend their condition: to become aware of factors that can improve self-care and environmental events that can exacerbate the disorder. Improving communication between patient and physician will benefit the patient, by providing knowledge about psoriasis, encouraging the patient to acquire specific skills in dealing with the disease, and instilling a sense of responsibility for the patient's involvement in self-care.

Tham SN, Tay YK. (1995)6 conducted a

questionnaire based survey to determine the level of knowledge of psoriasis among patients attending the National Skin Centre. Results of the study found that many patients had lack of knowledge regarding their disease and treatment aspects. The authors concluded that education is important in the overall treatment of psoriasis patients.

The present study identified gaps of knowledge in the following items; only 64(32%) subjects knew that the injury to the skin may exacerbate psoriasis. According to Jankowiak et al (2004)⁷, patients with psoriasis need to improve their knowledge of the disease and self-care methods to avoid exacerbation of disease. The greatest deficit of their knowledge on disease refers to the factors activating the process of the disease. Lanigan and Layton (1991)⁸ found that 53% of their patients did not know that sunburn can exacerbate psoriasis and 56% were unaware that infections can aggravate the condition. Wahl et al (2013)⁹ found that many of their study subjects were aware that stress and worry can exacerbate psoriasis whereas very few knew that diet is important to the development of psoriasis.

Nevitt and Hutchinson (1996)¹⁰ indicated that forty-one per cent of their patients were aware that psoriasis was a genetically determined disease and 37% thought that stress was an exacerbating factor. Seventy per cent of patients were aware that the condition was not curable, but 63% thought that treatment was worthwhile. 170(85%) subjects did not know about phototherapy which is also used for the treatment of psoriasis. A recent study by Renzi et al (2011)¹¹ found gaps in knowledge about treatments in both psoriasis and psoriatic arthritis groups.

Lubrano E, et al., (1998)¹² conducted a questionnaire based study on patient education in psoriatic arthritis. Patients showed a lack of knowledge with some erroneous beliefs about their disease and the results showed a significant association between the knowledge score and level of general education.

CONCLUSION

This questionnaire based study has demonstrated that many patients with psoriasis do not have adequate knowledge regarding the basic facts, triggering factors, disease process and treatment

aspects. It indicates that patients with psoriasis need sufficient education from the health care providers regarding their disease for better treatment outcome.

Acknowledgement: We sincerely thank Dr. Shivanand Kattimani, Associate Professor, Department of Psychiatry, JIPMER and Dr. M. Malathy, Assistant Professor, Department of Dermatology, JIPMER for their valuable help in preparing the questionnaire and support in conducting the study.

Sources of Funding: Nil

Conflict of Interest: Nil

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Knowledge and Attitude of Caregivers Regarding Affective Disorders

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ABSTRACT

Back ground of the study: Mental disorders are widely recognized as a major contributor to the global burden of disease worldwide. In this affective disorders or mood disorders are more prominent, affecting about one in ten thousand during their life time. Caregivers are one of the three basic components of treatment along with the patient and healthcare professionals. Attitude and beliefs about mental illness are shaped by personal knowledge, knowing and interacting with someone living with mental illness, cultural stereotypes, and other factors.

Objectives of the study

1. To assess the knowledge and attitude of the caregivers regarding affective disorders.
2. To determine relationship between knowledge and attitude of caregivers of patients with affective disorder.
3. To determine the association of knowledge and attitude with selected baseline variables of caregivers.

Materials and methods: Descriptive correlative design was used for the study. The data was collected from 94 caregivers of patients with affective disorders admitted to psychiatric wards of Father Muller Mental Health Center, Mangalore. The data was collected by knowledge questionnaire on affective disorders and attitude scale. **Results:** The findings the study showed that 55.3% of the subjects had very good knowledge and majority (77.7 %), of the subjects had favorable attitude towards patients with affective disorders. There was a moderate positive correlation between knowledge and attitude of caregivers of patients with affective disorders, $r = 0.5$ ($p < 0.001^*$). Association was found between knowledge and number of hospitalizations of patients with affective disorders ($p = 0.004^*$) and between attitude and educational status of the subjects ($p = 0.034^*$). **Conclusion:** Knowledge influences attitude. Appropriate educational and regulatory interventions in the clinical setting will improve the knowledge and attitude.

Keyword: Affective disorders, Knowledge, Attitude, Caregivers.

INTRODUCTION

Mental disorders are widely recognized as a major contributor (14%) to the Global burden of

disease world wide. In this affective disorders (Mood disorders) are more prominent. Affective or mood disorders are fairly common in psychiatric disorders affecting about one in ten thousand, during their lifetime. The World Bank has ranked depression fifth in the illness burden among women and seventh among men in developing countries. In India one in eleven persons suffers from mental illness.¹ As

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per the latest bipolar statistics quoted by Depression and Bipolar Support Alliance (DBSA), about 2-5% of Indian population suffers from mental disorders requiring urgent care at any one point of time. In India around 12,780,847 people are suffering from bipolar affective disorder. Census 2011 shows that two out of every five Indians suffer from depression. The alarming increase in the number of mentally ill patients warrants urgent attention not only on curative aspect but also on preventive aspect.²

Caregivers are usually close family members that take the responsibility of looking after the sick patient in the family. In India, families represent the key resource persons in the care of patients with chronic mental illness. Mental health services have moved away from providing institutional care to community based care. So family members have increasingly found themselves becoming primary source of care and social support for persons suffering from affective disorders. Family member's poor or lack of knowledge and negative attitude towards affective disorders threatens the effectiveness of patient care and rehabilitation.³

Poor knowledge and negative attitude towards affective disorders threatens the effectiveness of patient care and rehabilitation. This poor and inappropriate view about affective disorder and negative attitude towards such patients can inhibit the decision to seek help and provide proper holistic care. Better knowledge is often reported to result in improved attitudes towards people with mental illness and a belief that mental illnesses are treatable, can encourage early treatment seeking and promote better outcomes. Exploring trends in people's knowledge and attitudes towards mental illness would have implications for nursing practices worldwide.⁴

MATERIALS & METHODS

A descriptive correlative design was used to assess the knowledge and attitude of caregivers of patients with affective disorders. Ethical approval was obtained from Father Muller Institutional Ethics Committee. A formal written permission was obtained from hospital authorities to conduct the research study in Father Muller Mental Health Centre, Mangalore. An informed consent was obtained from the subjects.

A knowledge questionnaire and attitude scale was used to elicit the knowledge and attitude of caregivers on affective disorders. The knowledge questionnaire comprised of 24 multiple choice questions to identify the knowledge level and total score was 24. Each right answer carried one mark. The questions covered three domains, i.e. meaning and etiology, signs and symptoms, and treatment and prevention of affective disorders. The level of knowledge of caregivers on affective disorders was scored into Excellent (86-100%), Very Good (71-85%), Good (56-70%), Average (40-55%), and Below average (<40%). Attitude scale comprised 16 items, 10 positively and 6 negatively stated items. The domains of the attitude scale were stereotyping, optimism and coping. The caregivers responses included strongly agree, agree, undecided, disagree, strongly disagree and the maximum total score was 80. The level of attitude of caregivers on affective disorders was scored into Highly favourable (81-100%), Favourable (61-80%), Unfavourable (41-60%), and Highly unfavourable (< 40%). Content validity of tool was established by 13 experts from psychiatry, psychiatric nursing, clinical psychology and psychiatric social work. Reliability of knowledge questionnaire and attitude scale were tested by using split-half method. The reliability coefficients, *r* was found to be 0.87 and 0.82 for knowledge questionnaire and attitude scale respectively.

Pilot study was conducted in psychiatric wards of Father Muller Mental Health Center, Mangalore and study was found feasible. For final study the data was collected from 94 caregivers of patients with affective disorders from the psychiatric wards of Father Muller Mental Health Center Mangalore. The collected data was analyzed using descriptive and inferential statistics

RESULTS

Baseline Characteristics of caregivers of patients with affective disorders

- More than half of the subjects 57.4% were found in the age group of >40 years. Most of the subjects 52.1% were males and 47.9% subjects were females. Majority of the subjects, 61.7 % were married, 27.7% were single 9.6 % were widow and 1% were separated.

- Regarding education, most of the subjects, 41.5%, got only primary level of education. Most of the subjects 32% were skilled workers

- Majority, 77.7%, of the patients were diagnosed to have BPAD- current episode mania without psychotic symptoms, 18.1% had BPAD -mania with psychotic symptoms. About 73.4% patients had less than or equal to 10 years of history of illness. Majority, 76.6% were hospitalized less than or equal to 5 times

Knowledge and attitude of caregivers

The study revealed that more than half of the subjects (55.3%) had very good knowledge, 34% had good knowledge, 9.6% had excellent knowledge and 1.1% had average knowledge. The mean knowledge score was 17.5 ± 2.4 .

Table 1: Domain wise mean and SD of Knowledge score N=94

Domains	Items	Max. score	Mean	SD
Concept and Etiology	6	6	3.9	1.4
Signs and Symptoms	6	6	4.3	1.1
Management	12	12	9.3	1.7

Maximum Score = 24

The data presented in Table 1 shows that the mean knowledge scores was higher in the domain of management compared to that of signs and symptoms and concept and etiology.

The finding of the study revealed that majority of the subjects (77.7%) had favorable attitude, 21.3% had highly favorable attitude and 1.1% had unfavorable attitude. The mean attitude score of caregivers was 56.4 ± 5.7

Table 2: Domain wise Mean and Standard deviation of attitude score N=94

Domains	Items	Max. score	Mean	SD
Stereotyping	6	30	22.5	2.8
Optimism	5	25	16.8	2.9
Coping	5	25	16.9	2.8

Maximum Score = 80

The data in table 2 shows the mean attitude scores was higher in the domain of stereotyping and coping compared to that of optimism.

Table 3: Relationship between knowledge and attitude of caregivers of patients with affective disorder N=94

Variables	r	P
Knowledge Attitude	0.5	<0.001*

* Significant

The data presented in table 3 shows that there is a moderate positive correlation ($r = 0.5$, $p < 0.001^*$) between knowledge and attitude of caregivers on affective disorders which is statistically significant. As the knowledge increased, the attitude of the caregivers was found to be more positive.

The results of present study also showed that there was significant association between knowledge and number of hospitalization ($\chi^2=8.426$, $p=0.004^*$) of patients with affective disorders and between attitude and educational status ($\chi^2=10.41$, $p=0.034^*$) of the subjects.

DISCUSSION

The above findings of the study were consistent with the community based cross-sectional study conducted in an urban community in South Delhi on perception and attitude of the community towards mental illness. The result of the study showed that mean age of the participants was 35.8 ± 12.6 years with almost half (47%) belonging to the 30–49 years age group. Majority of the participants were female

(57%), literate (84%), currently married (81%).⁵

A study was conducted to determine attitudes of families towards mental disorders who have family member with mental disorders. The sample of the study consisted of 138 patient's relatives who accepted to participate in the study and had psychiatric inpatient and outpatient at Istanbul University Cerrahpaşa Medical Faculty. Most of the patients relatives were in the 40-50 age group (29.7 %), married (71.7 %), female (63.8%), house wife (38.4 %) and graduated from secondary school (36.2 %). Most of the patients diagnosis were mood disorders (47.8 %), illness time was between 1-5 years (34.8 %), number of admission to hospital was 2 and more (83.3 %). This study also support the present study.⁶

The study revealed that more than half of the subjects (55.3%) had very good knowledge, 34% had good knowledge, 9.6% had excellent knowledge and 1.1% had average knowledge. The mean knowledge score was 17.5 ± 2.4 with a mean percentage of 73%. The mean percentage of respondents knowledge was highest in the area of management (77.5%) compared to concepts and etiology (65%) and signs and symptoms (71.5%). The high level of knowledge of caregivers regarding affective disorders can be do to the educational interventions provided by the mental health team members in the selected setting. The setting is a teaching hospital where the patients and caregivers receive education on patient and related topic from students of nursing, psychology and psychiatric social work.

The findings of the present study were inconsistent with a cross –sectional study conducted in Aceh Tamiang district, Indonesia to identify the performance of caregivers in taking care of mental ill patient in the family. The knowledge of caregiver in this study was categorized into three groups of the knowledge as good, fair and poor. It was noted that the majority of respondent had fair knowledge, 73.40% and only 13.83% had good knowledge. 23%.⁶

The result of the present study also showed that there is a moderate positive correlation ($r = 0.5$, $p < 0.001$) between knowledge and attitude of caregivers on affective disorders.

These findings of this study were consistent with a study conducted to assess the knowledge and attitude

regarding mental illness among general public in selected rural area of Hukkeri taluka. The result showed that there was a positive correlation between knowledge and attitude of subjects regarding mental illness ($r = 0.790$).⁷

The findings of the present study supported by a descriptive study conducted to assess the level of knowledge regarding mental illness among caregivers of mentally ill patients in Mangalore. The objective of the study was to assess the level of knowledge regarding mental illness among care givers of mentally ill patients. Using purposive sampling technique 100 samples were selected and a structured knowledge questionnaire was used to assess their level of knowledge on mental illness. The result showed that 65% of care givers had moderately adequate knowledge, 29% had inadequate knowledge and only 6% had adequate level of knowledge on mental illness. There was a significant association between knowledge score and baseline variables of gender, religion educational status, occupation, and monthly income, place of residence and previous knowledge of care givers on mental illness.⁷

CONCLUSION

The findings the present study concluded that 55.3% of the subjects had very good knowledge and majority, 77.7 %, of the subjects had favorable attitude towards affective disorder patients. The analysis also showed that there is a moderate positive correlation between knowledge and attitude of caregivers of patients with affective disorders which was statistically significant. This means that better knowledge brings more favorable attitude. Appropriate educational and regulatory interventions implemented in the various clinical settings will improve the knowledge and attitude of caregivers for better patient outcomes .

Acknowledgement: Researchers owe deepest gratitude to all the participants of the study, who formed the core and basis of the study, for their whole hearted cooperation. Words of immense gratitude flow from heart to all staffs of Father Muller Mental Health Center, Mangalore.

Sources of Funding: Nil

Conflict of Interest: None

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A Pre Experimental Study to Assess the Effectiveness of Structured Teaching Program on Child Abuse among Secondary School Students at Selected School at Abu Road

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ABSTRACT

Introduction: Child abuse is a very complex and dangerous set of problems that include child neglect and the physical, emotional, and sexual abuse of children. Although child abuse may not always lead to serious physical injury, it often results in serious emotional harm and may have long-lasting effects. As an adult you may encounter a child who has been hurt by abuse. Regardless of your role in that child's life—parent, teacher, coach, neighbor, family member—you can help.

Methodology: Experimental research approach, pre experimental research design selected for the study. The research approach used for this study is experimental approach. A pre-experimental design adopted with one group pre test- post test design. Sample consists of a subset of a population selected in a research study. The sample consists of secondary school students of government School, Siyawa at Abu road. The sample size for the final study consisted of 30 secondary school students in selected school at Abu road. Simple random sampling techniques used to select the samples. Using lottery method.

Results: The mean post test knowledge score is 12.5 is greater than the mean Pretest Knowledge score 5.97. The data further represent that 't' value of Tabulated t pre test knowledge and posttest knowledge value is more than calculated t value at 29 df for the 0.05 level of significance. Therefore the null hypothesis is accepted. It means there was no association between pretest and posttest knowledge levels. The obtained 't' value 8.09 is greater than the table value at 0.05 level of significant. Therefore 't' value is found to be significant. Hence it is inferred that there is significant difference between the pre test or post test knowledge score secondary school student regarding child abuse and the structural teaching programme is effective in improving the knowledge of secondary school student.

Keywords: Child abuse, Structured teaching programme, secondary school students.

INTRODUCTION

Child abuse can be physical, sexual, or emotional. Neglect—the failure to provide for a child's basic physical and emotional needs—is also a form of child abuse. In homes where child abuse occurs, fear, instability, and confusion may replace the love, comfort, and nurturing that children need. Although child abuse may not always lead to serious physical injury, it often results in serious emotional harm and may have long-lasting effects.¹

For instance, children from violent homes are at

higher risk for alcohol or drug abuse and juvenile delinquency. Abuse affects children differently, based on a number of factors, including the nature of the abuse, the age of the child, the relationship between the child and the abuser, and the child's environment. It's also important to know that help exists—for children and their families and friends.²

CHILD ABUSE IN INDIA

2.5 million Children die in India every year, accounting for one in five deaths in the world, with girls being 50% more likely to die. One out of 16 children die before they attain one year of age, and

one out of 11 die before they attain five years of age.³

The National Policy for Children, 1974, declared children to be a 'supreme national asset'. It pledged measures to secure and safeguard all their needs, declaring that this could be done by making wise use of available national resources. Unfortunately, ten successive Five Year Plans have not allocated adequate resources to meet the needs of children. Available resources have also not been utilized effectively for achieving outcomes for children.^{4, 5}

These increase the vulnerabilities of children and exposes them to situations of abuse and exploitation. According to the report published in 2005 on 'Trafficking in Women and Children in India', 44,476 children were reported missing in India, out of which 11,008 children continued to remain untraced. India, being a major source and destination country for trafficked children from within India and adjoining countries has, by conservative estimates, three to five lakh girl children in commercial sex and organized prostitution.^{5 6} Introduction.⁶

CHILD PROTECTION

While on the one hand girls are being killed even before they are born, on the other hand children who are born and survive suffer from a number of violations. The world's highest number of working children is in India. To add to this, India has the world's largest number of sexually abused children; with a child below 16 years raped every 155th minute, a child below 10 every 13th hour and one in every 10 children sexually abused at any point of time. The National Crime Records Bureau (NCRB) reported 14,975 cases of various crimes against children in 2005.⁷

This public health problem requires swift and effective action. The committee's deliberations led to recommendations for responding to the problem of child abuse and neglect while remaining realistic about the nature of feasible actions in these challenging political and economic times. The intent is to capitalize on existing opportunities whenever possible while advocating for new actions when they are needed.⁷

OBJECTIVES

1. To assess the pretest level of knowledge score

of secondary school students regarding child abuse.

2. To find out the effectiveness of structure teaching program in term of knowledge on child abuse among secondary school students in selected at Abu road.

3. To assess the post test level of knowledge score of secondary school students regarding child abuse.

4. To associate the pre-test knowledge score on child abuse among secondary school student with their selected demographic variable.

HYPOTHESIS

H₁: There will be a significant difference between the pre test knowledge score and post test knowledge score of child abuse among secondary school students

H₂: There will be a significant association between the pre test knowledge score on child abuse with their selected demographic variable among secondary school students.

REVIEW OF LITERATURE

A study was conducted among adolescent pregnancies have sparked a renewed impetus to identify risk factors, such as childhood sexual abuse (CSA), associated with adolescent pregnancy. Given mixed evidence regarding the strength of the relationship between CSA and adolescent pregnancy our objective was to provide an estimate of the effect size of this relationship using updated literature and meta-analytic techniques. Methods Meta-analyses of 21 studies were conducted using a random effects model of binary outcomes to determine aggregate effect-size estimates controlling for study heterogeneity. Results CSA significantly increased the odds of experiencing an adolescent pregnancy by 2.21-fold (95% CI: 1.94–2.51). Conclusions CSA places females at increased risk for subsequent adolescent pregnancy. Addressing conditions associated with CSA might impact the overall adolescent pregnancy rate.⁵

A prospective study included 566 nulliparous women in 3 cohorts: PTSD-positive, trauma-exposed resilient, and non-exposed to trauma. A six-week

postpartum interview reassessed interim trauma, labor experience, PTSD, depression, and bonding outcomes. Postpartum depression alone, or co morbid with posttraumatic stress, was associated with impaired bonding ($R^2=.195$, $P<.001$). In both models, higher quality of life ratings in pregnancy were associated with better outcomes, while reported dissociation in labor was a risk for worse outcomes.⁶

A meta-analysis study was conducted to explore the effects of various possible sources of bias. A meta-analysis of 41 studies (190285 participants) revealed that childhood maltreatment was associated with elevated risk of developing obesity over the life-course (odds ratio=1.36; 95% confidence interval=1.26–1.47). Results were not explained by publication bias or undue influence of individual studies.⁷

A study was conducted to determine whether depression and anxiety in adulthood are associated with abuse exposure in childhood. Results: Inclusion criteria were met by 19 studies with 115,579 study participants, for assessing depression ($n = 14$) and anxiety ($n = 13$). The combined ORs for depression were 2.04 (95 % CI: 1.65-2.53) for sexual abuse and 1.49 (95 % CI: 1.29-1.72) for physical abuse. The combined ORs for anxiety were 2.52 (95 % CI: 2.12-2.98) for sexual abuse and 1.70 (95 % CI: 1.33-2.18) for physical abuse. Conclusions: These findings require increased awareness for the potential needs of adults exposed to child abuse and public health interventions to prevent child abuse.⁸

A Meta analysis study was conducted among adults who reported childhood abuse were significantly more likely to be obese (odds ratio [OR]: 1.34, 95% confidence interval [CI]: 1.24-1.45, $P<0.001$). All four types of abuse were significantly associated with adult obesity: physical (OR: 1.28, 95% CI: 1.13-1.46), emotional (OR: 1.36, 95% CI: 1.08-1.71), sexual (OR: 1.31, 95% CI: 1.13-1.53) and general abuse (OR: 1.45, 95% CI: 1.25-1.69). Severe abuse (OR: 1.50, 95% CI: 1.27-1.77) was significantly more

associated with adult obesity ($P=0.043$) compared with light/moderate abuse (OR: 1.13, 95% CI: 0.91-1.41). We found no significant effects of study design (prospective vs. retrospective, $P=0.07$), age ($P=0.96$) or gender ($P=0.92$).⁹

METHODOLOGY

RESEARCH APPROACH & DESIGN

The research approach used for this study is experimental approach. A pre-experimental design adopt with one group pre test- post test design.

SAMPLE AND SAMPLE SIZE

Sample consists of a subset of a population selected in a research study. The sample consist of secondary school students of government School, siyawa at Abu road. The sample size for the final study consisted of 30 secondary school students in selected school at Abu road. Simple random sampling techniques use to select the samples. Using lottery method.

DATA COLLECTION TOOL

It comprised of 3 sections includes **socio demographic data collection** Its comprise of a items seeking information on demographical data such as age, gender, education, habitant, religion and parents education and type of family. **Structured questionnaire** It will be consisted of 20 structured questions on child abuse. **STP** It was comprised of a structured teaching program on child abuse.

DATA ANALYSIS

The data was obtained analyze on the basis of the objective of study using descriptive and inferential statistics.

SECTION 1: Findings related to socio demographic variables

Table 1: Frequency and Percentage distribution according to respondents

S No	Variables	Category	Respondents	
			Frequency	Percentage
1.	Age	12-14yr	16	53%
		15-17yr	14	47%
2.	gender	Male	16	53%
		female	14	47%
3.	Education	8 th	10	33%
		9 th	9	30%
		10 th	11	37%
4.	Parents education	8th	11	37
		10th	3	10
		12TH	0	0
		Uneducated	16	53
5.	religion	Hindu	30	100
		Muslim	0	0
6.	Habitant	Rural	30	100
		Urban	0	0
7.	Types of family	Nuclear	22	73
		joint	8	27
		Separate	0	0

Description of demographic variables of Respondents

GENDER: The majority of the respondents 53% belongs to the male Gender and 47% respondents were female gender.

AGE (IN YEAR): The majority of the respondents 53% belongs to the age of 12-14 years, followed by 47% belongs to the age of 15-17 years of age.

EDUCATION: The majority of the respondents 37% were 10th standard, followed by 33% respondents were 8th standard, the remaining 30% respondents were 9th standard.

PARENTS EDUCATION: The majority of the respondents 53% parents education were uneducated, 37% respondents were 8th standard & the followed by 10% respondents of 10th standard, & the remaining 0% respondents of 12th standard.

RELIGION: The majority of the respondents 100% were Hindu and 0% of respondents were Muslim religions.

HABITANT: The majority of the respondents 100% the secondary school students lived in the rural area and remaining 0% respondents lived in urban

area.

TYPES OF FAMILY: The majority of the respondents 73% students belongs to nuclear family, followed by 27% respondents were joint family, & the remaining 0% respondents were separate family.

SECTION 2: Area wise findings related to pre test and post test knowledge on child abuse

Table:2 Pre test and post test knowledge on child abuse

S. No.	Know-ledge	No. of state-ments	Max score	Respondents knowledge		
				Mean	S.D	Mean %
1	Pre test	20	14	5.97	2.54	42.6
2	Post test	20	19	12.5	3.64	66

Area wise analysis shows that the mean percentage obtained by the respondents was 66% with standards deviation 3.64 with post test score, 42.6% with SD=2.54 are pre test score. Hence it was necessary for the investigator to improve the knowledge of respondents by giving information regarding importance of structured teaching program on child abuse.

Table:3 Classification of subjects according to

pretest level of knowledge n=30

Pretest Knowledge regarding ---	Frequency	Percentage
Inadequate knowledge (0-6)	19	63
Moderate knowledge (7-14)	11	37
Adequate knowledge (15-20)	0	0

Table:4 Classification of subjects according to posttest level of knowledge n=30

Posttest Knowledge regarding ---	Frequency	Percentage
Inadequate knowledge (0-6)	2	7
Moderate knowledge (7-14)	19	63
Adequate knowledge (15-20)	9	30

SECTION: III Findings related to effectiveness of structured teaching programmed on child abuse among secondary school students by comparing pre and post test knowledge score.

Table: 5 Association between pre-test and post-test knowledge scores n=60

	Max Score	Mean	SD	Mean%	't' value	df	'p' value
Pretest Knowledge	14	5.97	2.54	42.6	8.09	29	>0.05
Posttest Knowledge	19	6.5	3.64	66			
Enhancement		6.53	1.1	23.4			

** Highly Significant

Section -3 findings related to effectiveness of structured teaching programmed on child abuse among secondary school students by comparing pre and post test knowledge score.

