

CLINICAL CARE PATHWAYS FOR MENTAL HEALTH CARE: A FEASIBILITY STUDY

Mrs. Lairikyengbam Sushila Devi^{1*}, Dr. Mrs. Vaishali Tendolkar², Dr. Mrs. Jaya Gawai³

1. Ph.D. Scholar, Datta Meghe Institute of Higher Education and Research (Deemed to be University) Smt.Radhikabai Meghe Memorial College of Nursing. Sawangi (Meghe) Wardha, Maharashtra, India.

Assistant Professor, Bharati Vidyapeeth (Deemed to be University) College of Nursing, Pune.

- 2. Professor, Dept. of MHN, Principal, Datta Meghe College of Nursing, Wanadongri, Nagpur 441110, Maharashtra, India.
- 3. Professor, Dept. of MHN, Datta Meghe Institute of Higher Education and Research (Deemed to be University). Smt.Radhikabai Meghe Memorial College of Nursing.

 Sawangi (Meghe) Wardha.

*Corresponding Author

ABSTRACT

Introduction: World Health Organization reported that mental and behavioural disorders account for about 12 percent of the global burden of diseases. In this study, researcher evaluated the efficacy for clinical care pathways for mental health care admitted ina tertiary care hospital in Wardha,India.

Objective of the study is: To evaluate the feasibility of clinical care pathways for mental health care.

Methodology: Research design adopted was one group pre test post test design. Sample size taken for the study was 10 samples. Populations of the study are the patients with common mental disorders Intervention implemented for the study was GMHAT-PC critical care pathways. Setting taken was Psychiatric unit of a tertiary care hospital in central India.

Result: The result shows Quality of care among patients with mental disorders improved remarkably after the implementation of clinical care pathways (p=0.05) and they expressed moderate level of satisfaction. GMHAT-PC critical care pathways checklist score significantly improve among nurses after training and continued to improve at every 15th day in three phases

.**Conclusion:** Implementation of critical care pathways is feasible and accepted by nurses working in psychiatric care units. Minimum training in GMHAT-PC clinical care pathways improved the patient satisfaction and quality of care to patients with common mental disorders.

Keywords: critical care pathways, common mental disorders, quality of care, satisfaction

INTRODUCTION

World Health Organization reported that mental and behavioural disorders account for about 12 percent of the global burden of diseases. A shortage of mental health workers has increased over time and due to limited availability of mental health education and awareness, it has created a healthcare crisis. Mental illness is still widely stigmatized in India, and many people with mental health issues are reluctant to seek help due to the fear of being judged or discriminated against. This makes it difficult to raise awareness about mental health and to encourage people to seek treatment. In India, there is a shortage of mental health professionals with only one psychiatrist per 100,000 people and one mental health worker per 10,000 people. And, in world 970 million people struggle with some mental illness or drug abuse. 1 in 4 people will be affected by a mental illness at some point in their lives. 14.3% of deaths worldwide, or approximately 8 million deaths each year, are attributable to mental disorders.

According to global burden of diseases study across states of India article published on Feb, 2020. The study assessed the heterogeneity and time trends of mental disorders across the states of India. They grouped states on the basis of their Socio-demographic Index (SDI), which is a composite measure of per-capita income, mean education, and fertility rate in women younger than 25 years. They also assessed the association of major mental disorders with suicide deaths& calculated 95% uncertainty intervals (UIs) for the point estimates. The result shows that one in seven Indians was affected by mental disorders of varying severity in 2017. The proportional contribution of mental disorders to the total disease burden in India has almost doubled since 1990. Substantial variations sexist between states in the burden from different mental disorders and in their trends over time. These state-specific trends of each mental disorder reported here could guide appropriate policies and health system response to more effectively address the burden of mental disorders in India.³

NEED OF THE STUDY

Mental health problems are one of the leading causes of disability in the world. Early and accurate detection of mental health problems, followed by an appropriate treatment and management, may help to reduce the global burden on health and social care systems caused by mental disorders. In India, at a given point of time, nearly 15 million people suffer from serious psychiatric illnesses, and another 30 million from mild/moderate psychiatric problems. The disability associated with mental disorders stops people from working and engaging in other creative activities.²⁹

Numbers of steps are needed to reach out people in the communities who suffer from mental illness. Firstly, it is important to raise awareness amongst public, doctors and other health care staff of the high prevalence of mental illness. Secondly and more importantly, emphasize that mental illness can be treated and therefore all attempts should be made for early detection and intervention. Thirdly, we need to improve professionals and other health workers' knowledge and skills in detecting mental illness, through training and education, about mental illnesses commonly

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seen in the community so that they incorporate mental health assessment as integral part of their

day to day work.

This makes it to spread awareness and educate anyone and everyone who is related to health services which can be possible by seeing the result of contemporary care and compare with

GMHAT-PC critical care pathways and assess the quality of care and satisfaction among patients

with mental disorders for easy, systematic care and better compliance to treatment.