The mean post test knowledge score is 12.5 is greater than the means Pretest Knowledge score 5.97. The data further represent that 't' value of Tabulated t pre test knowledge and posttest knowledge value is more than calculated t value at 29 df for the 0.05 level of significance. Therefore the null hypothesis is accepted. It means there was no association between pretest and posttest knowledge levels.

The obtained 't' value 8.09 is greater than the table value at 0.05 level of significant .Therefore 't' value is found to be significant .Hence it is inferred that there is significant difference between the pre test or post test knowledge score secondary school student regarding child abuse and the structural teaching programmed is effective in improving the knowledge of secondary school student .Hence research hypothesis H1 is accepted.

SECTION IV: Findings related to association between the pre test knowledge score and selected demographic variables on child abuse among secondary school students

Table:6 Chi-square test**N=30**

Characteristics	Category	Respondents			Ch-square value	df	P-value	Inference
		Poor	Average	good				
Gender	Male	11	5	-	0.433	1	3.84	NS
	Female	8	6	-				
Age	12-14YRS	11	5	-	0.433	1	3.84	NS
	15-17YRS	8	6	-				
Education	8 TH	6	4	-	1.222	2	5.99	NS
	9 TH	7	2	-				
	10 TH	6	5	-				
Parents education	8 th	7	4	-	0.020	3	7.81	NS
	10 th	2	1	-				
	12 TH	-	-	-				
	Un edu	10	6	-				
Religion	Hindu	19	11	-	0.000	1	3.84	NS
	Muslim	-	-	-				
Habitant	RURAL	19	11	-	0.000	1	3.84	NS
	URBAN	-	-	-				
Type of family	NUCLEAR	14	8	-	0.003	2	3.84	NS
	JOINT	5	3	-				
	SEPARATE	-	-	-				

***Significant; **highly significant**

Section 4: Findings related to association between the pre test knowledge score and selected demographic variables on child abuse among secondary school students

This study revealed that the obtained tabulated chi-square value of all socio demographic data with pretest knowledge is more than calculated chi-square value at 0.05level of significance. Therefore the null hypothesis is accepted. It means there was no significant association between socio demographic data with pretest knowledge level.

CONCLUSION

A study was conducted by Reducing Vulnerability (Fink, 1998) and Keeping Kids Safe (Tobin & Kessner, 2002) were reviewed. These programs, as most do, varied in how, when, and who implemented them. Most school prevention programs have the goals of teaching students how to say no to a person who inappropriately touches them, to leave the situation, and the importance of telling a trusted adult (Roberts

& Miltenberger, 1999).¹²

From the study findings it can be concluded that children are the key persons of growing nation. Nurses, who play a vital role in the promotion and maintenance of health they can provide adequate counseling. Health education is an important function of the health personnel. Nurses as resource persons working in the hospital and community setting should impart education especially on prevention of child abuse. The nursing curriculum should lay emphasis on knowledge on child abuse among secondary school students. So periodical health education programmed should be conducted by student nurses in hospitals, schools, community area as a part of curriculum and should motivate the students to participate actively.

Acknowledgement: Researchers want to extend their thanks to the school management for their generous permission to conduct the study.

Conflict of Interest: There was no such issue.

Source of Funding: Self- Finance.

Ethical Clearance: Taken from the college ethical committee.

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Behavioral Problems among Children Aged 6-10 Years: A Comparative Analysis of Working and Non-working Mother's Perspective

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ABSTRACT

A descriptive correlational study was conducted in an urban community of Kerala with an aim to assess and compare the behavioral problems of children aged 6-10 years of working and non-working mothers as reported by them. Hundred mothers (50 working and 50 non-working) who met the inclusion criteria were selected using systematic random sampling. Data was collected using a structured Child Misbehavior Severity Index rating scale. The results revealed that, no children were reported to have moderate or severe behavioral problems. However, majority 49(98.00%) of children of working mothers and 48(96.00%) of children of non-working mothers had mild behavioral problems. There was statistically no significant difference between behavioral problems of children among working and non-working mothers. From the study, it is concluded that irrespective of the maternal employment, the present day children are having behavioral difficulties which needs a greater attention by health professionals at the earliest.

Keywords: Behavioral problems; Children aged 6-10 years; working mothers; non-working mothers.

INTRODUCTION

About half of all lifetime mental disorders begin before the age of 14 years. It is obvious that "no health is possible without mental health" and that mental health issues form an integral part of child's development.¹ Child psychiatric problems are recognized as emerging public health issue throughout the world suggesting a global prevalence of approximately 20%.² About 12.5% children suffer from psychiatric disorders. Besides them, there are other children also who do not fulfill the criteria for disorder but has symptoms of poor mental health and require help.³ Behavioral problems constitute one of the most common psychiatric problems among young children. Nobody is perfect and all children will have bouts of bad behavior. They may throw tantrums, or talk back and even lash out to a parent. Children may seem irritable or even hostile when they are tired or are not feeling well. They may dispute with parents or disobey them. Young children may lie because they are too young to understand the

difference between the truth and a lie. Sometimes they lie to get themselves out of trouble. These are normal. When they act these ways all the time, or when these behaviors get them into trouble all the time at home, at school, or with other kids in the neighborhood, they may have a behavioral problem.⁴

Behavioral problems are one of the growing problems among school children in every society. Studies conducted both in India and abroad ^{5 6 7 8} ⁹ revealed an increasing prevalence of behavioral problems in children. A behavioral and emotional disorder, with onset usually occurring in childhood and adolescence come under F90-F98 of ICD 10 classification. Any behavior that disturbs the individual's ability to function adequately will constitute a behavior problem with common manifestations like tantrums, poor peer relationships, sleeping in class, reluctance or refusal to go to school, sleep disturbances, distress for separation, delayed development, fearfulness, nightmares, anxiety, withdrawn behavior, poor scholastic performance

etc.¹⁰ Young children with behavioral problems are at a greater risk of developing psychiatric disorders in later life and contribute disproportionately to the substantial social and economic burden attributable to mental health problems in the community.^{11 12}

Early intervention and treatment may prevent a child's emotional or behavioral difficulties from worsening and lessen some of the negative outcomes.¹³ Because these disorders have a good prognosis if treated at their onset, early identification and referral for appropriate care provides an excellent opportunity to improve the mental health of populations. It will be much cost effective, as it will prevent further deterioration; adult treatment and rehabilitation programs are much more expensive. However, early identification and differentiation of such behaviours is challenging due to the complex and slow rate at which these behaviours manifest and the high overlap of diagnostic categories. Moreover many of the problem behaviours evident during this period are, to some extent, normative and simply reflect developmental changes and stressors.

There are many tertiary care centres which attend to mental illness in hospital setting. They are therapeutic in nature and aim to treat and rehabilitate back to society. However, large gap exists in the area of prevention, mental health promotion and early intervention programmes. The researcher is hence strongly motivated and convinced to assess the behavioral problems in school going children with a view to improve the health consciousness of the community, as screening for behavioral problems targeting this age group at the community level would enhance the early recognition and referral for appropriate care.

MATERIALS & METHODS

The present study was aimed to assess and compare the behavioral problems of children ageing 6-10 years of working and non-working mothers. A descriptive research design with cross-sectional measurement approach was adopted. All mothers having children aged 6-10 years were included in the study and they were selected from different urban communities across Kothamangalam Municipality, Kerala state. A list of the target population was made and 100 mothers were selected using systematic

random sampling. Mothers having children with developmental problems and psychiatric problems were excluded.

Tool

1. Socio-demographic Performa

Related to mother: Age, religion, marital status, presence of marital discord, socio-economic status, total number of children, number of children below 10 years, disciplinary style, type of family, presence of favorable home atmosphere, educational status, occupation, relationship with neighbors, duration of time spend with child and substance use by spouse.

Related to child: Age, gender, birth order, temperament, type of school, sleeping pattern, attachment and nature of television viewing.

2. Child Misbehaviour Severity Index

This scale was developed by reviewing related scales available and in consultation with the subject experts. It consisted of items intended to assess the severity of misbehavior that children may exhibit as reported by their mothers and has 34 items which were formulated under 5 domains: hyperkinetic problems (4 items), disruptive behavioral problems (18 items), tic disorder (1 item), emotional problems (4 items), and other behavioral and emotional problems with onset usually occurring in childhood (7 items). A summated rating scale format was used with four choices per item ranging from 'Not at all to 'Always'.

The reliability of these instruments was established in terms of internal consistency. Administration of these instruments on a representative sample (n=10) shown Cronbach's alpha of 0.86.

The data collection was done after obtaining a formal permission from the concerned authorities. A written informed consent was obtained from every study participants. Collected data were tabulated and analyzed using SPSS trial version 20.0.

RESULTS

Demographic characteristics

More than half of working mothers, 26(52.00%) and 32(64.00%) non-working mothers belonged to the age group of 35 years and below. Majority,

37 (74.00%) of working mothers and 36(72%) of non-working mothers were Christians. All the non-working mothers who participated in the study were married. Most of the mothers in both the groups belonged to middle class family [40(80.00%) working mothers and 32(64.00%) non-working mothers]. Of the 50 working mothers, highest 13(26.00%) were post graduates, whereas among non-working mothers, 25(50.00%) were educated up to SSLC. Sixty two percentage of working mothers and 70.00% of non-working mothers were from nuclear family. Majority 28(56.00%) working mothers and 34(68.00%) non-working mothers reported intimate relationship with neighbors. Forty two of the working mothers and twenty nine of non-working mothers reported substance use by their spouses.

Most of the mothers; 36(72.00%) of working mothers and 37(74.00%) of non-working mothers were lenient towards their child. Majority of mothers in both the groups(98% working mothers & 100% non-working mothers) reported favourable home atmosphere for the growth of their child. Majority of the working mothers 43(86.00%) and non-working mothers 48 (96.00%) reported that they get quality time to spend with their child. Moreover, 48(96.00%) working and 49(98.00%) non-working mothers assisted their children in studies. Most of the working mothers 39(78%) and only 26(52.00%) of non-working

reported the temperament of child as easy. Regarding the type of school, the child is attending, majority were in government school in both the groups [44(88.00%) of working and 39(78.00%) of non-working mothers].

Assessment of behavioral problems

None of the mothers in both the groups reported behavioral problems among children as moderate or severe. However, majority of mothers 49(98.00%) working and 48(96.00%) non-working mothers reported mild behavioral problems. Very insignificant number i.e., only 1 (2.00%) of both working and non-working mothers reported no behavioral problems.

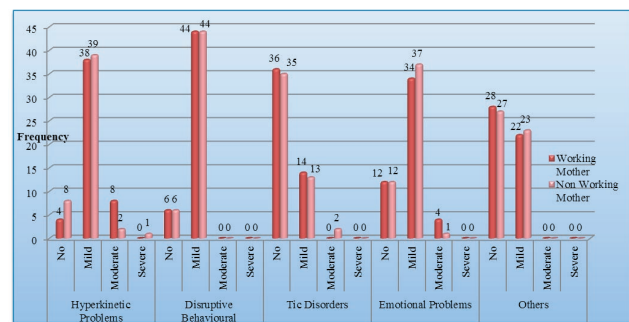


Figure 1: Frequency Distribution of Domain Wise Assessment of Degree of Behavioral Problems

Domain wise comparison of behavioral problems of children in working and non-working mothers

Table 1: Comparison of behavioral problems (n=50+50)

Domains	Working mother	Non-working mother	MD	t value	p value
	Mean \pm SD	Mean \pm SD			
Hyperkinetic Problem	2.42 \pm 1.77	2.58 \pm 1.83	-00.16	-00.444	00.658
Disruptive Behavioral Problem	4.58 \pm 3.34	4.22 \pm 3.19	00.36	00.550	00.583
Tic Disorder	0.34 \pm 0.56	0.28 \pm 0.45	00.06	00.590	00.556
Emotional Problem	1.70 \pm 1.45	1.62 \pm 1.66	00.18	00.404	00.687
Other Behavioral Problem	0.92 \pm 1.27	0.74 \pm 1.01	00.08	00.784	00.435
Overall behavioral Problem	9.20 \pm 5.72	10.20 \pm 5.42	00.18	01.052	00.29

Association between Behavioral Problems Score with Selected Demographic Variables

A statistically significant association was found between behavioral problems score and variables of working mothers like 'Presence of marital discord' ($F=5.47$, $p=0.024$); 'Number of children less than 10 years of age' ($F= 3.84$, $p=0.05$) and 'Age of child' ($F=3.371$, $p=0.012$) and 'Temperament of child' ($F=9.951$, $p=0.003$) at 0.05 level of significance. Among non-working mothers statistically significant association was found between the behavioral problems score and 'Education of mothers' ($F=2.783$, $p=0.05$), 'Substance use by spouse' ($F=3.869$, $p=0.05$) and 'Temperament of child' ($F=8.128$, $p=0.006$) at 0.05 level of significance. However no statistically significant association was found between behavioral problem score and other socio demographic variables.

DISCUSSION

In the present study it was found that behavioral problems of children have no significant relationship with maternal employment. Contrary findings were reported in a comparative study by Anitha J, Jayasudha A and Kalaiselvi aimed to assess the level of behavioral problems among preschool children of employed and unemployed mothers in Tamil Nadu.¹⁴ While assessing the association it was found that among working mothers, 'Presence of marital discord, Number of children less than 10 years of age, Age of child and Temperament of child has statistically significant association with behavioral problem score. Whereas, among non-working mothers, 'Education of mothers', 'Substance use by spouse' and 'Temperament of child' has statistically significant association. The findings of the present study have both supporting and contradicting literature reviews. Results are similar to the research conducted by Abolfotouh MA.¹⁵ Contrary findings were reported, in a study conducted by Shepherd CCJ, Li J, Mitrou F, Zubrik SR. to assess the relationship of socioeconomic disparities in the mental health of indigenous children in Western Australia.¹⁶ In another study on 'Identifying emotional and behavioral problems in children aged 4-17 years in US' by Pastor PN, Reuben MA, Duran CR, similar findings were reported. Chan SM in his study to assess the aggressive behavior in early elementary school children and its relations to early parenting, children's negative emotionality and coping strategies reported that authoritarian parenting was significantly and positively correlated

with children's aggressive behavior at school ($r(185) = 0.24$, $p < 0.01$).¹⁷

From the study findings, it was concluded that irrespective of the maternal employment, the present day children are having some or the other sort of behavioral difficulties which need a greater attention from both the parents and teachers involved to prevent further complications. Nurses can be successfully employed in providing specialized care for children with behavioral problems. Utilizing their expertise would imply a paradigm shift in the traditional nursing approach to patient care. It would however, take a long time in strengthening child psychiatric services and research in Kerala.

Ethical Clearance- Mar Baselios College of Nursing Institutional Ethical Committee clearance has been obtained prior to the study.

Acknowledgment- Nil

Conflict of Interest- Nil

Source of Funding- Self

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Impact of A Disease Management Program on Physical and Psychological Wellbeing of the Primary Caregiver of Client Diagnosed with Major Depression

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ABSTRACT

The present study was undertaken to find and evaluate the impact of disease management programme regarding major depression on the physical and psychological well being of the primary care giver of the client diagnosed with major depression before and after the administration of the intervention. Study results revealed that the mean posttest physical and psychological well being scores among the primary care givers who had undergone the disease management programme was significantly higher than the mean pretest scores at 0.05 level of significance.

Keywords: Disease management programme; physical wellbeing; psychological wellbeing; primary care givers; major depression.

INTRODUCTION/BACKGROUND

Mental health is a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and is able to make a contribution to his or her community¹. Mental health problems can cover a broad range of disorders, but the common characteristic is that they all affect the affected person's personality, thought processes or social interactions². For families who are already confronted with a range of day-to-day problems that affect all aspects of their lives, a family member with a severe mental illness may have a significant impact on the entire family system³.

Mostly the primary caregivers of clients with major mental illness are patient spouses, parents or closest relatives and are responsible for providing physical and emotional support for the mentally ill patients for long periods ranging from months to years. This responsibility can lead to an impact on the physical and psychological wellbeing of the primary care giver⁴. As a result, caregivers often neglect their own health care needs in order to assist their family member, causing deterioration in the caregiver's health and well-being⁵. Disease management is one such approach that aims to provide better quality of care and outcomes for patients with depression, as it

improves the physical and psychological well being of care givers automatically by providing adequate knowledge regarding home care of client, and other self management techniques⁶.

The objectives of the study were to:

1. Prepare and implement a disease management program regarding major depression to the primary caregiver of client diagnosed with major depression.
2. Assess and evaluate the physical wellbeing of the primary care giver of client diagnosed with major depression before and after the intervention.
3. Assess and evaluate the psychological wellbeing of the primary care giver of client diagnosed with major depression before and after the intervention.
4. Find the impact of a disease management program regarding major depression on physical and psychological wellbeing of the primary care giver of client diagnosed with major depression.

Operational definitions

Physical wellbeing of primary care giver: refers to the perceived sense of wellbeing in physical and

physiological parameters like sleep, diet, exercise, personal care, bowel and bladder elimination, and health care practices.

Psychological wellbeing of primary care giver: refers to the perceived sense of wellbeing in psychological parameters like life satisfaction, emotion, stress, anxiety level, and the ability to adjust with present situations

Disease management program regarding major depression: refers to an educational program which deals with the care of client at home, maintenance of client's activities of daily living, effective management of client's behavior, avoidance of risk for injury, maintenance of good interpersonal relationship with client, management of drug adherence, importance of regular follow up for client, management of caregiver's stress, anxiety and usage of effective coping mechanisms.

Impact of disease management program regarding major depression: refers to the significant improvement in the mean physical and mean psychological wellbeing scores of the primary caregiver of client diagnosed with major depression after the implementation of intervention.

Primary caregiver of client diagnosed with major depression: refers to the person who has taken primary responsibility and regularly cares for the client diagnosed with major depression as per ICD10 classification for a minimum period of 6 months and present with the client in the hospital.

Hypotheses

- H1: The mean post test physical wellbeing score is significantly higher than the mean pretest physical wellbeing score among the primary care giver of client diagnosed with major depression after intervention.
- H2: The mean post test psychological wellbeing score is significantly higher than the mean pretest psychological wellbeing score among the primary care giver of client diagnosed with major depression after intervention.

Conceptual frame work: Modified Ludwig Von Bertalanffy's General System Theory

MATERIAL & METHODS

Research approach: quantitative approach

Research design: quasi experimental pre test multiple post test design

Variables

Dependent variable:

- * Physical wellbeing of the primary caregiver
- * Psychological wellbeing of the primary caregiver

Independent variable: the disease management program regarding major depression.

Settings of the study: Government mental health centre, Thrissur, Kerala, India and Kusumagiri Mental Health Center, Kakkanadu, Ernakulum, Kerala, India.

Population: primary caregivers of clients diagnosed with major depression.

Sample and Sampling technique: 30 primary caregivers of clients diagnosed with major depression, purposive sampling technique.

Inclusion criteria:

- The primary care giver who regularly cares the client diagnosed with major depression as per ICD 10 classification for a minimum period of 6 months.

Exclusion criteria:

- The primary care giver who is having major physical or psychological health problems and is unable to meet his/her self care needs by themselves at the time of the study.

Tools and techniques

Tool 1: Psychological well being rating scale.

Section A: Demographic data-self report technique.

Section B: Psychological well being rating scale-self rating technique.

Tool 2: Physical well being rating scale-self rating technique.

Intervention: The disease management program regarding major depression

FINDINGS

Section 1: Sample description

Table 1.1: Frequency and percentage distribution of subjects according to age, gender, employment status, and marital status. (n=30)

Demographic variables	Frequency	Percentage
Age (in years)		
20-40	08	26.67
41-60	18	60.00
More than 60	04	13.33
Gender	08	26.67
Female	22	73.33
Employment status		
Employed	17	56.67
Not employed	13	43.33
Marital status		
Married	30	100
Unmarried	nil	nil
Widowed	nil	nil
Divorced	nil	nil

Table 1.2: Frequency and percentage distribution of subjects according to monthly income, relationship with patient, and educational level. (n=30)

Demographic variables	Frequency	%
Monthly income (in Rupees)		
Less than 5000	01	03.33
5001-10,000	23	76.67
10,001-20,000	04	13.33
More than 20,000	02	06.67
Relationship with the patient		
Father	04	13.33
Mother	08	26.67
Spouse	15	50.00
Sibling	nil	nil
Children	03	10.00
Paid care giver	nil	nil
If any other, specify	nil	nil
Educational level		
Lower primary (1-4)	02	06.67
Upper primary (5-7)	02	06.67
High school (8-10)	12	40.00
Plus two (11-12)	08	26.66
Diploma/Graduate/Professional	04	13.33
Post graduate and above	02	06.67

Section 2: Evaluation of the physical wellbeing of the primary care giver

The physical well being scores of the subjects had increased from pretest through posttest time periods.

Subcategories of physical wellbeing

Table 2.1: Frequency and percentage distribution of subjects according to the grading of scores on sleep, diet, exercise, and personal care. (n=30)

Subcategories	Pretest		Posttest1		Posttest2	
	f	%	f	%	f	%
Sleep						
Poor	21.0	70.0	16.0	53.3	12.0	40.0
Good	07.0	23.3	10.0	33.3	12.0	40.0
Very good	02.0	06.7	03.0	10.1	04.0	13.3
Excellent	0.00	0.00	01.0	03.3	02.0	06.7
Diet						
Poor	16.0	53.3	12.0	40.0	08.0	26.7
Good	09.0	30.0	06.0	20.0	08.0	26.7
Very good	03.0	10.0	07.0	23.3	10.0	33.3
Excellent	02.0	06.7	05.0	16.7	04.0	13.3
Exercise						
Poor	15.0	50.0	10.0	33.3	08.0	26.7
Good	10.0	33.3	13.0	43.3	10.0	33.3
Very good	03.0	10.0	04.0	13.3	07.0	23.3
Excellent	02.0	06.7	03.0	10.1	05.0	16.7
Personal care						
Poor	23.0	76.9	19.0	63.3	15.0	50.0
Good	05.0	16.9	07.0	23.3	08.0	26.9
Very good	01.0	03.1	03.0	10.3	06.0	20.0
Excellent	01.0	03.1	01.0	03.1	01.0	03.1

Table 2.2: Frequency and percentage distribution of subjects according to the grading of scores on bowel and bladder elimination, and health care practices. (n=30)

Subcategories	Pretest		Posttest1		Posttest2	
	f	%	f	%	f	%
Bowel and bladder elimination						
Poor	06.0	20.0	04.0	13.3	04.0	13.3
Good	11.0	36.7	08.0	26.7	08.0	26.7
Very good	10.0	33.3	14.0	46.7	12.0	40.0
Excellent	03.0	10.0	04.0	13.3	06.0	20.0
Health care practices						
Poor	20.0	67.1	17.0	56.9	15.0	50.0
Good	08.0	26.7	10.0	33.3	10.0	33.3
Very good	01.0	03.1	02.0	06.7	02.0	06.7
Excellent	01.0	03.1	01.0	03.1	03.0	10.0

The primary care giver had more problems in the area of personal care followed by the areas of sleep, health care practices, diet, and exercise. Least problems were found in the area of bowel and bladder elimination.

Section 3: Evaluation of psychological wellbeing of the primary care giver

The psychological well being scores of the subjects had increased from pretest through posttest time periods.

The primary care giver had more problems in the area of personal care followed by the areas of sleep, health care practices, diet, and exercise. Least problems were found in the area of bowel and

bladder elimination.

Section 3: Evaluation of psychological wellbeing of the primary care giver

The psychological well being scores of the subjects had increased from pretest through posttest time periods.

Subcategories of psychological wellbeing

Table 3.1: Frequency and percentage distribution of subjects according to the grading of scores on life satisfaction, emotion, and stress. (n=30)

Subcategories	Pretest		Posttest1		Posttest2	
	f	%	f	%	f	%
Life satisfaction						
Poor	16.0	53.3	12.0	40.7	09.0	30.0
Good	08.0	26.7	10.0	33.3	08.0	26.7
Very good	06.0	20.0	04.0	13.0	10.0	33.3
Excellent	0.00	0.00	04.0	13.0	03.0	10.0
Emotion						
Poor (high emotions)	07.0	23.0	07.0	23.3	05.0	16.7
Good	12.0	40.7	10.0	33.3	08.0	26.7
Very good	10.0	33.3	13.0	43.4	10.0	33.3
Excellent (low emotions)	01.0	03.0	0.00	0.00	07.0	23.3
Stress						
Poor (high stress)	18.0	60.3	14.0	46.7	12.0	40.0
Good	08.0	26.7	10.0	33.0	10.0	33.3
Very good	01.0	03.0	03.0	10.0	02.0	06.7
Excellent (low stress)	03.0	10.0	03.0	10.0	06.0	20.0

Table 3.2: Frequency and percentage distribution of subjects according to the grading of scores on anxiety level, and ability to adjust with present situation (n=30)

Subcategories	Pretest		Posttest1		Posttest2	
	f	%	f	%	f	%
Anxiety level						
Poor (high anxiety)	17.0	56.7	13.0	43.3	10.0	33.0
Good	12.0	40.0	10.0	33.3	08.0	26.7
Very good	01.0	03.0	04.0	13.3	06.0	20.0
Excellent (low anxiety)	0.00	0.00	03.0	10.1	06.0	20.0
Ability to adjust with present situation						
Poor	23.0	76.7	20.0	67.0	16.0	53.3
Good	07.0	23.3	05.0	16.7	06.0	20.0
Very good	0.00	0.00	05.0	16.7	05.0	16.7
Excellent	0.00	0.00	0.00	0.00	03.0	10.0

The primary care giver had more problems in the area of ability to adjust with present situation followed by the areas of stress, anxiety level, and life satisfaction. Least problems were found in the area of emotion.

Section 4: Impact of the Disease Management Program (DMP)

Table 4: Mean, SD and t value of pretest and posttest physical wellbeing score (n=30)

Parameter	Mean	SD	Paired mean difference	t value	Level of significance
Pre-test	88.6	14.89			
Post test- 1	108.03	20.69	1.94	7.25	0.00*
Posttest 2	124.1	26.1	3.54	9.09	0.00*

df=29 *significance at 0.05 level

depression after the implementation of intervention.

df=29 *significance at 0.05 level

Mean, SD and t value of pretest and posttest psychological wellbeing score(n=30)

Parameter	Mean	SD	Paired mean difference	t value	Level of significance
Pre-test	113	19.4			
Post test- 1	132.4	21.6	1.94	14.04	0.00*
Posttest 2	146.5	24.3	3.35	14.67	0.00*

df=29 *significance

It can be concluded that, the disease management program was found to be effective in improving the physical and psychological wellbeing among the

primary caregiver of client diagnosed with major depression after the implementation of intervention.

DISCUSSION/CONCLUSION

Discussion

Section I - Sample characteristics

Majority of the subjects (60%) were in the age group of 40-60 years. The finding co-relates with the study conducted by Kaushik and Bhatiya⁷. Majority of the subjects (73.33 %) were females, 56.67% of the subjects were employed and most (50%) of the subjects were spouses. The findings of the study conducted by Choi J et al⁸ stands supportive to the present study.

Section II - Physical wellbeing of the primary care giver

In a study conducted by Bahrami and Farzi⁹, the findings showed that the mean posttest score of physical aspect of quality of life (73.66) had increased as compared with the pretest score (64.06) which supports the current research study.

Subcategories of physical wellbeing

An article by Schulz R et al¹⁰ reported that, caregivers often neglect their own health care needs in order to assist their family member, causing deterioration in the caregiver's health and well-being.

Section III - Psychological wellbeing of the primary care giver

Thompson G & Steffen A et al¹¹ found that psycho-educational interventions teaching either mood management skills or problem-solving skills to caregivers were effective in reducing depression, reducing burden, and increasing coping in caregivers.

Subcategories of psychological wellbeing

A study by Ngibise K A et al¹² supports the present study findings.

Section IV - Impact of the Disease Management Program (DMP)

A study conducted by Chien and Lee¹³, the

findings support the present study.

Conclusion

The findings of the study revealed that the mean posttest scores of physical and psychological wellbeing after the disease management program was found to be higher than the pretest scores among the primary caregivers of client diagnosed with major depression at 0.05 level of significance and based on the findings it can be concluded that the disease management program was effective in improving the physical and psychological wellbeing among the primary caregiver of client diagnosed with major depression.

Implications of the study

Nursing Administration

- Nursing administrators should take necessary steps to make the nurses aware about the concept of disease management program and to train the nurses to implement those programs.

Nursing education

- Nursing students should be encouraged to attend seminars and workshop on benefits of disease management programs.

Nursing Research

- Extensive research should be done regarding the impact of disease management programs among the primary caregivers.

Nursing practice

- The nurse should maintain good rapport with the caregivers so that they can identify the problems faced by the care givers while caring the client.

Limitations of the study

- Data collection period was limited to two months. For finding the lasting impact of disease management program, longer time duration may be required.

- Since sample size was small and the study subjects were from only selected settings, generalizations of the study findings need to be done with caution.

RECOMMENDATIONS

- A similar study can be replicated in different settings with larger sample to validate and to make generalizations.

- Similar study can be conducted over prolonged periods in order to ensure the efficacy.

Acknowledgement: I owe my sincere thanks and gratitude to all those who have contributed to the successful completion of this endeavor.

Ethical Clearance: Ethical clearance was obtained from the institutional ethical committee. Written permissions from the respected authorities were obtained to conduct the research study. Informed consent was taken from the subjects and the confidentiality of the data was maintained.

Conflict of Interest: Nil

Source of Funding: Self

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Objective Structured Practical Examination as a Tool for the Formative Assessment of Practical Skill: Nursing Students Perception

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ABSTRACT

Objective Structured Practical Examination (OSPE) assessments have been a core element of assessment in clinical courses for many years. They enable assessment of theoretical, practical and problem-solving skills at multiple stations. Six stations, each assessing a mixture of different practical, theoretical, communications and problem-solving skills were developed.¹ It can be used to assess practical competencies in an appropriate, methodological, direct observation manner of the student's performance during planned clinical test stations.

Aims & Objective: The purpose of the study was to determine the nursing student's perception of OSPE

Material & Method: A descriptive survey approach was adopted to determine the Nursing student's perception of OSPE. A sample of 60 1st and 2nd B.Sc Nursing students of Shri USB college of Nursing were selected by using non probability purposive sampling technique. The data collection was done in two phases after the approval from the institutional ethical committee and informed consent taken from the individual student. In phase I the students participating in the study were introduced to OSPE system by a short lecture and an orientation programme was organized for faculty members participating in the study as observers. A total of 60 students were divided into 6 groups of 10 in each group, examined for 2 days. For the OSPE, students were oriented by an OSPE map and a written instruction list before the start of the exams. The OSPE consisted of five stations on intravenous cannulation (3 observed station, 1 unobserved station and a rest station) of 3-6 minutes each. The station 1 (unobserved)-sites of intravenous cannulation (3 mts), station 2 (observed)-identification of the size of cannula (3 mts), station 4-rest station, station 5- intravenous procedure demonstration.(6 mts).Marks were allotted for each station except for rest station. In phase 2 at the end of OSPE session data collected by using a self administered structured check list consisting of 5 broad based themes as (1) information received on OSPE (2) Atmosphere of OSPE (3) Stations of OSPE (4) Conduction of OSPE (5) overall view on OSPE with 27 items. Frequencies and percentages were used to analyze and interpret the data.

Results: The findings reveals a positive perception towards information received on OSPE (93 %),atmosphere of OSPE (88%),stations of OSPE(90%),conduct of examinations on OSPE(87%) and overall view on OSPE(88%).

Conclusion :The limited use OSPE in nursing in India the current study showed that positive perception towards OSPE as fair, unbiased valid, reliable, assessment method.

Keywords: OSPE, objective structured practical examination, student perception, intravenous cannulation

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INTRODUCTION

The teaching and learning of medical students has always been a complicated process. At times even the best of teachers may struggle in communicating knowledge and assessing its uptake. Assessment of gained knowledge is probably more difficult than delivering it. Assessment of clinical skills is far more important and complex as it directly link with patients care. The aim of this paper is to review the impact of OSPE on students learning i.e. OSPE as a learning tool.¹

OSPE replaced the table viva in the oral and clinical examinations. OSPE, as an assessment tool is not implemented in all institutions in India. Following the introduction of OSPE it has become the major part of the practical examinations in each class, from first year to final year undergraduate and post graduate. The aim of OSPE is to make practical examinations fair, objective and standardized in line with Best Evidence Medical Education (BEME) and the local needs. Objectives of OSPE: 1.To test factual knowledge.2.To assess the clinical competence.3.To demonstrate common sense.4. To assess analytical thinking and communication.²

OSPE comprises of numerous short duration stations where the students are tested for various clinical skills, knowledge and attitude in an objective fashion. In this way almost all areas of the syllabus are covered. This format of assessment leads to the organized and structured experience of the students to a wide range of different clinical skills in a relatively shorter time period. It is designed to expose the candidates to a greater number of examiners and topics and also to reduce the effect that any one examiner has on the candidate's score, thus making the system more structured and organized. It gives them a clear idea of their strengths and weaknesses in various aspects of the subject.³

Problem statement

"A study to assess the Objective structured practical examination as a tool for the formative assessment of practical skill: Nursing students Perception in a selected institute, Sirohi, Rajasthan"

OBJECTIVES

1. To determine the nursing students perception

of OSPE

Review of literature

A study was conducted on Objective structured practical examination as a tool for the formative assessment of practical skills of undergraduate students in pharmacology. This study attempt to evaluate the feasibility of using OSPE as a tool for the formative assessment of undergraduate medical education in pharmacology. Students of second year MBBS, at the end of the first term, were assessed by both the conventional practical examination and the Objective Structured Practical Examination (OSPE). A five-station OSPE was conducted one week after the conventional examination. Perceptions of students regarding the new method were obtained using a questionnaire. The study result shows that There was no significant difference in the mean scores between the two methods ($P = 0.44$) using the unpaired t test. The Bland Altman plot comparing the CPE (conventional practical examination) with the OSPE showed that 96% of the differences in the scores between OSPE and CPE were within the acceptable limit of 1.96 SD. Regarding the students' perceptions of OSPE compared to CPE, 73% responded that OSPE could partially or completely replace CPE. OSPE was judged as an objective and unbiased test as compared to CPE, by 66.4% of the students. Finally study concluded that use of OSPE is feasible for formative assessment in the undergraduate pharmacology curriculum.³

A study was conducted on Objective structured practical examination in biochemistry: An experience in Medical College, Kolkata. the objectives of the study were to introduce OSPE as a method of assessment of practical skills and learning and to determine student satisfaction regarding the OSPE. Furthermore, to explore the faculty perception of OSPE as a learning and assessment tool. The first M.B.B.S students of 2011- 12 batch of Medical College, Kolkata, were the subjects for the study. OSPE was organized and conducted on "Identification of Unknown Abnormal Constituents in Urine." Coefficient of reliability of questions administered was done by calculating Cronbach's alpha. A questionnaire on various components of the OSPE was administered to get the feedback. result shows that 16 students failed to achieve an average of 50% or above in the assessment.

However, 49 students on an average achieved >75%, 52 students achieved between 65% and 75%, and 29 students scored between 50% and 65%. Cronbach's alpha of the questions administered showed to be having high internal consistency with a score of 0.80. Ninety nine percent of students believed that OSPE helps them to improve and 81% felt that this type of assessment fits in as both learning and evaluation tools. Faculty feedback reflected that such assessment tested objectivity, measured practical skills better, and eliminated examiner bias to a greater extent. Finally study concludes that OSPE tests different desired components of competence better and eliminated examiner bias. Student feedback reflects that such assessment helps them to improve as it is effective both as teaching and evaluation tools.⁴

MATERIAL & METHODS

A descriptive survey approach was adopted to determine the nursing students perception of OSPE a sample of 60 1st and 2nd year B.Sc nursing students of Shri U S B college of nursing were selected by using non probability purposive sampling technique. The data collection was done after the approval from the institutional ethical committee and the written informed consent from the participants. The data was collected in two phases.

In phase 1: The students participating in the study were introduced to OSPE system by a short lecture and orientation programme was organized for faculty members participating in the study as observes. A total of 60 students were divided in to 6 groups of 10 in each, examined by 4 examiners for 2 consecutive practical days. structured checklist (answer key) for observed and unobserved was prepared along with examiners and students. And students instruction manual all validated by senior faculty members. For the OSPE students were oriented by OSPE map and a written instruction list before the start of the examination.

After the initial orientation students were exposed to the OSPE stations consisting of 5 stations on intravenous cannulation, two observed stations 2 unobserved station and one rest station of 3 to 6 minutes each arranged in the medical surgical laboratory in a clockwise manner the station were as follows. Station 1: (unobserved) sites of

intravenous cannulation (3 min), station 2: (observed) identification of the sites of the cannula (3 min). station 3: (unobserved) complication of intravenous cannulation (3 min) station 4 : (Rest station) station 5 : (observed) intravenous procedure demonstration (6 min). Marks were allotted for each station except for rest station.

In phase II: At the end of OSPE session data on students perception on OSPE were collected by using self administered structured checklist consisting of 5 broad based themes as

(1) Information received on OSPE (2) Atmosphere of OSPE (3) Arrangement of Stations of OSPE (4) Conduction of examination (5) Over all view on OSPE with 27 items.

At the end of the questionnaire, an open ended question was asked to elicit their opinions regarding this assessment method. The tool was validated by 3 experts in the field of nursing education. In the check list, the students were instructed to tick mark the best response o the 27 statements either agree or disagree. Each agree carried a score 1 (one) and each disagree carried a score 0 (zero).the participation was voluntary and anonymous. The students were assumed that no action will be taken against them if they wish not to answer to the questionnaire. The students were instructed to reply to their own answer sheet without any discussion with the peers. Frequencies and percentages were used to analyze and interpret the data.

FINDINGS

All the 60 students (100%) participated in the study

Section1: students over all perception on OSPE in 5 broad areas N=60

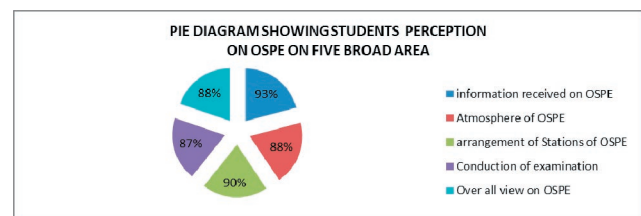


Figure :1 depicts that majority of the students (90%) agreed on the overall arrangement of stations of OSPE. 89% of the students agreed on overall conduction of examination and 89% also showed

positive response on overall view on OSPE. Majority of the students (87%) showed positive responses on overall view on OSPE. 79% of the students had positive responses on overall atmosphere of OSPE.

Section II : students perception on OSPE on different sub areas

Table 1: theme (1): Information received on OSPE,

Areas	Agree	Disagree
Information received on OSPE	93%	7%
1. Instruction given before the OSPE was adequate	98 %	2%
2. OSPE map was helpful	97%	3%
3. Opportunity was given to seek clarification	83%	17%

Table 1 showed that in regard to information received on OSPE, majority of the students (98%) felt that instruction given before the OSPE was adequate. Majority (97%) also felt that OSPE map was helpful. More than the half of half the students (83%) felt that opportunity was given to seek clarification

Table 2: Theme (2): Atmosphere of OSPE

Areas	Agree	Disagree
Atmosphere of OSPE	88	12
1. Space was adequate and comfortable	92%	8%
2. There was less distraction	84%	16%

Table 2 depicted that in regard to the atmosphere of OSPE, majority of the students (92%) felt that space was adequate and comfortable and 84% felt that there was less distraction.

Table 3: Theme (3): Arrangement of stations of OSPE

Areas	Agree	Disagree
Station	90%	10%
1. Bstations were sequentially arranged	93%	7%
2. Each station had clear instruction about the task to be performed.	93%	7%
3. Each station had clear instruction of time allotted and marks	90%	10%

4. Time allotted for the each station was adequate	82%	18%
5. Numbers of stations was adequate for the area assessed	85%	15%
6. Easy to switch from one station to another	97%	3%
7. Enough time was given to switch from station to another	95%	5%
8. Arrangement in each station was adequate	86%	14%

Table 3 showed that regarding the arrangement of stations of OSPE, most of the students (%) felt that stations were sequentially arranged. Majority(%) also felt that each station had clear instruction about the task to be performed. Majority of the student (%) felt that each station had clear instruction of time allotted and marks. % of he students felt that time allotted for the each station was adequate. Most of the students (%) felt that number of stations was adequate for the area assessed. Majority (%) found easy to switch from one station to another. % of the students felt that enough time was given to switch from station to another. Majority of the students (%) felt that arrangement in each station was adequate.

Table 4: Theme (4): Conduction of examination

Areas	Agree	Disagree
conduction of examination	87%	13%
1. Examination covered all types of questions related to area.	85%	15%
2. Examination assessed both theory and skill part.	81%	19%
3. Examination was stress free	96%	4%
4. Scoring was objective	76%	24%
5. Covered relevant areas	98%	2%

Table 4 represents that in regard to conduction of examination, majority of the students (%) felt that examination covered all types of questions related to area. Most of the students (%) felt that examination assessed both theory and skill part. % of students found that examination was stress free. % and % of the students felt that scoring was objective and covered relevant areas respectively.

Table 5: Theme (5): Overall view on OSPE

Areas	Agree	Disagree
Overall view on OSPE	88%	12%
1. Is a fair and unbiased means of evaluation	90%	10%
2. More uniform and objective since all students are asked similar questions with difficulty level	75%	25%
3. less fear of examiners as no direct interaction with examiner	75%	25%
4. OSPE is more satisfying compare to traditional method of assessment	91%	9%
5. would like to repeat the OSPE regularly	93%	7%
6. OSPE should be a part of curriculum	88%	12%
7. OSPE tests details of procedure in steps	91%	9%
8. Builds confidence to conduct a similar on a real patient	91%	9%
9. provided with an opportunity to learn	96%	4%

Table 5 showed that regarding overall view on OSPE, majority of the students (%) felt that OSPE is the fair and unbiased means of evaluation. % of the students felt that OSPE is more uniform and objective since all students are asked similar questions with difficulty level. % students felt less fear of examiners as no direct interaction with examiner. All the students % felt that OSPE is more satisfying compare to traditional method of assessment. % of students would like to repeat the OSPE regularly. % of students felt that OSPE should be a part of curriculum. All the students (%) felt that OSPE tests details of procedure in steps. % of students felt it builds confidence to conduct a similar on a real patient. All the students (%) felt that they were provided with an opportunity to learn.

Comments from Nursing students

- OSPE is a better way of conducting our practical procedure. It enables all the students to perform the procedure as well as answers to the related

questions

- Felt more relaxed and more confident during performing the procedure
- It was a fun learning experience and there was no confusion as general instructions were given clearly
- All the students were treated equally without partiality. It helps the student to think smartly and act actively as a specific time is allotted in every stations.
- Although this method is good, but it is time consuming but we are not confident to do the same procedure with real patients
- OSPE is less stressful and it is expensive as more numbers of articles are required
- It is time consuming at the same time it is very effective.

CONCLUSION

Inspite of the limited use of OSPE in India, the current study showed a positive perception toward OSPE .Nevertheless, there is need for the careful preparation and organization of the OSPE for the practical assessment of nursing students. Thus the present study emphasizes the utilization of OSPE as one of the practical evaluation tool. The results of this study can be used during curriculum planning process in order to motivate the continuation, discontinuation or adaptation of the current practice being following at the schools of nursing and colleges of nursing with regard to the utilization of OSPE's.

Acknowledgment: The researcher's acknowledge the contribution and cooperation provided by the institutional Head Mr. Karan Singh, Nursing Administrator Mr. Arvind Chauchan, Staffs and non teaching staffs and 1st and 2nd year B.Sc Nursing students of Shri USB college of Nursing students Sirohi, Rajasthan.

Conflict of Interest: Nil

Sources of Funding: Self

Ethical Clearance: Ethical clearance for the study is obtained from the college ethical committee.

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Stigma Associated with Electroconvulsive Therapy among Primary Care Givers of Patients Who Received ECT

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ABSTRACT

The purpose of this study was to assess the stigma associated with ECT among primary care givers of patients who received ECT at Department of Psychiatry, Christian Medical College, Vellore. A sample of 50 primary caregivers are selected using total enumeration sampling technique. Data were collected by interviewing the subjects with Stigma assessment scale. The mean age of primary care givers was 46.40 years. The findings of the study revealed that majority of the primary care givers(76%) still holds ECT as a stigmatizing treatment option. The findings of the study demonstrate the need for adequate psycho education to the primary care givers in reducing stigma and could be utilized in clinical areas by nurses in improving the effective care to patients undergoing ECT.

Keywords: Stigma, ECT, primary care giver

INTRODUCTION

The stigma of mental illness is a matter of great concern to mental health advocates. Negative responses to people who have been identified as having a mental illness are seen as a major obstacle to recovery, limiting opportunities and undermining self-esteem.¹ Electroconvulsive therapy (ECT) remains to be one of the most controversial treatments for psychological disorders and continues to be the subject of impassioned debate among various fractions of society, within both the professional and lay communities⁹

Stigma leads to negative stereotyping and to discriminatory behaviour towards people who underwent ECT. The world celebrated 73 years of ECT recently in 2011. Whilst ECT has stood the test of time for more than seven decades, stigma remains one of the main issues that need to be addressed¹.

When patients mention that they have had ECT, they are often viewed as a “two-headed” freak². The term “shock therapy” conjure up the image of pain which further stigmatizes this treatment⁵. Why should a therapy that has a proven effectiveness, remain cloaked in stigma?²

The controversy that exists over the relevance of ECT in contemporary psychiatric care often excludes the opinion of patients. Optimizing ECT service delivery must include the perspectives and input of service users.⁴

To truly understand and appreciate what stigma is and how it affects people who underwent ECT, we have to hear from the ones who face that stigma on a daily basis. They can best inform us- from their own personal experience and in their own words – what stigma is, what it does, and how it is conveyed⁶.

There is a paucity of studies in India that assess the primary care giver's perception of stigma associated with ECT. Given that ECT is a commonly used treatment modality in the country, this study addresses an important issue.

MATERIALS & METHODS

Quantitative approach with descriptive design was employed for the study. Study participants were the primary care givers of patients who received ECT and who were recruited from the Department of Psychiatry, Christian Medical College, Vellore. A sample of 50 consecutive primary care givers were

selected for the study. The sample size was calculated using the formula $4pq/d^2$. Using this formula¹⁰, an estimated prevalence of stigma of 88%, a precision of 10%, 5% α error, 80% power, the sample size was 42.

Data were collected from the primary care givers using the Family views of Stigma Questionnaire¹⁰ after modification. Reliability of the tool was assessed using test re test method and the reliability coefficient was, $r=0.87$ and the content validity was done by experts in the field. The scale has five subsections: general impact of stigma as perceived by respondents (3 items), perceived impact of stigma on ill relatives (7 items), perceived impact of stigma on non-ill family members (6 items), perceived contributors to mental illness stigma (9 items) and perceived aids in coping with stigma (8 items). The data was collected at the Department of Psychiatry for a period of 6 weeks. The subjects who met the inclusion criteria were identified. The investigator explained the purpose of the study and obtained written informed consent from the participants. Confidentiality and privacy was maintained throughout the data collection procedure. The discussion lasted for about 30 to 45 minutes with the care giver.

RESULTS

The descriptive analysis of the socio-demographic and clinical variables revealed that the mean age of patients was 30.42 years and that of primary care

givers was 46.40 years. Majority (66.0%) of primary care givers were females from a rural background. Majority (76%) of the primary care givers were married, 38.0% had completed primary education and 52.0% were unemployed. The mother was the primary care giver in 48% of the cases and the treatment costs were borne by the father in 46%; this is in keeping with the socio centric and integrated family system often seen in our country. Majority of the study participants were undergoing ECT for a diagnosis of schizophrenia; the majority had been having an illness for more than two years.

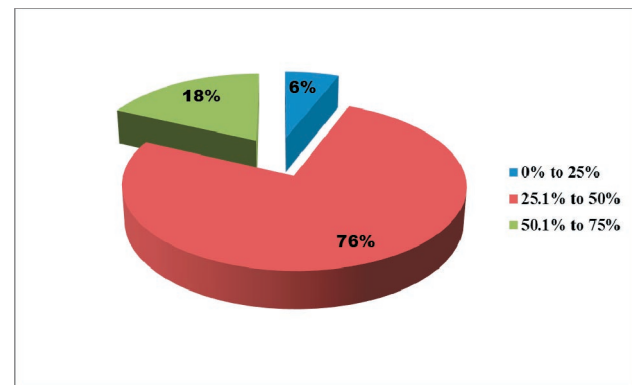


Figure 1: Stigma related to ECT among primary care givers of patients who have undergone ECT

Figure 1 shows that majority (76%) of the primary care givers experienced stigma related to ECT between 25 and 50% of the maximum score on the scale.

Family views of stigma

Table 1: General impact of Stigma related to ECT and Perceived Impact of Stigma on non-ill family members

Sl. No	General Impact Of Stigma	Not At All	Little	Some What	Much	Very
1	To what extent do you feel that stigma is associated with Electro convulsive therapy?	15 (30%)	10 (20%)	18 (36%)	5 (10%)	2 (4%)
2	To what extent do you feel that your relative has been affected by Electro convulsive therapy and stigma?	14 (28%)	16 (32%)	14 (28%)	6 (12%)	0
3	To what extent do you feel that your family members are affected by stigma when they have a mentally ill relative?	16 (32%)	11 (22%)	16 (32%)	6 (12%)	1 (2%)
Sl. No	Perceived Impact Of Stigma on non-ill family members	Not At All	Little	Some What	Much	Very
As someone with a mentally ill relative to what extent do you feel that stigma related to Electro convulsive therapy has had an favorable impact on your						
1	Relationship with others	14 (28%)	17 (34%)	16 (32%)	3 (6%)	0
2	Self-esteem	19 (38%)	19 (38%)	11 (22%)	1 (2%)	0
3	Relationship with your mentally ill relative	20 (40%)	19 (38%)	9 (18%)	2 (4%)	0
4	Willingness to acknowledge your relatives mental illness	16 (32%)	23 (46%)	10 (20%)	1 (2%)	0
5	Acceptance by mental health professionals	25 (50%)	22 (44%)	3 (6%)	0	0
6	Ability to make and keep friends	21 (42%)	15 (30%)	14 (28%)	0	0

Table 1 shows that 32% of relatives relationship with others are somewhat affected by stigma.

Table 2: Perceived contributors to stigma associated with Electro convulsive therapy

Sl. No	Perceived contributors to stigma associated with Electro convulsive therapy	Not At All	Little	Some What	Much	Very Much
	To what extent do you think each of the following contributes to the stigma associated with Electro convulsive therapy?					
1	Popular movies showing Electro convulsive therapy badly	11 (22%)	18 (36%)	13 (26%)	7 (14%)	1 (2%)
2	News coverage of tragedies caused by mentally ill people receiving/ received Electro convulsive therapy	13 (26%)	20 (40%)	15 (30%)	2 (4%)	0
3	Violence by mentally ill people receiving / received Electro convulsive therapy	27 (54%)	15 (30%)	6 (12%)	1 (2%)	1 (2%)
4	Casual use terms like crazy, psycho etc for those who are receiving/ received ECT	19 (38%)	18 (36%)	8 (16%)	4 (8%)	1 (2%)
5	Jokes about people undergoing/underwent Electro convulsive therapy	17 (34%)	21 (42%)	8 (16%)	2 (4%)	2 (4%)
6	Unfavorable personal experiences with mentally ill people receiving/ received Electro convulsive therapy	29 (58%)	14 (28%)	6 (12%)	1 (2%)	0
7	Efforts to reduce the population of psychiatric hospitals having ECT	29 (58%)	15 (30%)	5 (10%)	1 (2%)	0
8	Attitudes expressed in the home	10 (20%)	19 (38%)	9 (18%)	11 (22%)	1 (2%)
9	Teaching by mental health professionals about ECT	31 (62%)	14 (28%)	5 (10%)	0	0

Table 2 shows that 42% reported popular movies showing ECT badly as a reason for stigma whereas 34% reported news coverage of tragedies by mentally ill as a reason for stigma related to ECT.