AIM OF THE STUDY

• Aim of the study is to intervene GMHAT-PC critical care pathways.

• To assess the outcomes in improvement towards quality of life and satisfaction among

common mental disorders.

• Staff nurses utilize the GMHAT-PC critical care pathways in providing patients care and

improve the standards

RESEARCH METHODOLOGY

Objective:

To establish the feasibility of Clinical care pathways for mental health care.

Researcher conducted single arm interventional study (one group pre test post test design). There were several reasons for conducting this feasibility study, including identifying the feasibility of

process such as recruitment, retention and participation of patients understanding challenges in implementation of the intervention and estimating the effects and variance of the intervention. This

study was conducted at Tertiary care hospital in Wardha, India with proper permission from concerned ethical committee of the college and from the hospital authority to involve their patients

from psychiatry unit as sample and nurses from psychiatry ward as implementor.

Inclusion criteria:

• Adults of 18 years and above.

• Both male and female patients with common mental disorders

• Patient who can understand and converse in Hindi or English or Marathi.

Exclusion criteria:

• Patient who are critically ill and uncooperative.

Sample Size: 10

10

Method of Data Collection:

The patients with common mental disorders were recruited after fulfilling the inclusion criteria. Prior consent from patient's caregivers was taken. The group received care for the first seven days and then supervised for the next two months. The post test observations were recorded during the intervention on 15th day.

Researcher analyzed demographic variables by descriptive statistics. To establish the feasibility in terms of effectiveness of clinical care pathways, t-test is used.

Written informed consent was obtained from relatives after a detailed explanation of the concept and purpose of study. The study was approved by the Institutional Ethical Committee of Datta Meghe Institute of Medical Sciences (Deemed to be University).

RESULTS

Section I:

Deals with analysis of Demographic characteristics

Majority 40% are in age group of 18 to 30 years,30% are 31 to 40 years and 30% are 41 to 50 years.80% are male and 20% are female.70% are married and 30% are single. Majority 50% are from primary education,30% from graduation and 10% from secondary and post graduation.40% are labor, 30% are from services,20% from business and 10% are unemployed. Majority of the family income are from Rs15001-20000 which was 70%, Rs.5000-10000 of 20% and Rs.10001-15000 of 10%. Supporting system are from family which was 100%. majority duration of illness are 4years and above of 60%,3 to 4 years of 30% and 1 to 2 years of 10%. Majority 80% don't have past medical history and 20% have past medical history(hypertension, diabetis). 100% don't have past surgical history. Majority of 80% don't have family history of psychological problem and 20% have namely anxiety and depression. Majority 80% don't have history of relapse and 20% have history of relapse in once and twice.

SECTION II

n=10

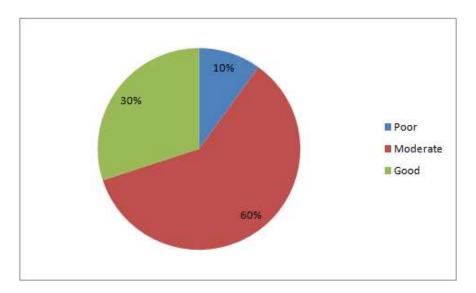


Figure 1: shows the quality of care and satisfaction among patients with common mental disorders before the intervention in psychiatry units.

Among the participants, 10% of the patients with common mental disorders expressed poor quality of care, 60% of them had a moderate quality of care and 30% of them had a good quality of care before clinical care pathways.

SECTION III

Table 1: shows quality of care and satisfaction among patients with mental disorder after the implementation of clinical care pathways.

n-10

	Experimental				
Test	Mean	SD	T	df	p-value
Postest1	5	9.6	3.64	18	0.001
Posttest2	11	9.3	3.53	18	0.001
Posttest3	20.2	9.9	4.34	18	0.000

The researcher applied a paired t-test for the comparison of changes in quality of care among patients with mental disorders in the experimental group. In posttest 1, the average changes in quality-of-care score was 5. In posttest 2, the average change in quality-of-care score was 11. In posttest 3, the average change in quality-of-care score was 20.2. T-values for this test were3.64 in posttest-1, 3.53 in posttest-2 and 4.34 in posttest-3 The corresponding p-values were small (less than 0.050) in post-tests (posttest-1, posttest-2 and posttest-3). The implementation of clinical care

pathways is significantly effective in improving the quality of care among patients with mental disorders.