Table 3: Perceived aids in coping with stigma

Sl. No	Perceived aids in coping with stigma	Not At All	Little	Some What	Much	Very Much
	To what extent do you think each of the following has helped you to deal with stigma you have encountered?					
1	Factual information about Electro convulsive therapy	0	3 (6%)	16 (32%)	21 (42%)	10 (20%)
2	Interaction with other families with mentally ill relatives undergoing Electro convulsive therapy	2 (4%)	11 (22%)	20 (40%)	12 (24%)	5 (10%)
3	Mutual support with in the family	1 (2%)	11 (22%)	21 (42%)	14 (28%)	3 (6%)
4	Research findings which establish a biological basic for Electro convulsive therapy	19 (38%)	20 (40%)	5 (10%)	5 (10%)	1 (2%)

Cont... Table 3: Perceived aids in coping with stigma

5	Advances in the treatment of Electro convulsive therapy	19 (38%)	16 (32%)	7 (14%)	5 (10%)	3 (6%)
6	Active involvement in efforts to reduce stigma	22 (44%)	14 (28%)	7 (14%)	5 (10%)	2 (4%)
7	Positive media depictions of mentally ill persons and Electro convulsive therapy	25 (50%)	15 (30%)	5 (10%)	5 (10%)	0
8	Talking with mental health professionals	4 (8%)	11 (22%)	16 (32%)	15 (30%)	4 (8%)

Table 3 shows that 92% reported factual information regarding ECT as a aid in coping with stigma whereas 74% reported interaction with other families with mentally ill relatives undergoing Electro convulsive therapy helped in coping with stigma related to ECT.

There was no significant association between socio demographic variables and stigma related to ECT among primary care givers.

DISCUSSION

There has been substantial documentation of the fact that mental illness tends to be viewed unfavourably by the general public ⁷. Most studies of stigma of mental illness and few studies regarding perceptions of patients and their families related to ECT have focused on the views expressed directly or indirectly by the public, with consequent inferences about the impact of such views on psychiatric patients and their families.

Our investigation found that almost all participants reported stigma experiences. More than half felt that stigma was associated with ECT. Just a little less than half said that their relative was affected by stigma and that family members were affected by stigma related to ECT. This suggests that family members felt that not only their ill relative, but the family as a whole was stigmatized by the patient having received ECT, and many could point to specific harmful effects.

The possibility that the actual experience of stigma is often less than what people expect is, in many ways, an optimistic finding. However, the expectation itself- the perception of stigma may be enough to produce problems for families with those

expectations.

Though a majority of the respondents did not perceive that stigma related to ECT was affecting the patient's self-esteem, friendships, ability to get a job, illness, recovery or acceptance by mental health professionals, there were others who felt there was a negative impact. A majority of the respondents felt that it was the illness which affected an individual's ability to establish friendships, find a place to live or get a job, rather than the stigma associated with it.

While many relatives felt that ECT stigma affected their relationship with others, a majority did not feel it influenced their own self-esteem, ability to make friends or willingness to acknowledge the relative's mental illness. Among the perceived contributors to stigma associated with ECT, movies and news coverage depicting ECT in a negative way and casual language and jokes about people who have received ECT were identified by many as important. Media depictions, film portrayals and news coverage were the most significant contributors to stigma as reported by a study done ³. He singled out the mass media as influential reinforcers of persisting negative conceptions of mental illness.

Violence by mentally ill individuals was not perceived to be contributing to stigma in this study. This contrasts to the findings ⁸, who reported concerns about violence contributing to the stigmatization of persons with mental illness. It has also reported that a public perception that mentally ill persons may be violent has increased over the past 50 years. ⁶

Most respondents felt that having discussions with mental health professionals, and adequate factual information were very important in coping with stigma. Interaction with other families with

mentally ill relatives undergoing ECT and mutual support within the family were also considered important. Many described that when proper explanations were given regarding ECT, it greatly reduced their distress. These factors were perceived as much more important than research or advances in ECT, active stigma reduction strategies and media portrayals.

LIMITATIONS

- Given the complex nature of stigma, it is possible that the tools that were used in this study have only looked at certain issues and may not have fully captured all of the relevant aspects of stigma and discrimination related to ECT.
- Subject response may vary on occasions because of people's tendency to give socially desirable response.
- It is possible that there is a subgroup of care givers who felt extremely stigmatized because of received ECT and therefore did not return for follow-up to the hospital and is not part of the sample studied.

CONCLUSION

A detailed understanding of the patient's and primary care giver's perspectives of stigma related to ECT helps in understanding and managing patients with mental illness. The majority of the population still holds ECT as a stigmatizing treatment option. Education is an essential part of care and an effective method for improving the knowledge about the effectiveness of ECT and reducing the stigma related to it. These results could be utilized in clinical areas by nurses in improving the effective evidence based care to patients undergoing ECT.

Ethical Clearance- College of Nursing, CMC, Vellore Institutional Ethical Committee clearance has been obtained prior to the study.

Acknowledgment- Nil

Conflict of Interest- Nil

Source of Funding- Self

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Effectiveness of Mindfulness based Stress Reduction (MBSR) on the Level of Depression and Mindful Attention Awareness among in-Patients with Cancer

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ABSTRACT

The diagnosis of cancer is viewed as a crisis. To cope with these fears, the patient with cancer may use and experience different behavioural patterns. Depression is the psychiatric syndrome that has received the most attention in individuals with cancer. The objectives of the present study were to assess the level of depression among in-patients with cancer; to assess the level of mindful attention awareness among in-patients with cancer; to assess the effectiveness of Mindfulness Based Stress Reduction (MBSR) on the level of depression and mindful attention awareness among in-patients with cancer; to find the association between the level of depression among in-patients with cancer and selected demographic and clinical variables and to find the association between the level of mindful attention awareness among in-patients with cancer and selected demographic and clinical variables. Quasi experimental pre test post test control group design was adopted. Data were collected from 60 in-patients with cancer using purposive sampling technique. Thirty were in the control group and other 30 were in experimental group. The result of the study showed that there was a significant decrease in the levels of depression among experimental group at P 0.01 level. There was a significant increase in the mindful attention awareness at P 0.01. There was a significant difference between post-test score of experimental and control group on depression and mindful attention awareness. There was significant association between selected demographic variables with the level of depression and Mindful attention awareness. Mindfulness Based Stress Reduction technique was found to be effective in reducing the level of depression and in increasing the level of Mindful Attention Awareness among in-patients with cancer.

Keywords: Effectiveness, cancer, Mindfulness Based Stress Reduction, Depression, Mindful attention awareness

INTRODUCTION

Cancer is eccentricity of a cell that slowly and eventually spread resulting in the death of a person. Though an opportunist initially, cancer ends as a fighter who has conquered the whole kingdom defeating all its opponents. For today's man cancer has become a life time achievement award for his unhealthy life style and habits. Now cancer is the second most common cause of death in the world. Sadness and grief are normal responses to painful life events associated with threatened or actual loss. They are to be expected in instances of life threatening illnesses, especially cancer. Depressed terminally ill

patients have reported feelings of "being a burden" even when the actual amount of dependence on others is small. The study of depression has been a challenge in cancer patients because symptoms occur on a broad spectrum that ranges from sadness to major affective disorder.

Depression can be triggered by a variety of difficult events, including a cancer diagnosis or having treatment for cancer. The relationship between cancer and depression is complex. Depression is said to be the least noticed symptom in people with cancer. Yet it can be one of the hardest for the patient and their family to cope with. Overall depression affects

at least 15-25% of people with cancer. Depression complicates the course of cancer and its treatment. Depression also complicates patient's efforts to cope with the illness and adhere to medical treatment. A number of studies have documented a substantial prevalence of depression and depressive symptoms along cancer patients. Cancer patients experience several stressors and emotional upheavals. The cost and prevalence, the impairment caused, and the diagnostic and therapeutic uncertainty surrounding depressive symptoms among cancer patients make these conditions a priority for research. For people who have experienced depression in the past, these moments of occurrence of lowered mood are moments of heightened vulnerability to depressive relapse.¹

Complementary and alternative therapies (CAM) are health treatment that is not classified as standard Western medical practice. CAM encompasses a variety of approaches. Alternative treatments used in depression associated with cancer include psychological therapies such as counselling and cognitive therapy, mind body techniques plus complementary therapies such as herbal supplements and aromatherapy. The most popular among them is Mind body techniques. These are based on the belief that your mind is able to affect your body. Mindfulness Based Stress Reduction Technique is one among them.

Mindfulness is a core psychological process that can alter how we respond to the unavoidable difficulties in life—not only to everyday existential challenges, but also to severe psychological problems such as suicidal ideation, chronic depression, and psychotic delusions. Mindfulness has been described as a process of bringing a certain quality of attention to moment-by-moment experience. Mindfulness was developed using various meditation techniques that originated from Buddhist spiritual practices. Mindfulness in contemporary psychology has been adopted as an approach for increasing awareness and responding skilfully to mental processes that contribute to emotional distress and maladaptive behaviour. Much of the interest in the clinical applications of mindfulness has been sparked by the introduction of Mindfulness-Based Stress Reduction (MBSR), a treatment program originally developed by Dr. Jon Kabat-Zinn for management of chronic

pain²

Mindfulness practice is ideal for cultivating greater awareness of the unity of mind and body, as well as of the ways the unconscious thoughts, feelings and behaviours can undetermined emotional, physical and spiritual health. It is simply being aware of what is going on, as it is arising, attending deeply and directly with it and relating to it with acceptance: a powerful act of participatory observation. The practice of mindfulness and the other curriculum elements of the MBSR programme have four broad learning intentions in relation to depressive relapse-inducing processes. Participants are learning to develop the potential to: step out of ruminative thinking patterns, recognise and be more aware of potential relapse-related Mind-body processes, access new ways to relate to both depression-related and other aspects of experience and to turn towards, befriend and engage with both difficult and other aspects of experience. Various studies projected the effectiveness of Mindfulness Based Stress Reduction on the level of depression and mindful attention awareness.^{3,4,5,6,7,8}

Most of the stressors of cancer patients cannot be changed. Cancer is still a shocking diagnosis to the common man. Fear associated with anticipation and stress slowly drags the person into deep whirlpool of depression. But despite of all these, there is still a weapon that every human being can fight with, the so powerful, creative and intense human mind. Acceptance is big tool to achieve much bigger things. Mindfulness helps to unlearn the habitual ways of reacting and helps the patients to be aware of and accept those stressors. This in turn will help patients with cancer to cope with the multiple stressors and prevent relapse of depression.

MATERIALS & METHODS

An evaluative research approach was used for the present study to accomplish the objective of determining the effectiveness of Mindfulness Based Stress Reduction technique on the level of depression and Mindful Attention Awareness among in-patients with cancer. The research design used for the study was a Quasi Experimental with pre test post test control group design. The sample of present study comprises of 60 cancer in-patients with 30 each in control and experimental group using purposive sampling. The

tool was prepared under three sections. Section I contained the Semi structured self administered questionnaire for Demographic proforma and clinical profile of the patients. Section II contained Beck Depression Inventory .The Beck Depression Inventory is standardised self administered tool which assess the level of depression. The total Score in Becks depression Inventory is 63. Section III contained Mindful Attention Awareness Scale. The original Mindful Attention Awareness Scale was developed by Brown and Ryan, 2003 consists of 15 items. Scoring is done by computing the mean of 15 items. A structured lesson plan for in-patients with cancer was developed to train them in Mindfulness Based Stress Reduction Technique. The main study was conducted after taking formal permission from the head of oncology department and after the approval of research committee of college. The samples were selected on the basis of inclusion and exclusion criteria. The patients were divided in to 6 groups with 5 patients in each group for the purpose of data collection. The pre-test was conducted. The experimental group received MBSR for a period of 7 days. Data was analysed on the basis of objectives and hypothesis using descriptive and inferential statistics. Demographic data were analyzed using frequencies and percentage, mean and standard deviation. Paired t test was used to find significant difference between pre test and post test scores of the depression and mindful attention awareness score of experimental and control group. Independent t test was used to find the significant difference between post test scores of experimental and control group. Chi square test was used to find the association between the depression, mindful attention awareness and selected demographic variables.

RESULTS

a) Demographic profile of in-patients with cancer

In experimental group and control group majority of patients were in the productive period of their life .There was approximately equal number of male and female in both experimental and control group. Majority of them 90 % were married. The occupational status revealed that more than a third of them work in private institutions. Most of them belonged to nuclear family.

b) Clinical profile of in-patients with cancer

In experimental group, 43.4 % was suffering from cancer of Head and Neck while in control group one third of in-patients were diagnosed as cancer of head and neck. In experimental and control group, more than half of the in-patients with cancer, the duration of illness was between 1-6 months and hospitalized for 1 week to 2 weeks. Based on the stages of cancer 43.3 % of the patients were in the first stage of cancer. Regarding the modality of treatment, 30 % of the patients were treated through chemotherapy and the duration of treatment was between 1-3 months for 53.4% of patients.

c) Level of depression of in-patients with cancer during pre-test and post-test in experimental and control group using becks depression inventory.

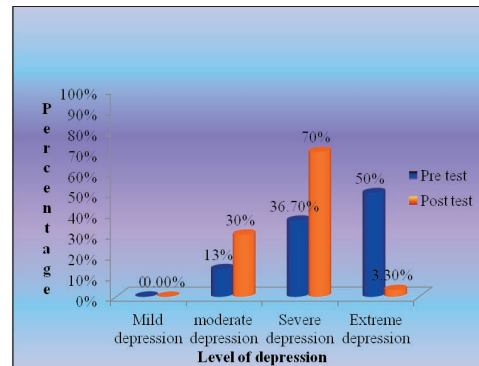


Figure 1: Cylindrical diagram showing distribution of pre test and post test depression scores of experimental group

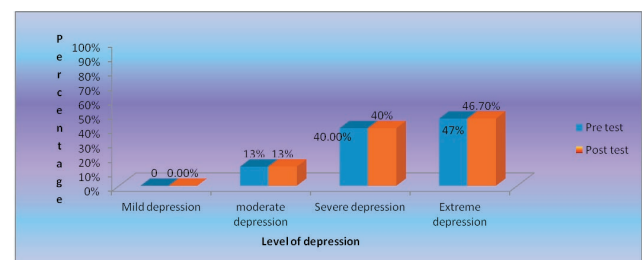


Figure 2: Bar diagram showing distribution of pre test and post test depression scores of control group

d) Level of mindful attention awareness of in-patients with cancer during their pre-test and post-test using mindful attention awareness scale.

Table 1: Frequencies and percentages of level of Mindful attention awareness of in-patients in Experimental and Control group during their pre- test and post test using Mindful Attention Awareness Scale.
N=60

S.I No	Level of Mindful Attention (Mean Score)-	Experimental Group (N=30)				Control Group (N=30)			
		Pre-test		Post Test		Pre- Test		Post- Test	
		Frequency	%	Frequency	%	Frequency	%	Frequency	%
1	Poor (<3)	22	74	0	0.0	23	77	23	77
2	Moderate (3.1 to 4.5)	8	27	20	67	7	23	7	23
3	High (above 4.5)	0	0	10	34	0	0	0	0.0
	TOTAL	30	100	30	100	30	100	30	100

e) Effectiveness of mindfulness based stress reduction technique

Effectiveness of mindfulness based stress reduction technique on the level of depression and comparison between experimental and control group

Table 2: Mean, Standard deviation, and t test value of the pre test and post test depression score of Experimental and Control group.
N=60

Group	Test	Mean	SD	t value df= 29	P value
Experimental group (n=30)	Pre test	39.50	5.2	9.0307*	<0.01
	Post test	33.63	3.7		
Control group(n=30)	Pre test	38.83	7.6	1.83 N.S	>0.05
	Post test	38.73	7.8		

*Significant at 0.01 level

NS: Non significant

Effectiveness of mindfulness based stress reduction technique on mindful attention and comparison between experimental and control group

Table 3: Mean, Standard deviation, and t test value of the pre test and post test mindful attention awareness score of Experimental and Control group.
(N=60)

Group	Test	Mean	SD	t value df= 29	P value
Experimental group (n=30)	Pre test	3.967	0.98	12.88*	<0.01
	Post test	2.567	0.54		
Control group(n=30)	Pre test	2.21	0.6	1.56 N.S	>0.05
	Post test	2.22	0.61		

*Significant at 0.01 level

NS: Non significant

During the pre test, the mean was 3.967 with a S.D of 0.98 in the experimental group and in the post test, mean was 2.567 with an SD of 0.54 The t value $t_{29}=12.88$ which was highly significant at $P\leq 0.01$. This shows

that MBSR was effective in increasing the mindful attention awareness of the in patients with cancer in the experimental group.

In control group, during the pre test, the mean value is 2.21 with an SD of 0.62 and post test with a mean of 2.22 and SD of 0.61. The t value $t_{29}=1.56$ which was not significant.

DISCUSSION

It was found that there was a reduction in the level of depression between the pre test (39.50) and post test (33.63) in the experimental group. The mean difference was found to be statistically significant with $t_{(29)}=9.0307$, $P<0.01$), where as the control group the $t_{(29)}=1.83$ was not significant. Similar study findings are reported in earlier studies. MBSR was effective in reducing depression among heterogeneous oncology patients⁹, among hematopoietic stem cell therapy patient¹⁰, cancer out- patients, significant improvement in mood state of breast cancer patients¹¹, reduction in depression of Japanese cancer patients¹², and another study also reported a total reduction in mood disturbance after Mindfulness based stress reduction.¹³

In the present study, it was found that there is significant increase in the level of mindful attention awareness between the pre test (3.96) and post test (2.56) assessment($t=12.88$), $P<0.05$ using Mindful Attention Awareness Scale in the experimental group. In the control group, the t value $t_{(29)}=1.56$ was not significant. Similar findings are reported in earlier studies. MBSR was effective in increasing mindful attention awareness among Canadian cancer patients¹⁴, breast cancer patients¹⁵, and patients with chronic illness¹⁶

An association between the level of depression and selected demographic variables and clinical variables showed a significant association between gender, marital status, type of family, family history of cancer, duration of illness and level of depression in experimental group. In control group, there was a significant association between the age, gender, type of family, duration of hospitalization and level of depression.

An association between the level of mindful attention awareness and selected demographic and

clinical variables showed that there is significant association between age, gender, type of family, duration of illness and duration of hospitalization. In the control group there was significant association between type of family, performance of daily living, and mindful attention awareness scores. .

Ethical Clearance- Vydehi Institute of Nursing Sciences and Research Centre Ethical Committee clearance has been obtained prior to the study.

Acknowledgment- Mr Mustafa Kirmani, Clinical Psychologist, Vydehi Institute of Medical Sciences and Research Centre.

Conflict of Interest- Nil

Source of Funding- Self

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Husain-usmani Principle of Shared Insanity: the First and the Last Dot Connect, What About the Middle One?

Discussion on Forensic Issue

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ABSTRACT

Forensic psychiatry is a sub-discipline of psychiatry which is still ridden with intrigue, shadow boxing and uncertainties. Ironically, the insanity of the accused has to be defended by sanity in the court of law. Most of the time we do not have the depth of conviction about what and whom the forensic psychiatrist is defending in the court. More issues are being cropped up rapidly as this discipline is in the phase of transformation and re-modeling. One such issue is that of “shared insanity”. Since this is an under diagnosed and under explored area not much is to offer at this stage. However, the authors took upon them to look in to certain aspects of forensic issue attached to this illness as corollary. These are extrapolated below.

Keywords: *shared insanity, partnership insanity, Husain-Usmani Principle, delusion, schizophrenia, Folie a deux*

INTRODUCTION

Husain-Usmani Principle of Shared Insanity

Shared insanity is a misnomer. Common feature is that two persons in close relationship, in isolation, share delusional ideas based on the same theme. If a primary insane has a delusional effect, that same effect is felt by the induced person; ¹ say an individual has seen a ghost as complete manifestation, the induced one shall also have the same effect. The ghost image is not divided into two – the upper and lower torso – each one to have the divided effect. Sharing is proportionality, whereas partnership could be different. A partner would be amenable to have the complete profiling effect of the ‘ghost’ and not ‘torso-wise’.

Partnership is partaking equal proportion of grief

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or joy. The entity is indivisible.

Sharing is having a divided portion. A loaf of bread is shared by two people equally. This means that the loaf was divided into two portions and each partner took one for himself or herself.

Hence the authors suggest that the terminology of “shared insanity” may be substituted by “partnership insanity”. The next reason for proposing this essential change is that the concept is still not fully understood. All the more the condition remains under diagnosed. Befittingly, if proper words are not aligned, it may lead to wrong conceptualization in the academics. The core issue may fritter away. The literature is patchy and non-illustrative in this aspect.

However, in partnership insanity, the primary insane shall demonstrate all the features of delusions, schizophrenia or paranoia ². The rubbing effect on the induced partner shall be faded one or just patchy. What is important is to realize that the initiative is always taken by the primary partner. He/she gets the support from the induced partner – the prompter ³.

Epidemiology is still unclear.

FORENSIC ISSUE

Characteristically, there are some important forensic issues that must be studied before fixing culpability or non culpability of the accused laboring under the disease known as “shared insanity”. There are certain established clinical features, and the authors believe that these must be individually examined before rendering proof of the disease.

1. Frequent mother daughter association and diagnosis of schizophrenia in inducing subject.
2. Social and psychological conditions.
3. Personality traits and genetic influence.
4. Forensic issues.
5. Principles of treatment sparse
6. Very imp: separation of two subject, i.e., primary and induced has to be the basis of any medical intervention
7. Forensic perspective
8. Medico legal introspection of the problem
9. Valuable determinants:
 - a. Conflict of interest
 - b. Decimation of personality
 - c. Malingered shared insanity
 - d. What about common intention
 - e. Mass household complicity
 - f. Forfeiture of mind and confiscation of reasoning
 - g. Rubbed insanity
 - h. Denial of civil rights (marriage) by the society and absolving criminal responsibility attributed to certified insane individuals

These issues throw multiple challenges in civil and criminal domains.

Under section 84 of Indian Penal Code (u/s 84 IPC) : “Nothing is an offence which is done by a person, who at the time of doing it by reason of unsoundness of mind he is incapable of knowing the nature of the act or that he is doing what is either wrong or contrary to the law.” For legal appetite

transient insanity is also included under this section and the law takes care of that phenomenon.

THE PILLION-RIDER SYNDROME

Shared insanity is a remarkable feature which perhaps does not find an analogy relating to legal issues in the entire domain of forensic psychiatry.

Let a profile be created which may facilitate forensic assessment and evaluation of given case in the field of shared insanity.

Let there be a new description of shared insanity by using four words that would be descriptive of this condition and would make the forensic assessment easier namely, induction, indoctrination, infatuation and insinuation.

PROPOSED DEFINITION OF SHARED INSANITY

A primary insane **inducts** a partner who may be a close relative, subsequently leading to **indoctrination** of secondary insane by her actions and behavior leading her to a level of **infatuation** about everything of the primary insane culminating in **insinuation** and criminal conduct.

EXAMPLE

‘A’ is a known case of fixed delusional paranoia. She has an older sister ‘B’, very attached and sympathetic to her. They live in isolation secluded from neighbors and most of the time partake each other’s joys and sorrows. ‘B’ has some demonstrable insanity and guides ‘A’ to the best of the mixture of sanity and insanity. However, to an outside observer ‘B’ is an insane woman who can be diagnosed as suffering from inducted shared insanity. ‘A’ is the driver of the two-wheeler where as ‘B’ is the pillion-rider. ‘A’ commits a cognizable offence under the influence of her delusional belief which was re-enforced by her sister ‘B’ – a rock stabilizer. The forensic assessment of the case comes to the conclusion that ‘B’ is guilty more than ‘A’, and that had ‘B’ not provided matured emotional support to ‘A’ she would have abstained from the crime. In practicality they go in to a feedback loop. The poser is: who is more culpable than the other, the driver or the pillion-rider. Obviously the pillion-rider is.

The “**pillion-rider syndrome**” gives an insight in to the psychiatric evaluation of the mental status of either party in shared insanity and can form the basis for demarcating the quantum of responsibility and its violation.

Finally, ethical guidelines and practices must be adhered to while pursuing the case of shared insanity and its criminal evaluation ⁴.

Acknowledgement- We are grateful for the help and cooperation received from colleagues and friends.

Ethical Clearance- Not required

Source of Funding: Not required

Conflict of Interest: Nothing to mention

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Job Stress and Coping among Nurses Working at Different Health Care Settings

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ABSTRACT

Background: Nurses are the back bone of any health establishment. Working in the profession of Nursing is a demanding and often stressful occupation, which can have important consequences on the health and wellbeing of nurses. Coping strategies are key elements of nurses' stress reactions. Coping strategies as a stabilizing factor may be as important as the stressful event itself.

Methods: A comparative and descriptive survey design was adopted. Using non probability convenience sampling 120 nurses (60 from corporate and 60 from government hospital) were selected those who met the sampling criteria. Instruments used for collecting the data consisted of Proforma for selected personal variables, Modified Expanded Nurses Stress scale, Modified Deakin Coping scale.

Results: The results showed that nurses from both corporate and government hospitals were experiencing mild level of stress and they were using moderate level of coping. There is a significant difference in mean job stress scores of nurses working in government and corporate hospital but there is no significant difference in coping. Also it revealed that there is a relationship between job stress and coping.

Conclusion: The study concluded that majority of the nurses working in both corporate and government hospitals were experiencing mild level of stress and they were using moderate level of coping.

Keywords: Job stress; coping; nurses; corporate hospital; government hospital.

INTRODUCTION

Nursing is generally recognized as a high stress occupation due to the nature of work. National institute for occupational safety and health (1995) defined nursing as among 40 occupations with higher than expected incidence of stress related disorders. Nursing has always been a stressful occupation due to its high emotional and physical demands. In recent years nursing's increased complexity, responsibility and health care demands have escalated the level of stress experienced in the profession. In a survey conducted by the American Nursing Association over 70% of nurses surveyed listed chronic or acute

effects of stress and overwork among their top three concern¹.

Hospitals are stressful places of employment due to the increased complexity and demands of most job descriptions, the unpredictable changes in one's daily routine, unrealistic expectations from the patients and their families and common encounters with ethical end of life issues. Of all the various type of hospital employees nurses are often exposed to many of these stressors and may be predisposed to develop work related psychological problems. Stress in nurses is an endemic problem².

Stress is an important psychological concept that can affect health, wellbeing and job performance in negative dimensions,. Stress may be acute or chronic in nature. It exists in different forms. It may be

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psychological, emotional, social, occupation or job related. Stress experienced by workers at work is called job stress. It may be due to a number of factors such as poor working condition, excessive work load, shift work, long hours of work, role ambiguity, role conflicts, poor relationships with the boss, colleagues or subordinate officers, risk and danger³.

Coping refers to a phenomenon that an individual alters their personal perception and behavior in response to conflict raised from the environment the individual exchange with. Most people can cope with stress for short periods but chronic stress produces prolonged changes in the physiological state. Effectiveness of coping behaviors depends on the situation in which they are used. Some coping behaviors may work well for some situations but not for others. In general terms, coping are a strategy that helps people reduce stress and solve problems. People differ in the coping strategies that they adopt for dealing with stressful incidents⁴.

A descriptive survey conducted to determine the most common work place stressor, the most frequently used ways of coping with stress, predictors of mental and physical health among nurses revealed that the work place stressors most frequently identified were workload and dealing with death and dying. Ways of coping most frequently used are positive reappraisal, self-control and planful problem solving. The best predictors of physical health were psychological hardiness, conflict with other nurses, uncertainty about patient treatment, seeking social support and confrontive coping. The best predictors of mental health were psychological hardiness, conflict with other nurses, workload, seeking social support, age, likelihood to leave nursing with the next 12 months and escape avoidance coping⁵.

OBJECTIVES

1. To assess the job stress among nurses working in government and corporate hospitals.
2. To assess the coping among nurses working in government and corporate hospitals
3. To compare the job stress and coping of nurses working in government and corporate hospitals.
4. To find the association of levels of job stress and coping of nurses working in government & corporate hospitals with their selected personal variables.

METHODOLOGY

Comparative and descriptive survey design was adopted for the study. The study was conducted in KRS government hospital and Vikram hospital, Mysore. Convenience sampling technique was used to obtain a sample of 120 nurses that is 60 nurses from government and 60 nurses from corporate hospitals of Mysore. Data were collected by using Modified Expanded Nurses Stress scale and Modified Deakin Coping scale. Modified Expanded Nurses Stress Scale was developed by Grey-Toft, which is a 5 point scale consisted of 34 items. Modified tool contains 30 items and each contains four alternative responses. They are never stressful, occasionally stressful, frequently stressful and extremely stressful. All are positive items and scored as 1, 2, 3, and 4 respectively. The maximum score is 120 and the minimum score is 30. The scores are arbitrarily divided into mild stress (30-60) moderate stress (61-90) and severe stress (91-120). Deakin Coping Scale is a 5 point scale consisted of 19 items. Modified tool contains 16 items and each contains five alternative responses. They are never, rarely, sometimes, often, and always. All are positive statements and are scored as 1, 2, 3, 4 and 5. The maximum score is 80 and the minimum score is 16. The scores are further divided arbitrary as low coping (16-37), moderate coping (38-58) and high coping (59-80). Validity and reliability of the tool were assessed.

FINDINGS

Table 1: Frequency and percentage distribution of nurses working in corporate and government hospitals according to their selected personal variables (n=120)

Si.no	Sample characteristics	Nurses of corporate hospital n=60		Nurses of government hospital n=60		Total n= 60+60 = 120	
		f	%	F	%	f	%
1	Age in years						
	a) 20-30	50	83.3	4	6.7	54	45
	b) 31-40	10	16.7	20	33.3	30	25
	c) 41-50	-	-	31	51.7	31	25.8
	d) 51 -60	-	-	5	8.3	5	4.2
2	Sex						
	a) Male	10	16.7	5	8.3	5	4.2
	b) Female	50	83.3	55	91.7	115	95.8
3	Marital status						
	a) Married	29	48.3	58	96.7	87	72.5
	b) Single	31	51.7	2	3.3	33	27.5
4	Type of family						
	a) Nuclear	48	80	48	80	96	80
	b) Joint	12	20	12	20	24	20
5	Educational qualification						
	a) Diploma in Nursing	56	93.3	55	91.7	111	92.5
	b) PBBSc in Nursing	2	3.3	5	8.3	7	5.8
	c) Basic BSc in Nursing	-	3.3	-	-	2	1.7
6	Years of experience						
	a) <2 years	23	38.3	2	3.3	25	20.8
	b) 2-5 years	22	36.7	9	15	31	25.8
	c) >5-10 years	12	20	9	15	21	17.5
	d) Above 10 years	3	5	40	66.7	43	35.8
7	Monthly income in rupees						
	a) 3000-8000	44	73.3	3	5	47	39.2
	b) 8001-13000	13	21.7	8	13.3	21	17.5
	c) 13001-18000	3	5	22	36.7	25	20.8
	d) 18001& above	-	-	27	45	27	22.5

Table 1 shows that shows that majorities (83.3%) of the nurses from the corporate hospital were in the age group of 20-30 years and in government hospital majority (51.7%) were belong to 41-50 years of age. Majority of nurses from both government and corporate hospitals were females. Findings showed that in corporate hospital 51.7% were married and 48.3% were single. In government

hospital majority (96.7%) were married. Findings revealed that majority of nurses (80%) from both hospital were belongs to nuclear family. In relation to Educational qualification majority (92.5%) of nurses from corporate and government hospital were having Diploma in Nursing. The present study identified that in corporate hospital majority of nurses 45 (75%) were having 5 years of experience, where as in

government hospital majority 40(66.7) of them were having above 10 years of experience. Among the nurses working in corporate hospital majority (73.3%) were getting salary of 3000-8000 rupees and in government hospital majority (45%) of the nurses were getting is 18001 rupees and above.

Table 2: Mean, standard deviation, median, range of job stress scores of nurses working in government and corporate hospitals n=120

Group	Nurses of Corporate hospital				Nurses of Government hospital			
Variable	Mean	SD	Median	Range	Mean	SD	Median	Range
Job stress	61.32	±3.365	60	33-95	71.07	±2.98	71	30-100

The data presented in Table 2 shows the mean job stress score is 61.32 with standard deviation ±3.365 for corporate hospital nurses and 71.07 with standard deviation ±2.98 for government hospital nurses.

Table 3: Frequency and percentage distribution of nurses working in corporate and government hospitals according to their level of job stress. n=120

Level of job stress	Nurses of Corporate hospital		Nurses of Government hospital	
	f	%	f	%
Mild stress	31	51.7	13	21.7
Moderate stress	26	43.3	45	75
Severe stress	3	5	2	3.3

Table 3 shows that 51.7% of corporate hospital nurses were having mild job stress, 43.3% of them having moderate level of job stress. In government hospital, majority (75%) of them were having moderate job stress, another 21.7% of them were having mild job stress and only 3.3% having severe job stress.

Comparison of mean job stress scores of nurses working in corporate and government hospitals

Table 4: Mean, mean difference, SD difference, SEMD, and independent “t” test for job stress scores of nurses working in corporate and government hospital. n=120

Group	Mean	Mean difference	SD difference	SEMD	Independent ‘t’ test
Nurses of Corporate hospital	61.32	9.75	±0.385	2.021	3.421
Nurses of Government hospital	71.07				

$$t'_{(118)} = 1.96 \text{ } p < 0.05$$

The data presented in the Table 4 shows that the mean difference between job stress scores of corporate hospital and government hospital nurses is 9.75. To find the significance of difference in mean job stress scores, an independent ‘t’ test was computed and obtained value of independent $t'_{(118)} = 3.421 \text{ } p < 0.05$ is found to be significant.

Table 5: Mean, SD, median, and range of coping scores among nurses working in corporate and government hospitals n=120

Group	Nurses of Corporate hospital				Nurses of Government hospital			
Variable	Mean	SD	Median	Range	Mean	SD	Median	Range
Coping	46.10	±6.84	46	16-80	45.95	±1.92	45	28-60

The data presented in Table 5 shows that the mean coping score is 46.10 with standard deviation ± 6.84 in corporate hospital nurses and 45.95 with standard deviation ± 1.92 in government hospital nurses.

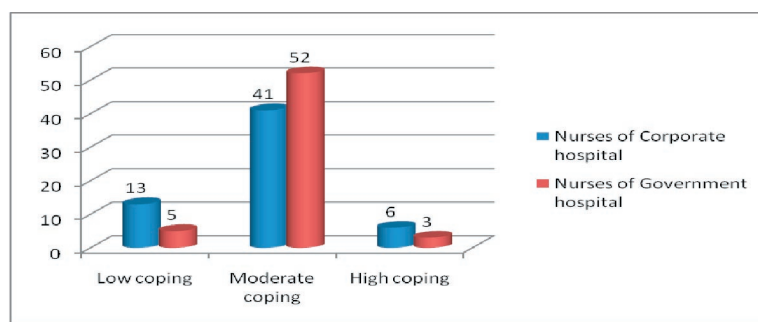


Figure 1: Frequency distribution of nurses working in corporate and government hospitals according to their level of coping score.

Comparison of mean coping scores of nurses working in corporate and government hospital.

Table 6: Mean, mean difference, SD, SD difference, SEMD and independent 't' test for coping scores of nurses working in corporate and government hospitals. n=120

Group	Mean	Mean difference	SD difference	SEMD	Independent 't' test
Nurses of Corporate hospital	46.10	0.150	± 4.923	1.76	0.085
Nurses of Government hospital	45.95				

$$t'_{(118)} = 1.98$$

The data presented in the Table 6 shows that the mean difference between coping scores of corporate hospital and government hospital nurses is 0.150. To find the significance of difference in mean coping scores, an independent 't' test was computed and obtained value of independent $t'_{(118)} = 0.085$ is found to be not significant.

Association of levels of job stress and coping of nurses working in corporate and government hospitals with the selected personal variables

The findings revealed that there was no significant association found at 0.05 level for coping of nurses working in corporate hospital with their selected personal variables, but job stress has significant association only for marital status. With regard to government hospital nurses there was no significant association between job stress and coping with their selected personal variables.

CONCLUSION

Working in the profession of nursing is a demanding and often stressful occupation. Health care institutions are different in size and nature, and nurses are confronted with different work tasks, working hours and working conditions. In addition to nursing itself, organizational and management characteristics influences the stress nurses experience at work. Most people can cope with stress for short periods but chronic stress produces prolonged changes in the physiological state.

Acknowledgement: We express our gratitude to the study participants, and authorities who gave permission to conduct the study.

Ethical Clearance: Ethical clearance was obtained from institutional ethical committee (JSS college of Nursing, Mysore).

Conflict of interest: Nil

Source of Funding: Nil

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The Relationship between Demographic Variables and Caregiver Burden among Caregivers of Stroke Patients Attending a Tertiary Care Hospital, South India

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ABSTRACT

Aim: The study was aimed to assess the relationship between demographic variables and caregiver burden among caregivers of stroke patients.

Methods and materials: A cross-sectional descriptive study was conducted among 84 care givers of stroke patients as per inclusion criteria. Study subjects were recruited by convenience sampling. Socio demographic and clinical data of stroke patients and their caregivers' demographic variables were collected through the records and by face to face interview. Severity of the disability of stroke patients was assessed by Barthel Index and Modified Rankin Scale. Caregiver burden scale was used to assess the burden of the caregiver.

Results: There was a significant relationship between caregiver burden score and caregivers' gender, employment status, marital status and relationship with the patient. Female gender, unemployment, spouses of the caregivers, and caregivers who were married was found to have increased burden of care.

Keywords: Patients with stroke, caregivers, burden of care.

INTRODUCTION

Stroke is a major public health concern globally. Stroke is the third leading cause of death and most common disabling disease. In India, the prevalence rate of stroke is much higher in urban areas (334-424/lakh) than in the rural area (84-262/lakh).¹ Nearly, 20% of stroke survivors need long term care. Caregivers are the backbone of care provided to stroke patients². A caregiver has to do a number of services including feeding, dressing, personal hygiene, positioning, giving medicines and providing emotional support. But, the co-morbidities and lifestyle changes associated with stroke can put substantial burden on survivors of stroke and their caregivers which ultimately affect the health related quality of life of both³. Often, care giving is a burden to the stroke caregivers in terms of heavy responsibility, uncertain

care needs, constant worries and restraints in the social life.

MATERIALS & METHODS

A cross-sectional descriptive study was carried out among 84 caregivers of stroke patients who attended stroke clinic, JIPMER (Jawaharlal Institute of Post Graduate Medical Education and Research) hospital, Puducherry, India. Caregivers who were staying with the patient as family members, aged more than 18 years, both sex and who were directly involved in patient care were selected as samples by convenience sampling method. Socio demographic and clinical data of patients and their caregivers' socio-demographic variables were collected through review of records and interview. Informed written consent was obtained from the subjects after

explaining the study. Subjects were assured of confidentiality. Ethical clearance for the study was obtained from Institute Ethics (Human) committee, JIPMER.

Barthel index was used to assess the activities of daily living of stroke patients who were affected with stroke for more than six months. It consisted of ten variables describing activities of daily living such as feeding, bathing, grooming, dressing, bowels, bladder, toilet use, transfer (from bed to chair and vice versa), mobility (on level surfaces) and stairs. The score ranges from 0-100 and a higher score indicate independence in activities of daily living.

The Modified Rankin Scale (MRS) was also used to assess the degree of disability in stroke patients. The MRS describes varying levels of disability ranging from no symptoms at all, no significant disability despite symptoms, slight disability, moderate disability, moderately severe disability and severe disability, to dead or maximum disability. The lowest score is zero indicating no symptom at all, and the highest score is six indicating dead.

For assessing the burden of the caregivers, Caregiver burden scale (Elmstahl, 1996)⁶ was used. This scale consists of twenty one questions with five different domains such as general strain, isolation, disappointment, emotional involvement and environment. A score of 0-20 indicates little or no burden, 21-40 indicates mild to moderate burden, 41- 60 indicates moderate to severe burden and 61-84 indicates severe burden.

RESULTS

The statistical analysis was carried out using both descriptive and inferential statistics. Frequency and percentage were used to analyze the distribution of patients and caregivers' socio-demographic variables. Kruskal Wallis test and Mann Whitney U test was used to assess the association between the caregiver burden score and socio-demographic variables based on the number of groups involved. All statistical analysis was carried out at 5% level of significance and P value <0.05 was considered as statistically significant.

The results of the study suggested that the mean age of the patients with stroke was 54 years and the

mean age of stroke onset was found to be 52 years. The mean stroke duration was two years. Barthel index mean score was found to be 60.18 which indicates severe dependency and the mean score of modified rankin scale was found to be 2.71 which indicates moderate disability. Regarding the caregivers, the mean age was 40 years and ranged from 20 to 65 years. There was a significant relationship between caregiver burden score and caregiver gender, employment status, marital status and relationship with the patient. Female gender, unemployment, caregivers who are married and spouses of the caregivers were found to be having increased burden of care.

Distribution of patients based on demographic variables is presented in table 1. The results showed that majority (70.2%) of the patients were males, 98.8% of them were married and 93% of the patients had no family history of stroke. Further, the caregivers' demographic variables are presented in table 2. 58.3% of caregivers were females, 82% of them were married, 58.2% were spouses and 63% of caregivers belonged to the nuclear family.

Further, the relationship between caregiver burden and socio demographic variables of caregivers is presented in table 3. The caregiver burden score was found to be higher in females (50.93) when compared to the males (30.7) and it was statistically significant at $p < 0.01$ level. Similar findings were reported by Bhattacharjee et al⁴. and Choi- Kwon et al⁵. The subjects who were unemployed experienced more burden as revealed by the mean burden score of 50.48 and it was also found to be statistically significant at $p < 0.01$ level. Further, the results of the study indicated the married caregivers as well as spouses as caregivers reported more burden and it was statistically significant at $p < 0.05$ level. No significant association was found with other variables such as educational level and the presence of medical illness in the caregivers. Even though, the burden score was found to be higher (43.4) in the caregivers who belonged to the nuclear family, it was not statistically significant when compared to the joint (42.6) and extended family (38.2).

Table 1: Distribution of patients based on demographic variables (n=84)

Variables	Category	Frequency	Percentage (%)
Gender	Male	59	70.2
	Female	25	29.8
	Illiterate	23	27.4
Education	Primary level (1-5)	24	28.6
	Secondary (6-10)	30	35.7
	Others (11 and above)	7	8.3
Previous Occupation	Skilled job	29	34.5
	Unskilled job	36	42.9
	Unemployed	19	22.6
Marital status	Married	83	98.8
	Never married	1	1.2
Stroke site of brain	Right Side	39	46.4
	Left Side	37	44.0
	Both side	8	9.5
Family history of stroke	Yes	6	7.1
	No	78	92.9

Table 2: Caregiver characteristics of patients with stroke (n=84)

Variable	Category	Frequency	Percentage (%)
Gender	Male	35	41.7
	Female	49	58.3
	Illiterate	16	19.0
Education	Primary level(1-5)	21	25.0
	Secondary 6-10	28	33.3
	others(11 and above)	19	22.6
Employment status	Skilled	19	22.6
	Unskilled	34	40.5
	Unemployed	31	36.9
Marital status	Married	69	82.1
	Never married	14	16.7
	Single (widow)	1	1.2
Relation with the patient	Spouse	43	51.2
	Children	28	33.3
	Parent	2	2.4
	Other	11	13.1
Family type	Nuclear family	53	63.1
	Joint family	19	22.6
	Extended family	12	14.3
Medical illness in caregiver	Yes	18	21.4
	No	66	78.6

Table 3: Relationship between burden score and demographic variables of caregivers.

Variables	Category	n	Mean®	Test value	Degree of freedom	P
Gender	Male	35	30.7	$z = -3.75$		<0.001**
	Female	49	50.93			
Education	Illiterate	16	48.03	$\chi^2 = 7.00$	3	0.07 (N.S)
	Primary	21	51.05			
	Secondary	28	39.77			
	Others	19	32.42			
Employment status	Skilled	19	27.58	$\chi^2 = 10.5$	2	0.005**
	Unskilled	34	43.56			
	Unemployed	31	50.48			
Marital status	Married	69	45.92	$\chi^2 = 7.62$	2	0.022*
	Never married	14	26.96			
	Single	1	24			
Relationship with Patient	Spouse	43	50.90	$\chi^2 = 10.51$	3	0.015**
	Children	28	34.27			
	Parent	2	30.25			
	Others	11	32.86			
Family type	Nuclear	53	43.43	$\chi^2 = 0.45$	2	0.79 (N.S)
	Joint	19	42.61			
	Extensive	12	38.21			
Medical illness	Yes	18	44.44	$z = -0.382$		0.7 (N.S)
	No	66	41.97			

z= Mann Whitney U test

 χ^2 = Kruskal Wallis test

* Significant at p <0.05 level ** significant at p <0.01 level N.S. Not significant

CONCLUSION

The study suggested that moderate to severe burden was experienced by caregivers who were females by gender, unemployed, married person and spouses of the patient. The increased prevalence of stroke as well as the increasing pressures on families to provide care, more research is needed to identify the caregivers who are at risk of developing burnout. Research is also needed to identify services that are effective in strain alleviation.

Acknowledgement: We would like to thank Dr. Sunil K Narayan, Professor and Head, Department of Neurology, JIPMER for his valuable support and all

the care givers who participated in the study.

Sources of Funding: Nil

Conflicts of Interest: Nil

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Impact of Multimedia Approach to an Awareness Program on Knowledge and Attitude Regarding Schizophrenia Among Students of Selected University, Punjab

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ABSTRACT

A pre test-post test experimental study was conducted to assess the impact of multimedia approach to an awareness program on knowledge and attitude regarding Schizophrenia. A sample of 167 students of Chitkara University was selected by simple random sampling technique. A self reported questionnaire on knowledge assessment and Attitude scale regarding Schizophrenia was prepared and validated. There were 40 items in Knowledge questionnaire and 30 items in Attitude scale. The tools were administered to the respondents to measure their baseline pre test knowledge and attitude regarding schizophrenia. After the pre test, the Hollywood movie, 'A beautiful mind' based on the life of Dr John Nash, a schizophrenic and a Nobel Prize winner was shown to the participants. It was followed by an awareness talk on 'Living with Schizophrenia' with the help of PowerPoint presentation and videos. Post test was conducted to measure the impact of information on knowledge empowerment and attitude of respondents. Data was analyzed through descriptive and inferential statistics using SPSS 16.0 version. The findings of the study showed that the baseline knowledge of the participants was surprisingly very poor. Discrimination and stigma was found in their attitude towards schizophrenic patients. The knowledge of the participants improved significantly after sensitizing them through the awareness program given by multimedia approach. Results also suggest there were positive gains in attitude. Thus, in conclusion, multimedia approach can be the effective tool in sensitizing people towards stigmatized mental disorders like schizophrenia.

Keywords: *Multimedia approach, Schizophrenia*

INTRODUCTION

Today's globalizing world is flooded with myriad of media tools, may it be You Tube, Facebook, Twitter, Google, Tumblr, Instagram and the list is endless. Some of these media tools are also used for giving health awareness to general public. But somewhere media is failing in fulfilling these social responsibilities especially in mental health awareness. There are very few examples where media has portrayed a mental illness in its true term. One of such example is Oscar winning movie, 'A Beautiful mind'. It is a 2001 American biographical film based on the real life of Dr John Nash, a Nobel Laureate in Economics who was also suffering from paranoid schizophrenia. The movie leaves an impression that schizophrenic patients are not the subject for mock;

rather they should be empathized and if given support and treatment, they too can lead a normal life. The attitude and approach towards mentally ill patients is often emotion-laden and hence easily influenced by whatever is shown in the media. So the researcher has used multimedia devices to improve knowledge and Attitude regarding schizophrenia

Research Hypothesis:

H1: The mean post test score knowledge score is significantly higher than the pretest knowledge scores of students regarding schizophrenia

H2: The mean post test score attitude score is significantly higher than the pretest attitude scores of students regarding schizophrenia

MATERIALS & METHODS

Research Approach: Quantitative approach

Research Design: One group Pretest- Posttest design

O₁ X O₂

Setting: The study was conducted in Chitkara University, Punjab, India

Population: All students of Chitkara University from various streams (10000 approx)

Sample & Sampling Technique: Cluster sampling (two-stage) was used

1. First Stage: Four educational streams i.e. BJMC, B.TECH (ECE), B.SC. Nursing, B.Sc. Hospitality were selected through simple random sampling by using lottery method.

2. Second stage: Semester/Year of education

Criterion Measure:

Variable	Category	%age	Total Score Range	Score
Knowledge	Adequate Knowledge	Above 75%	0-40	31-40
	Moderate Knowledge	51-75%		21-30
	Inadequate Knowledge	Upto 50%		<20
Attitude	Positive Attitude	67- 100%	30- 150	111-150
	Neutral Attitude	34-66%		71-110
	Negative Attitude	Upto 33%		30-70

Intervention : Awareness Program by using Multimedia Approach

1. Video Instructional Module was shown to the participants by editing the movie, "A Beautiful Mind" based on the life of Dr John Nash, a Nobel Laureate who also was a patient of paranoid schizophrenia. The editing of the movie was done with the help of one of computer science engineering student Mr Deep Sodhi.

2. It was followed by a Powerpoint presentation on schizophrenia, its signs and symptoms, etiology and treatment modalities used.

was selected again by lottery method

Out of four streams, total 167 students participated in the study

Development & Description of the tool:

Section I: Demographic data, includes Age, Stream of Education, Year of study, Gender, Nationality, Religion, Presence of mental illness, Presence of mental illness in the family and Presence of mental illness in the neighborhood / social circle

Section II: Structured Knowledge Questionnaire to assess the knowledge of students regarding Schizophrenia in the form of 40 multiple choice questions. The total score was 40

Section III: Five Point Likert scale was used to measure the attitude of adults regarding the persons living with schizophrenia. There were total 30 statements. 7 out of 30 statements were negative. Reverse scoring was done for those items

3. Open Forum Discussion was done with the participants to discuss various myths regarding the illness

In intervention, power point presentation was included so that the information regarding the disorder which is not covered in the movie can be included. As every individual has their own perception so open forum discussion has helped in clearing any myths and misconceptions

Content Validity & Reliability

Content validity of the tool was done by giving it to 5 experts from the field of mental health nursing

and the reliability of the tool was established by using test-retest method. It was 0.08 for knowledge questionnaire & 0.09 for Attitude scale.

RESULTS

Demographic data

Table 1: Frequency and percentage distribution of subjects according to Age, Education stream, Year of study, Gender, Religion, Nationality, Presence of mental illness, Family history of mental illness

Age Group (in yrs)	Frequency	Percent
15-18	50	29.9
19-21	93	55.7
22-24	24	14.4
Education Program	Frequency	Percent
B.Sc. Hospitality	22	13.2
B.Sc. Nursing	41	24.6
BJMC	33	19.8
B.Tech	71	42.5
Year of study	Frequency	Percent
First year	71	42.5
Second year	89	53.3
Third Year	7	4.2
Gender	Frequency	Percent
Male	79	47.3
Female	88	52.7
Nationality	Frequency	Percent
Indian	162	97
Any other	5	3
Religion	Frequency	Percent
Hindu	130	77.8
Muslim	3	1.8
Sikh	29	17.4
Christian	1	0.6
Any other	4	2.4
Family history of mental illness	Frequency	Percent
Yes	7	4.2
No	160	95.8
Presence of mental illness	Frequency	Percent
Yes	8	4.8
No	159	95.2

Majorities (57.7%) of the participants was in the age group of 19-21 yrs and were engineering students (42.2%). Most of them were studying in first (42.5%) and second year (53.3%) of their program. There were approximately equal number of males and females. Almost all participants were of Indian nationality in which majority of the participants were from Hindu religion (77.8%). Out of 167, only eight participants reported presence of mental illness and seven reported family history of mental illness.