	Experimental				
Test	Mean	SD	T	df	p-value
Postest1	3	8.3	0.10	18	0.460
Posttest2	3.3	8.1	-0.23	18	0.409
Posttest3	2.1	8.6	-0.53	18	0.302

The researcher applied a paired t-test for the comparison of changes in satisfaction among patients with mental disorders in the experimental group. In posttest 1, the average changes in satisfaction score was 3.3. In posttest 3, the average change in satisfaction score was 3.3. In posttest 3, the average change in satisfaction score was 2.1. T-values for this test were 0.10 in posttest1, 0.23 in posttest2 and 0.53 in posttest3. The corresponding p-values were large (greater than 0.050) in posttests (posttest1, posttest2 and posttest3). The average increase in satisfaction was not significantly different. The implementation of clinical care pathways is not significantly effective in improving satisfaction among patients with mental disorders.

SECTION IV

Table 2 shows Global mental health assessment tool, critical care pathways checklist scale at different time points.

Test	Experimental		T	df	p-value
	Mean	SD			
Pre test	16	3.1			
Post test 1	29	2.5	12.59		0.00001
Post test 2	30	2.1	14.51	2	0.00001
Post test 3	32	1.9	14.92		0.00001

The researcher applied a two sample t-test for the comparison of changes in knowledge and skills among nurses in providing care by using GMHAT-PC critical care pathways. In post test 1, the score was 29, in post test 2 the score was 30 and in post test 3, the score was 32. T values for this test were 12.59 in posttest 1.14.51 in posttest 2 and 14.92 in posttest 3 with 2 degree of freedom. The corresponding values were small (less than 0.050) in post test 1, 2 and 3. The implementation of clinical care pathways is significantly effective in improving knowledge and skills among nurses.

The implementation of clinical care pathways is significantly effective in improving the quality of care among patients with mental disorders.

Nurses showed significant improvement in knowledge and skills receiving training on GMHAT-PC critical care pathways.

DISCUSSION

This study established the feasibility of GMHAT-PC critical care pathways for the care of mentally ill. The result showed a significant improvement in quality of care and moderate level of satisfaction among patients with common mental disorders. A significant improvement in GMHAT-PC critical care pathways scores among nurses who received training program is also seen.

A study review on Clinical pathway modeling which support Clinical pathways are an effective and efficient way to standardise the progression of treatment, which in effect can reduce the pressure and problems surrounding subject areas that decision makers need to address., to support patient care and facilitate clinical decision making. This literature review proposes taxonomy of problems related to clinical pathways and explores the intersection between Information Systems (IS), Operational Research (OR) and industrial engineering. A structured search identified 175 papers included in the taxonomy and analysed in this review. The findings suggest that future work should consider industrial engineering integrated with OR techniques, with an aim to improving the handling of multiple scopes within one model, while encouraging interaction between the disjoint care levels and with a more direct focus on patient outcomes. Achieving this would continue to bridge the gap between OR, IS and industrial engineering, for clinical pathways to aid decision support.¹²

A study on Pathways to Mental Health Services and Perceptions about the Effectiveness of Treatment. The gap between need and effective treatment for mental health problems continues to be a challenge for researchers and policymakers. Much of the attention has been on differences in treatment rates, with insufficient attention to variation in pathways that people take into treatment. Individuals may choose to seek help but may also be substantially influenced by others or coerced into care. The chances of each type of pathway are influenced by social characteristics and may shape perceptions of effectiveness of care. This paper investigates variation in pathways into care and perceived effectiveness of care. It also examine whether choice or coercion into care are associated with whether individuals perceive care as effective and if severity of illness moderates this relationship. Persons who independently sought mental health care were more likely to rate treatment as effective compared to persons ordered into care. Among people with severe mental illnesses, the probability of rating treatment as effective is lowest among those who were ordered into care. Entry into mental health care is not sufficient for closing the treatment gap as the outcomes vary as per the severity.

16

CONCLUSION

The outcomes in quality of care have significantly improved due to clinical care pathway and moderate improvement insatisfaction among patients with mental disorders. Comparison of post intervention outcome of intervention group at every after 15 days shows significant difference. And, there is a significantly positive correlation between quality of care and satisfaction among patients with common mental disorders. And, nurses shows significant improvement in knowledge and skills receiving training on GMHAT-PC critical care pathways.

The results of this study indicate that it shows how the use of a tool such as GMHAT/PC critical care pathways could support healthcare workers in their practice, facilitating more accurate diagnoses and quality care and hopefully reducing the burden of mental health disorders for the individual. Future research should assess the value of semi-structured interview tools, such as GMHAT/PC, in developing trainee healthcare workers' skills in mental health assessments, most particularly for common mental health disorders which cause significant disability for a large proportion of Society. It is helpful tool in correct diagnosis and prompt treatment towards mental illness which promote in improving towards quality of care and satisfaction.

Availability of data and materials:

Data generated and analyzed during the current study are not publicly available, but are available from the corresponding author upon reasonable request.

Conflict of Interest: The authors certify that they have no involvement in any organization or entity with any financial or non-financial interest in the subject matter or materials discussed in this paper.

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