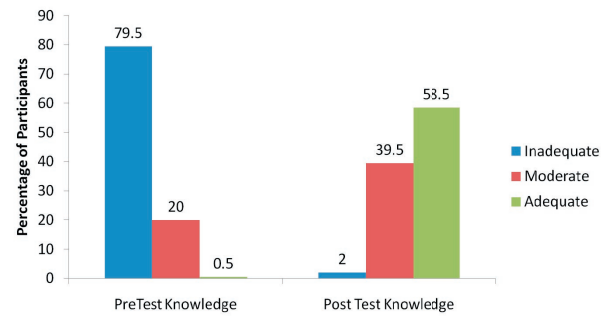


Figure 1. Comparison between Pre test and Post test Knowledge Scores

Figure 1 reveals that majority of the participants (79.5%) were having Inadequate Knowledge in pre-test which significantly dropped to 2% in post test knowledge score. In pre-test, only 20% of the participants were having moderate Knowledge whereas in post-test nearly 40% of the participants showed adequate Knowledge regarding schizophrenia. Only 0.5% of the participants were having Adequate Knowledge regarding schizophrenia before the intervention, which rose to 58.5% after the intervention

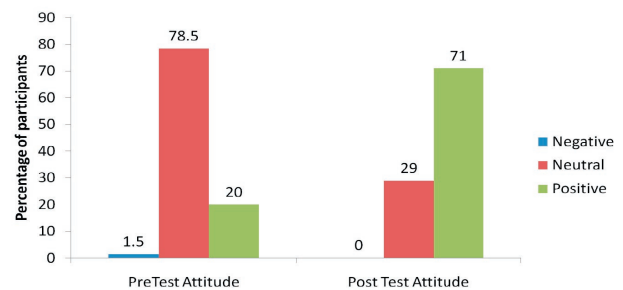


Figure 2. Comparison between Pre test and Post test Attitude Scores

Figure 2 reveals that majority of the participants (78.5%) were having Neutral Attitude before the intervention whereas only 29% were having neutral attitude after the intervention. 20% of the participants were having positive attitude before intervention whereas after the intervention, 71% of the participants developed positive attitude towards schizophrenic patients.

Table 2: The mean, SD, t value and Level of significance of Pre- test and Post test knowledge scores
N=167

Knowledge regarding Schizophrenia	Mean	SD	't' value	Level of Significance
Pre test Score	17.43	6.733	19.382	0.000*
Post test Score	30.17	5.175		

Table 2 depicts that Mean post-test knowledge score (30.17) is higher than Mean pre-test knowledge score (17.43) and the 't' value is highly significant. Thus the multimedia approach was found to improve the knowledge significantly.

Table 3: The mean, SD, t value and Level of significance of Pre- test and Post test Attitude scores
N=167

Attitude regarding Schizophrenia	Mean	SD	't' value	Level of Significance
Pre test Score	15.75	5.324	20.846	0.000*
Post test Score	27.54	5.195		

Table 2 depicts that Mean post-test Attitude score (27.54) is higher than Mean pre-test Attitude score (15.75) and the 't' value is highly significant. Thus the multimedia approach was found to improve the attitude significantly.

By accepting the Research Hypothesis 1 and 2, it can be concluded that the multi-media approach was found to be highly effective in improving knowledge and Attitude regarding schizophrenia among students

DISCUSSION

Researcher has found number of studies showing the impact of movies in increasing social distance, stigma, negative attitude or misconceptions. There were hardly any studies reporting the use of multimedia devices to improve Knowledge and attitude regarding this deadly and lesser known disease.

A study on Effects on Beliefs, Attitudes and Social Distance, examined the impact of the movie "The White Noise" on the audience's beliefs and attitudes towards schizophrenia.

In this movie unlike 'a beautiful mind', negative portrayal of schizophrenic patient was shown. A Survey with pre-post-questionnaire was done to assess the knowledge about schizophrenia, stereotypical attitudes and social distance. After watching the movie, differences between the audience's knowledge about schizophrenia and expert opinion increased. So it indicates negative portrayal reinforce negative stereotypes and increase social distance

A survey of more than 500 people was conducted within Mind's user networks to discover what impact media coverage of mental health issues had on their lives. Almost three quarters of respondents thought that media coverage had been unfair, unbalanced, or very negative. Moreover, half said that this media coverage had had a negative effect on their mental health, with a third feeling more anxious or depressed as a result and 22% feeling more withdrawn.

CONCLUSION

From the findings of the present study, it can be concluded that Media is a tool that can be effectively used to increase knowledge, create favorable attitudes and change overt behavior. If the media can exacerbate stigma in the field of mental illness, it is reasonable to assume that media can be used to reduce stigma as well. When used correctly, multimedia approach can have significant positive impacts on Knowledge and attitudes.

Keeping this in view, the National Mental Health Program of India has attempted to use media publicity to reduce the stigma and encourage treatment seeking. The new Mental Health Care Act also aims to use media to dissipate effectively the various provisions relating to the new law. Media can influence public and shape their minds towards mentally ill patients in better or worse ways..

The mental health awareness programs should use the multimedia approach in bringing out positive outcomes

Acknowledgement: I sincerely thank Mr Deep Sodhi, Student of Computer Science engineering at Chitkara University who helped in editing the movie. I also thank all the participants for giving their consent and valuable time.

Ethical Clearance: Permission was taken from Head of the department of respective streams at Chitkara University. Verbal informed consent was taken from all the participants. Confidentiality was maintained throughout and after the study

Source of Funding: Self

Conflict of Interest- Nil

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A Study to Explore the Perceived Benefits of Alternative Health Care Practices on Mental Illness as Described by Clients Diagnosed with Major Mental Illness and their Caregivers

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ABSTRACT

Qualitative approach was adopted for this study. The design used was phenomenological research design. Findings of the study revealed that the clients and their caregivers had various physical, psychological and social benefits after the use of alternative health care practices.

Keywords: *perceived benefits; alternative health care practices; mental illness; clients; caregivers.*

INTRODUCTION OR BACK GROUND

The use of alternative approaches to mental health care can be substantially helpful to people living with severe mental illness as they cope with fatigue, insomnia, anxiety, and stressors that are often compounded by the serious symptoms and consequences of mental illness.¹

MATERIAL & METHODS

The objectives of the study were to

1. Find the perceived benefits of alternative health care practices on mental illness as described by clients diagnosed with major mental illness.
2. Describe the perceived benefits of alternative health care practices on mental illness as described by caregivers of clients diagnosed with major mental illness.

Research approach-Qualitative research approach.

Research design- phenomenological research design.

Setting of the study- The present study was conducted at Government Ayurveda Research Institute For Mental Diseases, kottakkal and Central Research Institute for Homeopathy, Kurichi.

Population-The populations of this study was the

clients who have been diagnosed with major mental illness according to ICD-10 criteria by a psychiatrist for a period of minimum 6 months and who have undergone any of the alternative health care practices and their caregivers.

Sample and sampling technique-Sample size was determined based on the data saturation. Purposive sampling technique was used.

Inclusion criteria

Inclusion criteria for clients with major mental illness.

- Adult Clients (>20 years) diagnosed with major mental illness for a period of minimum 6 months and who has received any of the alternative health care practices for the mental illness.
- Clients who are present during the time of data collection.
- Clients who are willing to participate.
- Clients who have grade VI insight and have good judgement.
- Clients who can understand Malayalam or English.

Inclusion criteria for caregivers

- Adult caregivers (>20 years) who are primarily responsible for giving care to the client diagnosed with major mental illness and who have been with

the client when the client is taking alternative health care practices.

- Caregivers who are present during the time of data collection.
- Caregivers who are willing to participate.
- Caregivers who can understand Malayalam or English.

Exclusion criteria

- Clients who receive any of the alternative health care practices less than 7 days.
- Caregivers who are taking treatment for mental illness.

Instrument/Tool: Semi structured interview schedule.

Data collection: Semi structured interview was conducted for exploring the perceived benefits of alternative health care practices on mental illness using a recording device.

Plan for Data Analysis:

Demographic data would be analyzed by using frequency and percentage. Interview would be analyzed using thematic analysis.

FINDINGS

Section I: Sample description of Clients who took alternative health care practices.

Table 1: Frequency and percentage distribution of the subjects who took Homeo according to age, gender, religion and diagnosis. N-20

Demographic variable	Frequency	Percentage
Age in years		
20-29	13	65
30-39	03	15
40-49	03	15
50-59	00	00
60-69	01	05
Gender		
Male	15	75
Female	05	25
Religion		
Hindu	08	40
Muslim	06	30
Christian	06	30
Diagnosis		
Schizophrenia	14	70
Depression	01	05
BPAD	05	25

Table 2: Frequency and percentage distribution of the subjects who took Ayurveda according to age, gender, religion and diagnosis.
N-20

Demographic variable	Frequency	Percentage
Age in years		
20-29	10	50
30-39	05	25
40-49	02	10
50-59	03	15
Gender		
Male	17	85
Female	03	15
Religion		
Hindu	09	45
Muslim	04	20
Christian	07	35
Diagnosis		
Schizophrenia	10	50
Depression	02	10
BPAD	08	40

Section II**Table 3: Perceived benefits of alternative health care practices by the clients.**

Theme	Subtheme	Category	Alt.health care practices	Schizo(H=14,A=10)	Dep (H=1,A=2)	BPAD (H=5,A=8)
Physiological benefits	Bodily benefits	Improvement in sleep	Homeo	100	100	100
			Ayurveda	100	100	100
		Improvement in personal hygiene	Homeo	42.8	100	60
			Ayurveda	40	100	75
		Improvement in nutritional intake	Homeo	64.2	100	60
			Ayurveda	50	100	62.5
Psychological benefits		Improvement in psychomotor activity	Homeo	71.4	100	80
			Ayurveda	40	100	50
	Thought benefits	Improvement in delusions	Homeo	71.4	00	40
			Ayurveda	60	00	75

Cont... Table 3: Perceived benefits of alternative health care practices by the clients.

		Improvement in depressive cognition	Homeo	64.2	100	80
			Ayurveda	30	100	62.5
	Perceptual benefits	Improvement in hallucination	Homeo	71.4	00	20
			Ayurveda	70	00	25
	Emotional benefits	Improvement in irritability	Homeo	100	100	100
			Ayurveda	100	50	62.5
		Improvement in aggression	Homeo	100	00	100
			Ayurveda	100	00	100
Social benefits	Improvement in occupation		Homeo	50	100	60
			Ayurveda	90	50	50

*Schizo-Schizophrenia, *Dep-Depression, *BPAD-Bipolar Affective Disorder, *H-Homeo, *A-Ayurveda

Section III. Sample description of caregivers of clients who took Homeo.

Table 4:Frequency and percentage distribution of the caregivers according to age, sex, source of information about Homeopathic treatment, duration of Homeopathic treatment, combination of treatment and time taken to cure the symptoms. N=20

Demographic variable	Frequency	Percentage
Age in years		
20-30	03	15
31-40	06	30
41-50	02	10
51-60	06	30
61-70	03	15
Gender		
Male	10	50
Female	10	50
Source of information about homeopathic treatment		
Relatives	08	40
Friends	12	60
Duration of homeopathic treatment		
<1 year	06	30
1-5 years	09	45
6-10 yeras	06	30

Combination of treatment at present		
Only homeo	10	50
Homeo+Allopathy	09	45
Homeo+Allopathy+Spiritual	01	05
Time taken to cure the symptom	01	05
<1 month		
1-3 month	03	15
4-7 month	07	35
	10	50

Sample description of caregivers of clients who took Ayurveda.

Table 5: Frequency and percentage distribution of the caregivers according to age, sex, source of information about Ayurvedic treatment, duration of Ayurvedic treatment, combination of treatment and time taken to cure the symptoms.
N=20

Demographic variable	Frequency	Percentage
Age in years		
20-30	02	10
31-40	06	30
41-50	08	40
51-60	04	20
Gender		
Male	15	75
Female	05	25
Source of information about Ayurvedic treatment		
Relatives	06	30
Friends	14	70
Duration of Ayurvedic treatment		
<1 year	08	40
1-3 years	10	50
4-6 yeras	02	10
Combination of treatment at present		
Only Ayurveda	08	40
Ayurveda+Allopathy	12	60
Time taken to cure the symptom		
<1 month		
1-5 month	02	10
6-10month	12	60
	06	30

Section IV

Table 6: Perceived benefits of alternative health care practices by the caregivers.

Theme	Subtheme	Category	Alt.health care practices	Schizo (H=14, A=10)	Dep(H=1, A=2)	BPAD(H=5, A=8)
Physiological benefits	Bodily benefits	Improvement in sleep	Homeo	100	100	100
			Ayurveda	100	100	100
		Improvement in personal hygiene	Homeo	64.2	100	60
			Ayurveda	60	100	75
		Improvement in nutritional intake	Homeo	64.2	100	60
			Ayurveda	50	100	62.5
Psychological benefits		Improvement in psychomotor activity	Homeo	71.4	100	80
			Ayurveda	50	100	50
	Thought benefits	Improvement in delusions	Homeo	71.4	00	40
			Ayurveda	60	00	75
		Improvement in depressive cognition	Homeo	64.2	100	80
			Ayurveda	30	100	62.5
	Perceptual benefits	Improvement in hallucination	Homeo	71.4	00	20
			Ayurveda	70	00	25
	Emotional benefits	Improvement in irritability	Homeo	100	100	100
			Ayurveda	100	50	62.5
		Improvement in aggression	Homeo	100	00	100
			Ayurveda	100	00	100
Social benefits	Improvement in occupation		Homeo	50	100	60
			Ayurveda	90	50	50

*Schizo-Schizophrenia, *Dep-Depression, *BPAD-Bipolar Affective Disorder, *H-Homeo, *A-Ayurveda

DISCUSSION / CONCLUSION

The findings of this study correlates with the study conducted by central council for research, Delhi in collaboration with NIMHANS Bangalore. ²

CONCLUSION

Findings of the study revealed that the clients and their caregivers had various physical, psychological and social benefits after the use of alternative health care practices.

Nursing implications

Nursing education

- The findings of the study can be incorporate in Ayurvedic nursing.

Nursing practice.

- The nurse should educate the clients as well as the caregivers in the hospitals and those attending the outpatient unit of the hospitals regarding the perceived benefits of alternative health care practices.

Nursing Administration

- Opportunities should be provided for nurses to attend the inservice education programme so that they can learn about the alternative health care practices and teach the public.

Nursing research

- There is a need for the extensive and expansive research in this area to find the perceived benefits of alternative health care practices.

Limitations.

- The study was restricted to only two alternative therapies and major psychotic disorders.

Recommendations

Similar study can be conducted for other mental disorders

Acknowledgement: I am grateful to all of them who have directly or indirectly helped me in the successful completion of this dissertation

Conflict of Interest: Nil

Source of Support: Self

Ethical Clearance: Detailed research proposal and tools were submitted to the Institutional Ethical Committee (IEC) for review and ethical clearance was obtained.

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Medication Non- Compliance: A Predictor for Relapse in Psychosis

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ABSTRACT

Medication non-compliance or Drug non-compliance remains as one of the major challenges in the field of psychiatry & psychiatric nursing, because it increases the risk of relapse and re-hospitalization to a greater extent. Psychiatric patients are at a higher risk for medication non-compliance because they have impaired judgment, insight and stability. The distress which is caused to the patients and family members are incredible, as most of them are unaware about the real dread of the mental illness in the absence of continued treatment. Therefore sticking on an appropriate treatment regimen becomes inevitable to the patients with psychosis, as medication non-compliance serves as a major predictor for psychotic relapse. It is very essential for the mental health team members to impart measures to improve medication compliance in patients with psychosis, in order to reduce the suffering of the patients and their families. Unless the crucial factors responsible for medication non-compliance is identified and addressed properly, it becomes a long standing issue. Hence, this paper is forecasted in such a way that the common factors which affects medication compliance and influences the medication adherence are duly addressed along with the preventive strategies.

Keywords: Medication non-compliance, relapse, psychosis, medication adherence.

INTRODUCTION

Medication non-compliance is a recognized problem and remains as the most crucial aspect in treatment of mental illness. In due course to time, patient becomes non adherent to medication includes a range of patient behaviors, from treatment refusal to irregular use or partial change of daily medication doses. Partial adherence to medication is at least as frequent as complete non adherence. Non adherence to medication has a negative impact on the course of illness resulting in relapse, re-hospitalization, longer time to remission, and attempted suicide.¹⁰ Hence, Compliance with treatment, or treatment adherence, is a very important clinical issue.

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MEDICATION COMPLIANCE & NON-COMPLIANCE

Compliance (also adherence, capacitance) describes the degree to which a patient correctly follows medical advice and it most commonly, it refers to medication or drug compliance. Medication non-compliance is denoted as not following the medical advice properly.

In psychiatric perspective, medication non-compliance simply refers to the “non-adherence of medications by the mentally ill patients”. Noncompliance is a major reason that neuroleptic drugs are not more effective in keeping people with psychosis out of the hospital. Noncompliance accounts for about 40% of all relapse. In addition relapse from noncompliance may be more severe or dangerous than relapse occurring while on neuroleptic medication.⁹ Persistent noncompliance may worsen the overall course of the schizophrenic

illness, and may eventually make the person less likely to respond to medication.

Many mental disorders require more than just a brief medication intervention. For some patients, several months or years of medication or even lifelong medication is necessary. For instance, the recommended treatment time for the first episode of psychosis is six to 12 months, but almost half of patients stop taking their antidepressant within three months for various reasons. Noncompliance can have serious consequences, such as relapse or recurrence of the illness. Therefore, enhancing medication compliance or preventing non adherence is an important treatment goal for the mental health team members and the patients.

COMMON FACTORS CAUSING MEDICATION NON-COMPLIANCE^{6,4}

- Patient characteristics (e.g., attitudes toward illness and medication, socioeconomic considerations, social supervision, decision based on personal value, judgment and religious or cultural beliefs)
- The treatment setting (e.g., primary care versus specialty office and inpatient versus outpatient);
- Medication characteristics (e.g., side effects, individual sensitivity to side effects, simple versus complicated medication regime, expense of the medicines)
- Clinical features of the disorder (e.g., chronicity, exaggerated feelings of guilt in depression, suspiciousness in schizophrenia, substance abuse and comorbid anxiety); and
- Clinician expertise (e.g., knowledge of pharmacology, empathy, instilling hope, successful integration of pharmacology and psychotherapy).
- Personality traits or coping style (denial of illness), or the mere presence of a mental disorder, where the insight of the patient is predominantly affected.
- concern about the interactions between substances and the medication (a patient may not take his or her medication if a return to substance use occurs)

- belief that the medication isn't working
- feeling better, which leads the patient to believe that the medication is no longer needed
- misattribution of the mental health disorder symptoms to the use of the medication

STRATEGIES TO PREVENT NON-COMPLIANCE IN PSYCHOTIC PATIENTS

Prescribing clinicians frequently do not often detect or ask about noncompliance and are not always good at recognizing when patients stop their medication. They may not recognize noncompliance until the patient becomes psychotic and starts reacting to hallucinations. Prescriber's assessment of the situation alone shall not be relied upon. Nonetheless, if possible, it is important to maintain routine contact with the prescriber to discuss, among other things, compliance issues.¹⁰ The first step in planning the strategies to prevent non-compliance in patients with psychosis is to identify the pre-determined conditions and the common factors.⁷ The views in relations these are substantiated as follows,

Pre-determining conditions in anticipating medication non-compliance in patients with psychosis

The following conditions should be kept in mind, before considering a patient to be non-compliant with medicines. Only then, non-compliance should be focused as a problem.^{2,3}

1. The person's diagnosis or condition requiring medication has been accurately diagnosed as a schizophrenic spectrum disorder.
2. The person has received adequate information about the condition and a clear recommendation for ongoing neuroleptic / psychotropic treatment.
3. The recommended treatment is known to be effective, usually determined by the person's past history of improving on neuroleptic medication.
4. The extent of the noncompliance is enough to increase psychotic symptoms or adversely affect the course of the illness. Hence, distinguishing the truly noncompliant person from persons who occasionally forget or skip some of the doses, is of utmost importance.

5. The risk/benefit ratio is favorable. In other words, the “cure is not worse than the disease”.

Common reasons to suspect medication non-compliance in patients with psychosis ⁵

1. The patient claims to have stopped medication because of a mental health professional's recommendation. While this may be true in some cases, frequently the report is distorted. Double checking with the prescriber is of a real mandate.

2. The patient is not bothering to obtain medication prescriptions, not going to the pharmacy to fill prescriptions, or indifferent to the logistics of keeping up with a medication regimen.

3. The patient has little or no knowledge of the details of the drug regimen such as color or shape of the pills, frequency of scheduling, etc.

4. There is a sudden worsening of dyskinetic movements of the mouth or hands without a known change in the medication regimen.

5. There is an unexpected improvement in the parkinson's side effects of muscle stiffness, rigidity, tremor, or slowness of movements without any known change in the medication regimen.

Preventing medication non-compliance in patients with psychosis ^{2,5}

Believing in compliance - About one-third of people with schizophrenia say that they stay on medicine primarily because other people think it's important. For them, the influence of other people, rather than believing the medication is needed, is the key factor that promotes compliance. An important thing to remember here is that it is very therapeutic in its own right when the prescriber shows concern about why the person doesn't take the medication and shows sensitivity about the side effects of the medication.

Preventing Relapse - Prevention of relapse includes finding the most effective drug and best dose for the person. Aggressive treatment of early signs of relapse is important for preventing the kind of noncompliance that arises during a psychotic episode.

Simplify the Drug Regimen - Complex drug regimens have been consistently shown to be a strong risk factor for noncompliance. Psychotic symptoms and/or problems in thinking often interfere with the patient's ability to follow the prescribed regimen. The regimen may have to be simplified and reviewed in detail, often in association with a family member. ¹¹

Make sure that the transitions are seamless - Minimizing the likelihood of non-compliance starts during inpatient treatment. It is important to arrange for outpatient benefits, an appropriate living situation and psychiatric aftercare. Providing concrete directions and reviewing them with the patient can be an effective solution.

Fostering the therapeutic alliance - Mere emphasis on medication is not adequate. Many aspects of the clinical relationship (e.g., continuity, stability, nurturance, authority) provide patients with incentives to maintain compliance. The development of a therapeutic alliance can take time and needs to be individualized and flexible. For example, some patients want a psychiatrist / psychiatric nurse, who is authoritative and others can't stand that type of a professional. Identifying a doctor or treatment system that works well with families, especially regarding cross-communication and drug side-effect management ⁸

Insisting on the concept of Deinstitutionalization - Using institutionalization (hospitalization) as a last resort when everything else is tried and just can't make a dent on the patient's compliance problem. The goal is to use the hospital to stabilize the patients' acute symptoms and then set up a new plan that hopefully can alter the compliance behavior after discharge. Recommending Depot Drug Delivery by converting from an oral to an injectable (depot) form of neuroleptic may improve compliance. (Haloperidol and Prolixin are available as in long acting forms). This should be initiated during inpatient hospitalization. As inpatient units do not routinely transit patients from oral to depot, it may be up to the relatives to push the inpatient mental health professionals to trying this approach. Depot therapy may be most effective in improving compliance for disorganized patients. While this approach is not guaranteed to improve compliance, it makes it much easier to track compliance and rule out what is going on.

Involving family members in the care:

Organize the family to present a consistent and coherent message about the families' expectations about compliance. Encourage to get as many family members as possible to go to psychoeducational sessions so that everyone has the same knowledge base.

CONCLUSION

Compliance is a multi-factorial phenomenon representing the patient's contribution towards the treatment of illness. Problems with non-compliance are closely related with treatment outcome. In psychoses, patients are often incapable of recognizing their symptoms and seek medical help at the earliest. In general, psychiatric disorders have a negative stigma among people and negative attitude towards psychotropic drugs are common among patients and their relatives. Although most people suffering from mental illnesses receive considerable benefit from taking medications, a sizable percentage choose to drop them at some instance during their course of illness. Once medications have been discontinued, patients often become psychotic again, creating a great deal of difficulty for themselves and their families, cycling back to the hospital. Hence strategies to prevent medication non-compliance needs to be instituted in general for all patients who are under treatment, irrespective of the presence of risk factors for non-compliance.

Acknowledgement: Nil

Ethical Clearance – As this is a review, ethical clearance has not been obtained.

Source of Funding – Self

Conflict of Interest – Nil

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Self Esteem and Quality of Life of Male Nurses

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ABSTRACT

Back ground of the study: Males and females differ fundamentally in their instincts, emotions, interests, attitudes and modes of behaviour. Role conflict and heavy workload of men in nursing may adversely affect their self esteem and quality of life

Objective of the study: To determine relationship between self- esteem and quality of life of male nurses

Materials and methods: Descriptive correlative design was used for the study. The data was collected from 80 male nurses by using self esteem scale and quality of life scale.

Results: The findings the study showed that 88.75% of the male nurses were having normal self esteem and 58.75 % were having average quality of life. Male nurses' self esteem was positively correlated with their quality of life. ($r = 0.736$, $p < 0.05$).

Conclusion: Majority of male nurses was having normal self esteem and more than half of the subjects had average quality of life. The study showed a positive correlation between self esteem and quality of life. Self esteem influences various aspects of life including quality of life.

Keywords: *Self esteem, Quality of life, Male nurses.*

INTRODUCTION

Basically, males and females differ fundamentally in their instincts, emotions, sentiments, interests, attitudes and modes of behaviour. Men come to the nursing profession for the same reasons women do. They want to care for sick and injured people, they want a challenging profession, and they want reasonable job security with good wages. Men make up approximately 6 to 7 percent of today's nurses.¹

Self-esteem is an integral part of personal happiness, fulfilling relationships and achievement.² Consequences of low self esteem are anxiety, low tolerance to stress, feeling of loneliness, increased risk for depression, relationship problems, sexual dysfunction, impairment in academic and job performance, under achievement and increased risk for drug and alcohol abuse.³

Although men have been involved in the profession of nursing for a significant length of time, nursing is primarily regarded as a female profession. Certain stereotypes are often associated with the men

in nursing, and these stereotypes can have an effect on an individual's attitude towards the male nurse. Faced with special challenges from people and institutions that consider nursing a women's profession, many men find success by defying stereotypes.⁴ Men who enter this female dominated profession face a variety of difficulties, especially stigmatization in the society and in the work place. Males frequently reported negative reactions from family and friends when they decided to become a nurse.⁵ It is disgraceful for a man to be directly subordinated to women, except in family-mother child relationship.⁶ These factors can negatively influence the self esteem of male nurses.

Quality of life is the degree to which a person enjoys the important possibilities of his /her life. The domains of quality of life include family, friends, work, neighbourhood, community, education and spiritual.⁷ Each domain contributes to one's overall assessment of the quality of life. The nursing professionals have been carrying greater workloads, with an inappropriate ratio of patients to qualified workers, rotating shifts, manipulation of toxic substances, and the presence of risk factor pertinent

to the environment, which leads to a situation known as work overload. Consequently, nurses experience a high degree of frustration and discontent as to one's responsibilities and professional work, which may result in physical and psychological disorders that can affect one's health and compromise quality of life.⁸

A study conducted in Central Institute of Psychiatry, Ranchi on self esteem and quality of life in adolescents has shown that self esteem influence various spheres of life. Poor self esteem is likely to affect various aspects of life, including quality of life of a person.⁹ The male nurses are confronted with the factors which affect both their self esteem and quality of life. Studies show that self esteem and quality of life are impaired in male nurses.^{5, 10, 11} However few studies have dealt with the self esteem and quality of life of men in nursing in India.

MATERIALS & METHODS

A descriptive correlative design was used for this study. Ethical approval for the study was obtained from Father Muller Institutional Ethics Committee, Father Muller Medical College, Mangalore. The study was conducted at six hospitals in Mangalore. The percentage of male nurses in each hospital was about 5-10%. A formal written permission was obtained from each hospital authority to conduct the research study. A total of 84 male nurses were selected by convenient sampling from these hospitals. Male nurses were eligible for the study if they were working in the hospitals, had minimum three months of experience and had registered under Karnataka State Nursing Council. Male nurses who were having chronic illnesses were excluded. Informed written consent was obtained from the participants prior to the study.

Self esteem and quality of life were rated by Self Esteem Scale (five point rating scale) and Quality of Life Scale (four point rating scale). The Self Esteem Scale had 28 items in the domains of self respect, self confidence, attitude toward self, attitude toward job, feeling of worthiness, and satisfaction in one's own life. Quality of life scale had 40 items in physical, psychological, familial, social, financial and spiritual domains. The content was validated by sixteen experts (psychiatric nurses, psychiatrists, clinical psychologists, psychiatric social worker and experts from other nursing specialties). Reliability for both tools were established by test-retest method. The reliability coefficients of self esteem scale and quality of life rating scale were 0.923 and 0.873 respectively. A score above or equal to 84 ($\geq 60\%$) was considered as normal self esteem whereas a score less than 84 ($< 60\%$) was considered as low self esteem. The quality of life scores were categorized as follows: above 101 ($\geq 90\%$) as excellent quality of life; 78-100 (70-89%) as good quality of life; 56-77 (50-69%) as average quality of life and less than 56 (50%) as poor quality of life.

The collected data was analyzed using descriptive and inferential statistics. Data was analyzed using SPSS version 14. Data was described using mean, median and standard deviation. Pearson correlation coefficient was used to correlate the scores of self esteem with the quality of life scores. Bivariate analysis was done using Chi square test and Fishers exact test. All statistical tests were two-tailed and significance level set at 0.05.

RESULTS

The baseline characteristics of the participants are described in table 1.

**Table 1: Baseline characteristics of male nurses
N=80**

S.no.	Variables	Frequency	%
1	Age In Years		
	A. 21-25	63	78.75
	B. 26-30	13	16.25
	C. >30	4	5
2	Religion		
	A. Christian	63	78.75
	B. Hindu	17	21.25
3	Marital Status		
	A. Single	74	92.5
	B. Married	6	7.5
4	No Of Children		
	A. 1	4	5
	B. 2	-	-
	C. >2	2	2.5
	D. Na	74	92.5
5	Type Of Family		
	A. Nuclear	67	83.75
	B. Joint	13	16.25
6	Place Of Residence		
	A. Rural Area	33	41.25
	B. Urban Area	43	53.75
	C. Semi Urban Area	4	5
7	Professional Qualification		
	A. Bsc	51	63.75
	B. Gnm	26	32.5
	C. Pc Bsc	3	3.75
8	Designation		
	A. Staff Nurse	76	95
	B. Ward-in-charge	4	5
9	Area Of Work		
	A. General Ward	17	21.25
	B. Icu	13	16.25
	C. Ot	50	62.5
10	Personal Income		
	A. <5000	9	11.25
	B. 5000-7500	33	41.25
	C. 7501-10000	35	43.75
	D. >10000	3	3.75
11	Professional Experience		
	A. <1	24	30
	B. 1-3	50	62.5
	C. >3	6	7.5
12	Hours Of Work Per Week		
	A. ≤ 48 Hrs	5	18.75
	B. >48	65	81.25

13	Hours Of Night Duty Per Moth		
	A. <72hrs	46	57.5
	B. 72-120	32	40
	C. 121-180	1	1.25
	D. >180hrs	1	1.25
14	Number Of Annual Holidays		
	A. ≤30 Days	76	95
	B. >30 Days	4	5
15	Number Of Duty Off Followed By The Working Days(Per Month)		
	A. ≤75	75	93.75
	B. >5	5	6.25

Among the subjects 88.75% of male nurses were having normal self esteem and 11.25% were having low self esteem.

Table 2: Domain wise mean and standard deviation self esteem of male nurses N=80

Domains	Min score	Max score	Mean	S.D
Self respect	6	30	21.55	3.50
Self confidence	4	20	13.80	2.21
Attitude towards self	4	20	13.7	1.85
Attitude towards job	6	30	19.33	2.22
Feeling of worthiness	4	20	13.31	1.60
Satisfaction in one's own life	4	20	13.16	2.50

Maximum score=140

The mean score of self esteem for male nurses was high (94.92 ± 9.27). Male nurses were having high mean scores indicating normal self esteem in the domains of self respect, self confidence, attitude towards self, attitude towards job, feeling of worthiness, and satisfaction in one's own life (Table. 2).

Among subjects 58.75% of the male nurses were having average quality of life, 35% were having good quality of life whereas 3.75% and 2.5% were having excellent quality of life and poor quality of life respectively.

Table 3: Domain wise distribution of mean and standard deviation of quality of life of male nurses

N=80

Domains	Min score	Max score	Mean	S.D
Physical	7	28	18.67	3.49
Psychological	5	20	13.85	2.47
Familial	4	16	10.4	2.58
Social	4	16	11.31	2.07
Financial	4	16	9.42	1.81
Spiritual	4	16	12.38	1.88

Maximum score= 112

The mean quality of life score was 76.06 ± 11.52 . The quality of life of male nurses was average in physical, psychological, familial and financial domains, whereas they had good quality of life in social and spiritual domains (Table 3).

Table 4: Mean, standard Deviation and correlation of self esteem and quality of life of male nurses

Variables	Min score	Max score	Mean	SD	r
Self esteem	28	140	94.92	9.27	0.736*
Quality of life	28	112	76.06	11.52	

 $r_{(78)} = 0.283$ at 5% level, $p < 0.05$

There was a high positive correlation ($r=0.736$, $p < 0.05$) found between self esteem of male nurses and their quality of life. (Table 4)

χ^2 values computed between self esteem of male nurses and selected variables like personal income ($\chi^2_{(1)}=6.12$ $p < 0.05$), hours of work per week ($\chi^2_{(1)}=7.6$ $p < 0.05$) and hours of night duty per month ($\chi^2_{(1)}=7.01$ $p < 0.05$) were statistically significant. χ^2 values computed between quality of life of male nurses and selected variables like place of residence ($\chi^2_{(1)}=7.93$ $p < 0.05$), hours of work per week ($\chi^2_{(1)}=9.26$ $p < 0.05$) and hours of night duty per month ($\chi^2_{(1)}=9.62$ $p < 0.05$) were also found to be statistically significant.

DISCUSSION

The baseline characteristics of male nurses in the current study were found consistent with the findings of another study conducted in California Institute of Nursing on men in nursing, where 80% of the subjects were graduate nurses.¹² The following studies showed inconsistent findings when compared with the present study. A study conducted in California

Institute of Nursing on men in nursing reported that the largest age segment among survey participants were between 45 and 54 years.¹² Another study conducted in Brazil on quality of life nurses reported that majority of the subjects (58.3%) were married.¹³ A study conducted in Northern Ireland on quality of working life of nurses reported that 17.6% were staff nurses, 52.9% were senior staff nurses and 29.5% were supervisors.¹⁴ The study conducted in California Institute of Nursing on men in nursing reported that top nursing specialties among respondents include critical care (27%), emergency department (23%) and Med/surg (20%). The study also reported that the majority of respondents (54%) have over 10 years of professional experience.¹² The reasons for the difference may be the migration of young graduate nurses to European and Gulf countries soon after the completion of course.

Majority of the male nurses (88.75%) were having normal self esteem and 11.25% of male nurses were having low self-esteem. These findings may be due to the socially desirable responses of participants, good working atmosphere, high educational qualification and good family support.

The results were congruent with the findings of another study conducted in UK to examine the relationship between self-esteem and stress, coping and burnout in mental health nurses (n=568). Nurses who felt happy with their life were physically fit and who had job security had higher self-esteem scores. Smokers and drinkers in the sample were found to have significantly lower levels of self-esteem. Multiple regression analysis showed that happiness was one of the best predictors of self-esteem. The results of the study revealed that enhancing nurses' levels of self-esteem is necessary to reduce their stress levels.¹⁵

Majority of male nurses (58.75%) were having average quality of life and 35% were having good quality of life. Male nurses were having good quality of life in spiritual and social domains. They were having average quality of life in psychological, physical, familial and financial domains. Male nurses were having lesser mean scores in the domains of financial functioning and family functioning. This may be due to the less salary and lack of time to involve in their family affairs.

A study conducted in the University of Ulster, Northern Ireland assessed dimensions of hospital nurse's quality of working life. A total of 56 nurse's quality of working life categories were identified and fitted into six dimensions: socio-economic relevance, demography, organization aspects, work aspects, human relation aspects and self-actualization. The study results had shown gross impairment in the quality of working life of nurses. This study also focused on further research with other groups in a wider variety of setting to increase knowledge and understanding of this area.¹⁴

The present study findings revealed a positive correlation between the self esteem and quality of life of male nurses. The following study shows the relationship between self esteem and quality of life with stress. A study was conducted in UK to examine the relationship between self-esteem and stress, coping and burnout in mental health nurses (n=568). Self-esteem correlated ($p < 0.05$) highest with measures of stress. Multiple regression analysis showed that happiness was one of the best predictors of self-esteem. The results of the study revealed that enhancing nurses' levels of self-esteem is necessary to

reduce their stress levels and improve their quality of life.⁸

A study conducted in Central Institute of Psychiatry, Ranchi, India on 'self esteem and quality of life in adolescents' has shown that self esteem influence various spheres of life. Poor self esteem is likely to affect various aspects of life, including quality of life of a person.⁹

Variables like personal income hours of work per week and hours of night duty per month showed significant association with self esteem. As the income increases the nurses are able to satisfy their personal and social needs which enhance their feeling of worthiness. Also when there is an increase in the hours of work per week and night duty per month, they may become stressed and exhausted with very less energy left for carrying out other responsibilities, leading to decreased satisfaction in own life.

Variables like place of residence, hours of work per week and hours of night duty per month showed significant association with quality of life. The association found between these variables and quality of life may be due to the following reasons. Nurses who are from rural area may enjoy better interpersonal relations in the family compared to those from urban; moreover they may get respect and acceptance from the society too. This may enhance their psychological, familial and social functioning. Also when there is an increase in the hours of work per week and night duty per month, they may not adequate time to sleep, take rest and spend with their family and friends. Moreover, they will be stressed and exhausted leading to the decreased quality of life.

CONCLUSION

Normal self esteem and a good quality of life are the key indicators of success of male nurses in nursing profession. The findings of the study revealed that majority of male nurses were having normal self esteem and average quality of life. Significant positive correlation existed between self esteem and quality of life of male nurses. It is important to conduct study in larger populations before generalizing the findings of the study.

Acknowledgement: The researchers owe deepest

gratitude to all the participants of the study, who formed the core and basis of the study, for their whole hearted cooperation.

Sources of Funding: Self

Conflict of Interest: Nil

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Study to Assess Depression and Its Risk Factors among Patients with Chronic Medical Conditions attending Selected Units of AIMS, Kochi

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ABSTRACT

A quantitative approach descriptive study was conducted to assess depression and its risk factors among 150 subjects diagnosed with chronic medical conditions like diabetes mellitus, COPD and CAD. The objectives of the study were to identify depression among patients with chronic medical conditions, find out the risk factors for depression among patients with chronic medical conditions and find out the association between depression and its risk factors among patients with chronic medical conditions. The data was collected using socio demographic sheet and Beck's depression inventory (structured interview). The major findings of the study were, among the 150 patients, 42% of them had clinical depression at varying levels and one third of the patients i.e.34% had mild mood disturbance. The major risk factors for causing depression among patients with chronic medical conditions were low education, existence of co- morbid diseases, age, monthly income and use of medications. Significant association was found between depression and its risk factors like marital status, education, occupation, monthly income, family support, history of maternal deprivation and stressful life events. These findings necessitate the need for strategies to improve the patients well being and there by reducing the illness burden.

Keywords: Assess, Patients, Risk factors, Chronic medical conditions.

INTRODUCTION

Depression is an important public-health problem and one of the leading causes of disease burden worldwide. Depression is often co morbid with other chronic diseases and can worsen their associated health outcomes. The lifetime prevalence of mood disorder in patients with chronic disease is 8.9% to 12.9%, with a 6-month prevalence of 5.8% to 9.4%.The risk of suicide has been noted to be higher among patients with physical illnesses than the general population with a prevalence estimate of 22 – 60%. It can be difficult to diagnose depression in the medically ill. Physical symptoms such as disturbed sleep, impaired appetite, and lack of energy may already exist as a result of the disease. The functional limitations imposed by the disease may result in “understandable” distress, and some clinicians find it difficult to conceptualize such distress as a

depressive disorder. Indeed, the distinction between an adjustment reaction and a depressive illness is often not clear. Despite these difficulties, it is essential to diagnose and treat depression in patients with chronic conditions.

MATERIALS & METHODS

A quantitative research with descriptive design was used to assess depression and its risk factors among patients with chronic medical conditions. The study was conducted among 150 patients diagnosed with chronic medical conditions attending AIMS, Kochi using convenience sampling technique. The data was collected by administering the tools; Tool I:- Demographic proforma which included two section i.e. socio demographic data which includes demographic variables.Tool II:-Beck's depression inventory, a 21- items self- report instrument intended to assess the existence and severity of symptoms

of depression. The highest possible total score for the whole test is 63 and lowest possible score is 0. The internal consistency for the BDI was good, with a Cronbach's alpha coefficient of around 0.85. Tool III:- Checklist to assess the risk factor of depression. This checklist is filled by the researcher by screening the socio-demographic and clinical variables of

the patients. After obtaining permission from the institutional ethical committee, the researcher conducted a pilot on 15 subjects in the pulmonary, endocrinology and cardiology units of AIMS, Kochi. Data was analysed using descriptive and inferential statistics.

RESULTS

Table 1. Distribution of subjects based on socio-demographic variables n=150

Sl.no	Demographic Variables		Frequency (f)	Percentage (%)
1.	Age (in years)	35-45	3	2
		46-55	27	18
		56-65	47	31.3
		66-75	73	48.7
2.	Sex	Male	113	75.3
		Female	37	24.7
3.	Education	Illiterate	6	4
		Primary	77	51.3
		Secondary	14	9.3
		Higher secondary	15	10
		Graduate	28	18.7
		Postgraduate	1	0.7
		Professional	9	6
4.	Occupation	Unemployed	42	28
		Agriculture	8	5.3
		Coolie	6	4
		Self-employed	33	22
		Government employee	33	22
		Professional	28	18.7
5.	Religion	Hindu	102	68
		Christian	37	24.7
		Muslim	11	7.3
6.	Marital status	Married	147	98
		Unmarried	1	0.7
		Widowed	2	1.3
7.	Type of family	Joint	71	47.3
		Nuclear	79	52.4

Cont... Table 1. Distribution of subjects based on socio-demographic variables

n=150

8.	Monthly Income	< 5000	27	18
		5001- 10,000	58	38.6
		10001- 25,000	43	28.7
		25,000-50,000	15	10
		> 50,001	7	4.7
9.	Area of Residence	Rural	97	64.7
		Urban	43	28.6
		Suburban	10	6.7
10.	Family Support	Yes	132	88
		No	18	12
11.	History of Maternal deprivation	Yes	138	
		No	12	8

Table1. depicts that half of the subjects i.e. 73(48.7%) were in the age group of 66-75years and majority of them 113(75.3%) were males. Of the total subjects i.e. 77(51.3%) of them were educated up to primary and most of them 108(72%) were employed. Majority of them 102(68%) were from Hindu religion

and 147(98%) of them were married. Most of them 79(52.6%) were from nuclear family and 58(38.6%) have a monthly income between 5,001- 10,000. Majority of them 132(88%) had good family support and 138(92%) didn't have a history of maternal deprivation.

Table 2. Distribution of subjects based on clinical data

n=150

Sl.no	Clinical data		Frequency (f)	Percentage (%)
1.	Duration of illness	3-5years	38	25.3
		6-10years	49	32.7
		>10years	63	42
2.	Hospital Admission in last 1year	Nil	75	50
		1	52	34.6
		2	13	8.7
		3 or more	10	6.7
3.	Follow up	Yes	142	94.7
		No	8	5.3
4.	Alcohol or other substance use	Yes	65	43.3
		No	85	56.7
5.	Family history of chronic medical illness	Yes	31	20.7
		No	119	79.3
6.	Family history of mental illness	Yes	5	3.3
		No	145	96.7

7.	BMI	BMI <30	138	92
		BIM>30	12	8
8.	Co-morbidities	Hypertension	29	46
		Arthritis	27	18
		Dyslipidaemia	4	2.7
		Chronic renal failure	4	2.7
		Nil	46	30.6
9.	Medications	Oral hypoglycaemic agents	50	33.3
		Bronchodilators	50	33.3
		Cardiac drugs	50	33.4
		Anti-hypertensive	69	46
		Anti-rheumatic + NSAIDs	31	20.6

Table 2. depicts that nearly half of them i.e. 63(42%) had illness of a duration more than 10 years and 49(32.7%) had a duration of illness for 6-10 years. Seventy five (50%) of them didn't have hospital admission during last one year. Majority 142(94.7%) of them had regular follow-up. Nearly half of them 65(43.3%) had a habit of using alcohol and other substance use. Most of them i.e. 119(79.3%) had no family history of chronic illness and 145(96.7%) didn't have a family history of mental illness. Majority of them i.e. 138(92%) had BMI less than 30 and about 69(46%) of them were having hypertension as a co-morbid illness. Among the 150 subjects with chronic medical conditions 50(33.3%) of the subjects were taking cardiac drugs, 50(33.3%) were taking bronchodilators and 50(33.3%) were taking oral hypoglycaemic agents respectively. Along with the routine medications, 69(46%) of them were taking antihypertensive drugs and 31(20.6%) of them were on anti-rheumatic and NSAIDS.

Depression among subjects with chronic medical conditions

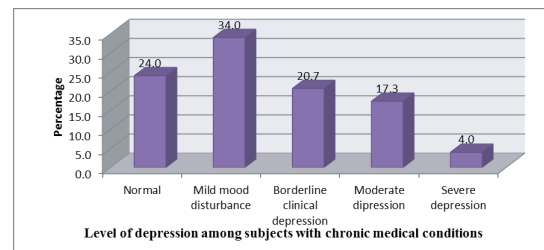


Figure 1. depicts the distribution of subjects based on the level of depression. Among the 150 patients, 63(42%) of them had clinical depression at varying levels i.e. 31(20.7%) with borderline clinical depression, 26(17.3%) moderate depression and 6(4%) with severe depression. One third of the patients i.e. 51(34%) had mild mood disturbance and only 36(24%) out of 150 patients didn't experience any depression.

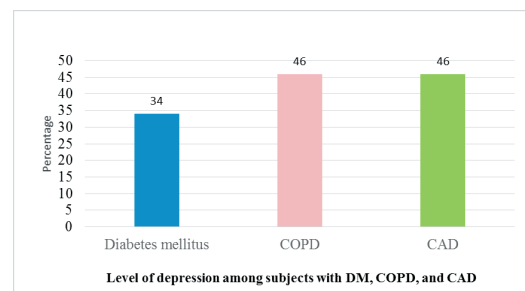


Figure 2: Comparison of clinical depression among subjects with chronic medical conditions

Figure 2. depicts the comparison of clinical depression among the three chronic medical conditions. Among the three chronic medical conditions, the patients with COPD and CAD had higher percentage of clinical depression i.e. 23(46%) in each and 17(34%) of patients with Diabetes mellitus had clinical depression.

Table 3. Distribution of subjects based on the risk factors for depression

n=63

Sl.no	Risk factors		Frequency (f)	Percentage (%)
1.	Age(in years)	Yes(20-50,>65)	41	65
		No	22	35
2.	Sex	Male	17	27
		Female	46	73
3.	Marital status	Yes (unmarried, widowed)	3	4.8
		No	60	95.2
4.	Education	Up to secondary	53	84.1
		Higher secondary and above	10	15.9
5.	Occupation	Yes(employed)	23	36.5
		No	40	63.5
6.	Monthly income	Up to 10,000	42	66.7
		Above10,000	21	33.3
7.	Area of Residence	Yes(urban)	19	30.2
		No	44	69.8
8.	Family support	Yes (less support)	15	23.8
		No (good support)	48	76.2
9.	Family history of mental illness	Present	1	1.6
		Absent	62	98.4
10.	History of maternal depression	Present	8	12.7
		Absent	55	87.3
11.	Stressful life events	Present	5	8
		Absent	58	92
12.	Alcohol or other substance use	Yes (history of using)	26	41.3
		No	37	58.7
13.	Co-morbidities	Present	46	73
		Absent	17	27
14.	Medications	Yes (beta blockers, antihypertensive, NSAIDS etc.)	35	55.6
		No	28	44.4
15.	BMI	Yes (≥ 30)	4	6.4
		No	59	93.3

Table 3. depicts that the major risk factors for causing depression among patients with chronic medical conditions were education up to secondary 53(84.1%), existence of co- morbid diseases 46 (73%), age 41 (65%), monthly income<10,000 42(66.7%) and use of medications 35 (55.6%) in the present study. Nearly half of the subjects 26 (41.3%) had a history

of alcohol and other substance use. Unemployment 23 (36.5%), area of residence as urban 19(30.2%) and gender as female 17(27%) were identified as the other major risk factors prevalent among the subjects.

Section V: Association between depression and its risk factors among patient with chronic medical conditions

Table 4: Association between depression and marital status n=150

Sl.No	Variables		f	Mean	Mean Difference	SD	T value	P value
1.	Education	Up to secondary	97	17.59	5.97	6.49	5.391***	0.000
		Higher secondary and above	53	11.62	-	6.48	-	-

$t_{(148)}=1.976$; *** significant at $P<0.001$

The table 4. depicts that, there is a significant association between depression and education ($t =5.391$; $p<0.001$).

Table 5: Association between depression and occupation Education

Sl.No	Variables		f	Mean	Mean Difference	SD	T value	P value
1.	Occupation	Employed	108	14.63	3.03	6.87	2.39*	0.018
		Unemployed	42	17.66	-	7.18	-	-

n=150

$t_{(148)}=1.976$; * significant at $P<0.05$

The table 5. depicts that, there is a significant association between depression and occupation ($t =2.39$; $p<0.01$).

Table 6: Association between depression and monthly income n=150

Sl.No	Variables		f	Mean	Mean Difference	SD	T value	P value
1.	Monthly Income	Up to 10,000	85	16.52	2.40	7.75	2.088*	0.039
		Above 10,000	65	14.12	-	5.85	-	-

$t_{(148)}=1.976$; * significant at $P<0.05$

The table 6. depicts that, there is a significant association between depression and monthly income ($t=2.088$; $p<0.05$).

Table 7: Association between depression and family support n=150

Sl.No	Variables		f	Mean	Mean Difference	SD	T value	P value
1	Family support (less)	Absent	132	14.47	8.41	6.66	5.11***	0.000
		Present	8	22.88	-	5.50	-	-

$t_{(148)}=1.976$; *** significant at $P<0.001$

The table 7.depicts that, there is a significant association between depression and family support ($t=5.11$; $p<0.001$).

Table 8: Association between depression and history of maternal deprivation n=150

Sl.no	Variables		f	Mean	Mean Difference	SD	T value	P value
1.	History of maternal deprivation	Absent	12	19.91	4.81	9.15	2.29*	0.023
		Present	138	15.10	-	6.76	-	-

$t_{(148)}=1.976$; * significant at $P<0.05$

The table 8. depicts that, there is a significant association between depression and history of maternal deprivation($t=2.29$; $p<0.05$).

Table 9: Association between depression and stressful life events n=150

Sl.no	Variables		f	Mean	Mean Difference	SD	T value	P value
1.	Stressful life events	Absent	5	26.60	11.50	4.39	3.72***	0.000
		Present	145	15.10	-	6.84	-	-

$t_{(148)}=1.976$; $P<0.05$; *** significant at $p<0.001$

The table 9.depicts that, there is a significant association between depression and stressful life events ($t=3.72$; $p<0.001$).

Table 10: Association between depression and other selected demographic variables. n=150

Sl.No	Variables		f	Mean	Mean Difference	SD	T value	P value
1.	Age (in year)	<50	12	14.58	.98	9.83	.460 ^{ns}	0.646
		>50	138	15.56	-	6.82	-	-
2.	Sex	Male	113	15.04	1.79	6.66	1.342 ^{ns}	0.182
		Female	37	16.83	-	8.14	-	-
3.	Area of residence	Rural	97	15.95	1.33	6.83	1.107 ^{ns}	0.270
		Urban	53	14.62	-	7.47	-	-
4.	Family history of mental illness	Present	5	18.20	2.81	8.04	.872 ^{ns}	0.385
		Absent	145	15.39	-	7.05	-	-
5.	Alcohol or other substance use	Present	65	15.87	.69	6.94	.590 ^{ns}	0.556
		Absent	85	15.18	-	7.20	-	-
6.	Co-morbidities	Present	104	15.7	.70	6.63	.559 ^{ns}	0.577
		Absent	46	15.00	-	8.03	-	-
7.	Medications	Present	84	14.90	1.32	6.58	1.13 ^{ns}	0.257
		Absent	66	16.22	-	7.63	-	-
8.	BMI	Yes	12	14.08	1.52	5.66	.715 ^{ns}	0.476
		No	138	15.60	-	7.18	-	-

$$t_{(148)}=1.976 ; \quad P>0.05$$

The table 10. depicts that, there was no any significant association found between depression and the risk factors such as, age, sex, area of residence, family history of mental illness alcohol or substance abuse, co morbidities, medications and BMI.

DISCUSSION

The first objective of the study was to identify depression among patients with chronic medical conditions. It was found out that among the 150 patients with chronic medical conditions, 63(42%) of them had clinical depression at varying levels i.e. 31(20.7%) with borderline clinical depression, 26(17.3%) moderate depression and 6(4%) with severe depression. One third i.e. 51(34%) of the patients had mild mood disturbance and only 36(24%) out of 150 patients didn't experience any depression. While comparing the clinical depression among the three chronic medical conditions, the patients with COPD and CAD had higher percentage of clinical depression score i.e. 23(46%) in each and 17(34%) of patients with

Diabetes mellitus had clinical depression.(Fig No: 8). This study is supported by Katon W. who conducted a Canadian community-based study on epidemiology of depression in chronic medical conditions suggests that, patients with chronic medical illnesses have been found to have two- to threefold higher rates of major depression compared with age- and gender-matched primary care patients. Rates of depression in primary care patients were between 5% and 10 %, whereas prevalence rates of depression in patients with diabetes and coronary heart disease (CHD) an chronic obstructive pulmonary disease have been estimated to be 11 to 12%, 15 to 23% and 10 to 20% respectively.²Second objective of the study was to find out the risk factors for depression among patients with chronic medical conditions. In the study the major risk factors for causing depression among patients with chronic medical conditions were low level of education, existence of co- morbid diseases, age, monthly income<10,000,use of medications, history of alcohol and other substance use, unemployment, area of residence as urban and gender as female. This is supported by a cross-sectional study conducted by

Rebecca E, Prescott G. to determine the prevalence of depressive symptoms and to identify risk factors for depressive symptoms in COPD. Risk factors for ≥ 3 depressive symptoms in COPD were younger age, female gender, current smoking, marital status, divorced/separated, widowed, never married, \leq high school degree, dyspnoea, difficulty walking, and co-morbid diabetes, arthritis or cancer. The third objective of the study was to find out the association between depression and its risk factors. The current study shows that there is a statistically significant association between depression and its risk factors such as, marital status, education, occupation, monthly income, family support, history of maternal deprivation and stressful life events. There was no any significant association found between depression and other risk factors. Conceptual frame work of the study, the researcher utilized modified Betty Neuman's System Model. The present study mainly focussed on secondary prevention of depression i.e. early case identification by assessing depression with Beck's depression inventory as well as finding out the risk factors among patients with chronic medical conditions.

Acknowledgement: I am thankful to *Almighty God* for his blessings and guidance which enabled me to conduct this study smoothly.

I consider it as my profound privilege to express my heartfelt gratitude to my Research Guide *Mrs. Febu Elizabeth Joy* and my co-guide *Mr. Sreejesh, Assistant Professor*.

Last, but not the least, let me express my heartfelt gratitude to all participants of the study without whose help, co-operation and inspiration this study could not have been accomplished.

Source of Funding - Self

Conflict of Interest - Nil

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Behavioral Problems among Children Aged 6-10 Years: A Comparative Analysis of Working and Non-working Mother's Perspective

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ABSTRACT

A descriptive correlational study was conducted in an urban community of Kerala with an aim to assess and compare the behavioral problems of children aged 6-10 years of working and non-working mothers as reported by them. Hundred mothers (50 working and 50 non-working) who met the inclusion criteria were selected using systematic random sampling. Data was collected using a structured Child Misbehavior Severity Index rating scale. The results revealed that, no children were reported to have moderate or severe behavioral problems. However, majority 49(98.00%) of children of working mothers and 48(96.00%) of children of non-working mothers had mild behavioral problems. There was statistically no significant difference between behavioral problems of children among working and non-working mothers. From the study, it is concluded that irrespective of the maternal employment, the present day children are having behavioral difficulties which needs a greater attention by health professionals at the earliest.

Keywords: Behavioral problems; Children aged 6-10 years; working mothers; non-working mothers.

INTRODUCTION

About half of all lifetime mental disorders begin before the age of 14 years. It is obvious that "no health is possible without mental health" and that mental health issues form an integral part of child's development.¹ Child psychiatric problems are recognized as emerging public health issue throughout the world suggesting a global prevalence of approximately 20%.² About 12.5% children suffer from psychiatric disorders. Besides them, there are other children also who do not fulfill the criteria for disorder but has symptoms of poor mental health and require help.³ Behavioral problems constitute one of the most common psychiatric problems among young children. Nobody is perfect and all children will have bouts of bad behavior. They may throw tantrums, or talk back and even lash out to a parent. Children may seem irritable or even hostile when they are tired or are not feeling well. They may dispute with parents or disobey them. Young children may lie because they are too young to understand the difference between the truth and a lie. Sometimes they

lie to get themselves out of trouble. These are normal. When they act these ways all the time, or when these behaviors get them into trouble all the time at home, at school, or with other kids in the neighborhood, they may have a behavioral problem.⁴

Behavioral problems are one of the growing problems among school children in every society. Studies conducted both in India and abroad ^{5 6 7 8} revealed an increasing prevalence of behavioral problems in children. A behavioral and emotional disorder, with onset usually occurring in childhood and adolescence come under F90-F98 of ICD 10 classification. Any behavior that disturbs the individual's ability to function adequately will constitute a behavior problem with common manifestations like tantrums, poor peer relationships, sleeping in class, reluctance or refusal to go to school, sleep disturbances, distress for separation, delayed development, fearfulness, nightmares, anxiety, withdrawn behavior, poor scholastic performance etc.¹⁰ Young children with behavioral problems are

at a greater risk of developing psychiatric disorders in later life and contribute disproportionately to the substantial social and economic burden attributable to mental health problems in the community.^{11 12}

Early intervention and treatment may prevent a child's emotional or behavioral difficulties from worsening and lessen some of the negative outcomes.¹³ Because these disorders have a good prognosis if treated at their onset, early identification and referral for appropriate care provides an excellent opportunity to improve the mental health of populations. It will be much cost effective, as it will prevent further deterioration; adult treatment and rehabilitation programs are much more expensive. However, early identification and differentiation of such behaviours is challenging due to the complex and slow rate at which these behaviours manifest and the high overlap of diagnostic categories. Moreover many of the problem behaviours evident during this period are, to some extent, normative and simply reflect developmental changes and stressors.

There are many tertiary care centres which attend to mental illness in hospital setting. They are therapeutic in nature and aim to treat and rehabilitate back to society. However, large gap exists in the area of prevention, mental health promotion and early intervention programmes. The researcher is hence strongly motivated and convinced to assess the behavioral problems in school going children with a view to improve the health consciousness of the community, as screening for behavioral problems targeting this age group at the community level would enhance the early recognition and referral for appropriate care.

MATERIALS & METHODS

The present study was aimed to assess and compare the behavioral problems of children ageing 6-10 years of working and non-working mothers. A descriptive research design with cross-sectional measurement approach was adopted. All mothers having children aged 6-10 years were included in the study and they were selected from different urban communities across Kothamangalam Municipality, Kerala state. A list of the target population was made and 100 mothers were selected using systematic random sampling. Mothers having children with

developmental problems and psychiatric problems were excluded.

Tool

1. Socio-demographic Performa

Related to mother: Age, religion, marital status, presence of marital discord, socio-economic status, total number of children, number of children below 10 years, disciplinary style, type of family, presence of favorable home atmosphere, educational status, occupation, relationship with neighbors, duration of time spend with child and substance use by spouse.

Related to child: Age, gender, birth order, temperament, type of school, sleeping pattern, attachment and nature of television viewing.

CHILD MISBEHAVIOUR SEVERITY INDEX

This scale was developed by reviewing related scales available and in consultation with the subject experts. It consisted of items intended to assess the severity of misbehavior that children may exhibit as reported by their mothers and has 34 items which were formulated under 5 domains: hyperkinetic problems (4 items), disruptive behavioral problems (18 items), tic disorder (1 item), emotional problems (4 items), and other behavioral and emotional problems with onset usually occurring in childhood (7 items). A summated rating scale format was used with four choices per item ranging from 'Not at all' to 'Always'.

The reliability of these instruments was established in terms of internal consistency. Administration of these instruments on a representative sample (n=10) shown Cronbach's alpha of 0.86.

The data collection was done after obtaining a formal permission from the concerned authorities. A written informed consent was obtained from every study participants. Collected data were tabulated and analyzed using SPSS trial version 20.0.

RESULTS

Demographic characteristics

More than half of working mothers, 26(52.00%) and 32(64.00%) non-working mothers belonged to the age group of 35 years and below. Majority, 37 (74.00%) of working mothers and 36(72%) of

non-working mothers were Christians. All the non-working mothers who participated in the study were married. Most of the mothers in both the groups belonged to middle class family [40(80.00%) working mothers and 32(64.00%) non-working mothers]. Of the 50 working mothers, highest 13(26.00%) were post graduates, whereas among non-working mothers, 25(50.00%) were educated up to SSLC. Sixty two percentage of working mothers and 70.00% of non-working mothers were from nuclear family. Majority 28(56.00%) working mothers and 34(68.00%) non-working mothers reported intimate relationship with neighbors. Forty two of the working mothers and twenty nine of non-working mothers reported substance use by their spouses.

Most of the mothers; 36(72.00%) of working mothers and 37(74.00%) of non-working mothers were lenient towards their child. Majority of mothers in both the groups(98% working mothers & 100% non-working mothers) reported favourable home atmosphere for the growth of their child. Majority of the working mothers 43(86.00%) and non-working mothers 48 (96.00%) reported that they get quality time to spend with their child. Moreover, 48(96.00%) working and 49(98.00%) non-working mothers assisted their children in studies. Most of the working mothers 39(78%) and only 26(52.00%) of non-working

reported the temperament of child as easy. Regarding the type of school, the child is attending, majority were in government school in both the groups [44(88.00%) of working and 39(78.00%) of non-working mothers].

ASSESSMENT OF BEHAVIORAL PROBLEMS

None of the mothers in both the groups reported behavioral problems among children as moderate or severe. However, majority of mothers 49(98.00%) working and 48(96.00%) non-working mothers reported mild behavioral problems. Very insignificant number i.e., only 1 (2.00%) of both working and non-working mothers reported no behavioral problems.

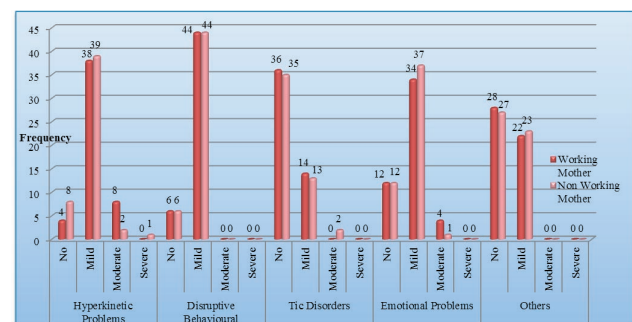


Figure 1: Frequency Distribution of Domain Wise Assessment of Degree of Behavioral Problems

Domain wise comparison of behavioral problems of children in working and non-working mothers

Table 1: Comparison of behavioral problems (n=50+50)

Domains	Working mother	Non-working mother	MD	t value	p value
	Mean \pm SD	Mean \pm SD			
Hyperkinetic Problem	2.42 \pm 1.77	2.58 \pm 1.83	-00.16	-00.444	00.658
Disruptive Behavioral Problem	4.58 \pm 3.34	4.22 \pm 3.19	00.36	00.550	00.583
Tic Disorder	0.34 \pm 0.56	0.28 \pm 0.45	00.06	00.590	00.556
Emotional Problem	1.70 \pm 1.45	1.62 \pm 1.66	00.18	00.404	00.687
Other Behavioral Problem	0.92 \pm 1.27	0.74 \pm 1.01	00.08	00.784	00.435
Overall behavioral Problem	9.20 \pm 5.72	10.20 \pm 5.42	00.18	01.052	00.29

Association between Behavioral Problems Score with Selected Demographic Variables

A statistically significant association was found between behavioral problems score and variables

of working mothers like 'Presence of marital discord' ($F=5.47$, $p=0.024$); 'Number of children less than 10 years of age' ($F= 3.84$, $p=0.05$) and 'Age of child' ($F=3.371$, $p=0.012$) and 'Temperament of child' ($F=9.951$, $p=0.003$) at 0.05 level of significance.

Among non-working mothers statistically significant association was found between the behavioral problems score and 'Education of mothers' ($F=2.783$, $p=0.05$), 'Substance use by spouse' ($F=3.869$, $p=0.05$) and 'Temperament of child' ($F=8.128$, $p=0.006$) at 0.05 level of significance. However no statistically significant association was found between behavioral problem score and other socio demographic variables.

DISCUSSION

In the present study it was found that behavioral problems of children have no significant relationship with maternal employment. Contrary findings were reported in a comparative study by Anitha J, Jayasudha A and Kalaiselvi aimed to assess the level of behavioral problems among preschool children of employed and unemployed mothers in Tamil Nadu.¹⁴ While assessing the association it was found that among working mothers, 'Presence of marital discord, Number of children less than 10 years of age, Age of child and Temperament of child has statistically significant association with behavioral problem score. Whereas, among non-working mothers, 'Education of mothers', 'Substance use by spouse' and 'Temperament of child' has statistically significant association. The findings of the present study have both supporting and contradicting literature reviews. Results are similar to the research conducted by Abolfotouh MA.¹⁵ Contrary findings were reported, in a study conducted by Shepherd CCJ, Li J, Mitrou F, Zubrik SR. to assess the relationship of socioeconomic disparities in the mental health of indigenous children in Western Australia.¹⁶ In another study on 'Identifying emotional and behavioral problems in children aged 4-17 years in US' by Pastor PN, Reuben MA, Duran CR, similar findings were reported. Chan SM in his study to assess the aggressive behavior in early elementary school children and its relations to early parenting, children's negative emotionality and coping strategies reported that authoritarian parenting was significantly and positively correlated with children's aggressive behavior at school ($r(185) = 0.24$, $p < 0.01$).¹⁷

From the study findings, it was concluded that irrespective of the maternal employment, the present day children are having some or the other sort of behavioral difficulties which need a greater

attention from both the parents and teachers involved to prevent further complications. Nurses can be successfully employed in providing specialized care for children with behavioral problems. Utilizing their expertise would imply a paradigm shift in the traditional nursing approach to patient care. It would however, take a long time in strengthening child psychiatric services and research in Kerala.

Ethical Clearance- Mar Baselios College of Nursing Institutional Ethical Committee clearance has been obtained prior to the study.

Acknowledgment- Nil

Conflict of Interest- Nil

Source of Funding- Self

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Clinical Significance of Insight in Psychosis

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ABSTRACT

Insight in psychosis is a multi-dimensional process, unfolding with time. It is domain-specific and influenced by a host of factors (cognitive, emotional, social and cultural) which all interact. In psychiatric context insight is often referred to as the ability of an individual to recognize that one has a mental illness or is experiencing psychopathological symptoms. But, most of the times, the concept of insight is far from being fully understood. Some of these uncertainties reflect the dynamic nature of insight, which implies uncertainty, thereby necessitating the need for therapeutic intervention because higher levels of insight have been shown to correspond to better psychosocial functioning and better clinical outcomes. The acknowledgement of a mental illness by the patient was cardinal to diagnosis of the presence of insight. In this article we have stressed the clinical implications of insight in psychosis with a overview of the various schools of thought, the fact that the quality of patients' lives might be improved by adopting the strategies to improve insight, thereby reducing the relapse and re-hospitalization rates and attitudes to treatment.

Keywords: *Insight, Psychosis, Relapse, Re-hospitalization & Clinical Outcomes.*

INTRODUCTION

Insight has implications for and impact on the patient's life, functioning, and on treatment compliance. Insight is a relevant focus of intervention for people with a range of mental illnesses and most research in the area has focused on its relevance to the relapse of illness. Higher levels of insight is found to have a positive co-relation with better psychosocial functioning and distinct clinical outcomes. It has been suggested that identity, quality of life, and a sense of control are the clinching factors in shaping the explanatory models which people develop to understand the experience of mental illness. If these factors are relevant to insight, they could be targeted for psychosocial intervention, which would in turn leads to decreased relapse rates and improved socio-

occupational functioning in patients with psychosis.

INSIGHT IN PSYCHOSIS – DEFINED

Insight in psychosis is generally defined as an abstract concept that involves a clear grasp or understanding of meaningful relationships within a situation. When used in the context of severe psychiatric disorders such as psychosis, it relates to the individual's understanding of his or her illness or the motivation underlying the individual's own behaviors. At the most fundamental level, poor insight in psychosis has been described as a lack of awareness of having an illness, of the deficits caused by the illness, the consequences of the disorder, and the need for treatment.¹¹

In order to be fully insightful, one need to have a clear, logical, and integrative intelligence, with full use of cognitive functions and without the distortions of thinking that a disturbed mood or defensiveness might create. Grades of insight ranging from complete denial to true emotional insight have been suggested.

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Another view of insight refers to the correct attitude to morbid change in oneself and the realization that the illness is related to psychological disturbances.

MULTI-DIMENSIONAL PERSPECTIVES OF INSIGHT

Insight has been widely accepted as a unidimensional view of individual's awareness, understanding and recognition of one's own illness. This traditional unidimensional view of insight has been replaced with recent multidimensional perspectives. Three dimensions of insight have been recognized,

- (i) Awareness of mental illness,
- (ii) Ability to re-label psychotic experience as abnormal, and
- (iii) Seeking medical treatment.

Consequent upon the criticisms such as inclusion of lots of western concepts of diseases and not addressing the insight in lieu of the patients perception of illness, the following changes are being proposed to the dimensions of insight.¹¹

"Proposed changes to dimensions of Insight" ³

Current dimensions of insight	Proposed dimensions of insight
Awareness of mental illness	Awareness of non-visible change in body or mind and its relation to their illness
Re-label experience	Re-label experience
Seek medical treatment	Need restitution and seeks any forms of available treatment

SCHOOLS OF THOUGHT PERTAINING TO INSIGHT IN PSYCHOSIS ¹¹

The 3 main schools of thought regarding insight in patients with psychosis are as follows,

1. The Psychological Defense Model,
2. The Cognitive Deficit Model,
3. The Neuropsychological Deficit Model

The Psychological Defense Model: This model is existing since 1990 and the Assumption was that failure to recognize or admit to a psychiatric illness was a conscious (or sub-conscious) refusal rather than an inability. It was further assumed that knowledge of the illness did exist at some cognitive level.

The Cognitive Deficit Model: This model acknowledges a slightly more organic etiology to impaired insight. The Cognitive Deficit Model suggests that poor insight is a result of progressively degenerating cognitive functioning over the course of the illness. The neurological basis of impaired insight in first-episode schizophrenia patients has been already established.

The Neuropsychological Deficit Model: This model was developed out of an identified similarity between the symptoms of poor insight and a neurological condition called anosognosia. Patients afflicted with anosognosia share striking similarities with psychiatric patients who have impaired insight.

FACTORS INFLUENCING INSIGHT IN PSYCHOSIS ^{3,4}

- Cultural models of illness and health
- General intelligence and knowledge
- Doctor / Nurse - patient relationship
- Symptomatology: lack of insight associated with delusions; preserved insight associated with depressed mood
- Executive function deficits
- 'Denial' - motivation, preservation of self-esteem,
- Avoidance of stigma
- Personality Traits - "Compliance non-conformity"

CLINICAL SIGNIFICANCE OF POOR INSIGHT IN PSYCHOSIS

The various clinical aspects of Insight in psychosis are, ¹

- Insight and severity of illness in psychosis
- Insight and symptoms in psychosis
- Insight and treatment adherence
- Insight and quality of life
- Insight and functional outcome

Poor insight is among the best predictors of non-

adherence to treatment. Poor insight also predicts a poorer course of illness (e.g., increased number of relapses and hospitalizations and deteriorating work performance, social skills, quality of social relationships, and other measures of illness course and

recovery). Few clinical symptoms have such a profound effect on the treatment of schizophrenia as does poor insight, but clinical correlates of lack of insight are not well understood. Poor insight is associated with inferior work quality, work habits, cooperativeness, personal presentation and medication adherence, as well as increased duration of treatment.⁷

Patients with schizophrenia and bipolar disorders have poorer insight than do patients with schizoaffective disorder or unipolar psychotic depression. In particular, patients with bipolar disorder who lack insight have a high risk of medication nonadherence. Patients with good insight tend to perform better on global and specific measures of functional outcome.⁸ Although initially described as a psychological phenomenon, poor insight has shifted to more neurologically based understandings of self-awareness deficits. The lack of awareness of illness in patients with psychotic disorders may be primarily due to poor verbal memory and cognitive disorganization.

The association between poor insight into illness and adherence to medication has been demonstrated independently from other patient demographic and clinical characteristics. Both delusions and lack of insight can be understood as reflecting a failure in self-knowledge, that is, a failure in an individual's ability to think about his or her own mental state results in delusion. Relative to insight, self-deception to retain a fragile self-esteem may lead to both grandiose delusions and a denial of mental illness.^{7,10}

RELATIONSHIP OF INSIGHT TO TREATMENT OUTCOME IN PSYCHOSIS

Insight is believed to correlate with better long-term functioning. The absence of insight was considered an important part of all psychoses including schizophrenia. It has been estimated that nearly 50% to 80% of patients diagnosed with major

psychosis, such as schizophrenia have shown partial or total lack of insight into their mental disorder.² Consequently, this poor insight can be associated with a limited understanding of the connection between appropriate and effective treatments for psychotic disorder and the optimal recovery though better treatment outcome.

Patient's inability to completely appreciate the severity of their disorder and the related risks of medication non adherence are associated with a great risk for relapse. A wide range of research undertaken indicates that insight is negatively correlated with illness severity and chronicity; that is, the more severe and enduring one's illness is, the less insight one has about that illness.⁵ Psychotic patients with good insight showed greater improvement after long-term hospitalization; those with poor insight were more frequently re-hospitalized. Since insight is associated with both better treatment compliance and improved outcome, either

(a) compliance as demonstrated by consistent treatment may mediate a better course of the illness, or

(b) the type of disorder that reduces the patient's capacity to have insight and compliance with

treatment may be associated with a more severe or progressive type of illness.^{3,4}

The long-term relationship between insight and treatment outcome is likely to be mediated by symptom severity. Higher baseline insight is associated with less symptoms and fewer re hospitalizations at follow-up.

STRATEGIES TO IMPROVE INSIGHT IN PATIENTS WITH PSYCHOSIS

Measures have been made to devise strategy to improve insight in psychotic patients which in turn would be expected to improve adherence to medication.

A "Brief Pragmatic Psychological Intervention (BPPI)" namely "Compliance Therapy" aims at improving insight, attitudes to illness and treatment, and medication compliance in acutely psychotic patients. The intervention employs a collaborative approach with patients, and draws from the

principles of motivational interviewing as well as cognitive techniques. It was also postulated that one of the factors related to insight and compliance prior to discharge was whether or not compliance therapy was given.⁶

“Short Insight focused CBT (SICBT)” has demonstrated significantly greater improvement in insight into compliance with treatment and ability to relabel their psychotic symptoms as pathological. Moreover, the efficacy of cognitive behavior therapy for improving medication adherence seems to be more promising than that of traditional individual psychoeducation approaches, which have been consistently disappointing in their failure to show adherence.⁵

“Survival skills training and workshop” has proven that families who complete the survival skills training and workshop are better equipped to help their ill family member understand his or her experiences as being illness related and to acknowledge this for themselves. They are also in a position to help other families and unrelated patients to utilize and process this information in the context of a supportive group environment.⁹

“Re entry” is one of the strategies for improving insight, where the main content areas include medication compliance, helping the patient avoid the use of street drugs/alcohol, the general lowering of expectations during the occurrence of negative symptoms and an increase in the tolerance of these symptoms.¹⁰

Acknowledgement: Nil

Ethical Clearance – As this is a review, ethical clearance has not been obtained.

Source of Funding – Self

Conflict of Interest – Nil

CONCLUSION

Hence the level of insight plays a pivotal role in determining the better clinical outcomes of the patients with psychosis. Diligently planned interventions to improve the insight in psychotic patients would certainly result in the substantial decrease in the rates of relapse and the incidence of re-hospitalization.

Though a vast array of research studies have been undertaken exploring the relationship of insight to major factors of clinical outcomes in psychosis, interventional studies experimenting the various above mentioned strategies would still be more beneficial in upheaving the quality of life of patients with psychosis.

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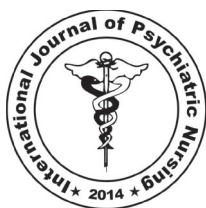
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