Original Article

Development and Validation of Clinical Schedule for Primary Care Psychiatric Nursing (CSP-N) for Primary Care Nurses

James Paul, Radhakrishnan Govindan, Narayana Manjunatha[1], Channaveerachari Naveen Kumar[1], Suresh Bada Math[1]

Department of Nursing and [1]Psychiatry, NIMHANS, Bengaluru, Karnataka, India

Abstract

Introduction: As per the World Health Organization's mental health report for 2022, nearly a billion people have mental health issues, and 82% of them are in low and middle-income countries where mental health services are largely absent. For the successful integration of mental health into primary health care, proper training and education of primary care professionals are mandatory. Primary care nurses are in an excellent position to screen, identify, dual collaboration for treatment planning/referral, and follow-up of persons with mental illness (PMI), but they often lack the confidence and competence to tackle mental health problems. The study aimed to develop and validate the clinical schedule for primary care psychiatric nursing (CSP-N). **Materials and Methods:** It is conducted in two phases: the development and validation phases. An extensive literature search has been conducted, and the ten themes derived from the two-focused group discussions and three-direct one-to-one interviews and input from mental health experts were used to design the CSP-N. The CSP-N was checked for content validity by a panel of 17 experts using the item-level content validity index (I-CVI) and the scale-level content validity index (S-CVI). **Results:** The draft version 1 of the CSP-N showed high content validity for individual items (I-CVI range: 0.82 to 1.00) and high overall content validity (S-CVI = 0.95), and suggestions from the experts were incorporated. The CSP-N was developed in four modules. The single-measure two-way mixed absolute agreement ICC value was calculated (for 32 subjects) for the reliability test, and the ICC value was 0.97 with a 95% CI (0.94, 0.99). **Conclusions:** Using an iterative approach, the development and validation of the CSP-N demonstrated high I-CVI and S-CVI for screening and identification, dual collaboration for the treatment plan, referral, and follow-up of a person with mental illness by the nurses in the community.

Keywords: Clinical, Mental illness, Primary care nursing, Psychiatric nursing, Schedules, Screening, Validation

Introduction

As per the National Mental Health Survey of 2016, the prevalence of mental illness in India is 10.6%, and the treatment gap ranges from 60% for common mental disorders to 90% for substance use disorders.[1-3] The mental disorders include common mental disorders (CMDs), substance use disorders (SUDs), and severe mental disorders (SMDs) such as schizophrenia and mania.[4-6] The burden of mental disorders accounts for 25.3% to 33.5% of all disease burden, and the treatment gap for severe mental disorders is 76% to 85% in low- and middle-income countries, respectively, due to the scarcity of specialist human resources and the large inequities in resource allocation.[3,7]

In lower and middle-income countries, different cadres of primary care workers, like doctors, nurses, and other paraprofessionals without any specialization in mental health, are effective in providing essential mental health care in the community.[3,8,9] The National Mental Health Survey 2016 recommended that all the states of India focus on human resource management by building the skills and knowledge of doctors, nurses, ASHAs, and others and hand-holding them in identifying and managing mental health issues at the primary care level.[2,8]

The primary care nurses are the people who reach the patients who are not attending the PHC, and training them to identify the patients with mental health issues at the community level and refer them for treatment can bring a significant change.

Access this article online

Quick Response Code:

Website: www.ijcm.org.in

DOI: 10.4103/ijcm.ijcm_721_22

Address for correspondence: Dr. Radhakrishnan Govindan, Department of Nursing, NIMHANS, Bengaluru - 560 029, Karnataka, India.
E-mail: dr.rk76@hotmail.com

How to cite this article: Paul J, Govindan R, Manjunatha N, Kumar CN, Math SB. Development and validation of clinical schedule for primary care psychiatric nursing (CSP-N) for primary care nurses. Indian J Community Med 2023;48:443-52.

Received: 21-08-22, **Accepted:** 06-04-23, **Published:** 30-05-23

However, the nurses working in PHCs' have to address all 23 programs, and they find it very difficult to give more focus to psychiatry based on the currently available standard MSE and history collection formats.[3,7,10]

In dual clinical collaboration (DCC), the nurse decides what kind of care their patients require and then collaborates with the health team accordingly, which makes health services easily accessible and untroubling to patients, helps to understand their individual needs, and strengthens the overall healthcare system.[11] The nurses' scope in the DMHP can double up as counsellors and community health workers as social workers to help access social welfare benefits and tackle other families' psychological issues.[12]

The CSP-N is an integrated module that helps primary care nurses do a rapid screening and identify, refer, and follow-up with a person with mental illness (PMI). CSP-N version-1 consists of a screening and identification of mental illness tool (Appendix-1) using culturally appropriate twenty-three screening questions, diagnostic guidelines for the provisional impression for psychiatric disorders adapted for use in primary care settings, and nursing management guidelines for CMD, SMD, IDD, and SUD, including handling side effects of medication and the red flags for the referral.

This study aimed to develop and validate the CSP-N for the primary care nurses to screen, identify, and provide dual collaboration of care for the treatment, referral, and follow-up of the person with mental health problems.

Materials and Methods

The CSP-N was developed and validated in four stages: 1) an extensive literature search; 2) focused group discussion and in-depth interviews with primary care nurses and experts; 3) development of the CSP-N Module; and 4) stabilizing the face and content validation, as explained in Figure 1.

1. Literature Search: An extensive literature search was done using various search MeSH terms such as *screening, identification of mental illness, primary care nurse's role, and management of the mentally ill* from several databases such as PubMed, PsycINFO, Science Direct, and CINAHL for studies related to the role of the primary care nurse in screening and identification, referral, and management of a PMI. The researcher has referred to 182 studies and, in those, reviewed 57 various studies related to primary care nurses' role in mental health issues.

2. FGDs and in-depth interviews with nurses and experts: After the literature review, a draft of the CSP-N was prepared in line with the clinical schedule for primary care psychiatry (CSP) for the medical officers and discussed individually with several mental health experts from the multidisciplinary team. Two FGDs were done with DMHP nurses (12 psychiatric nurses), primary care nurses (six field nurses) from Jigani PHC, and three in-depth direct interviews for 30 minutes each with the primary care nurses from Gottigere PHC [Table 1]. The sample size for the number of FGDs and in-depth interviews was decided upon data saturation during the qualitative phase.

The theme analysis was done using ATLAS-ti software, and the major themes raised from the FGD and direct interviews were used to develop the CSP-N. The major themes identified are explained in Table 2.

Development of CSP-N: Based on the review of the literature and the inputs from the FGD and in-depth interviews and discussions with the experts on the role of primary care nurses in screening, identification, referral, and follow-up of a person with mental health issues, the CSP-N developed under four modules explained in Figure 2.

Validation of CSP-N: The researcher approached 28 mental health experts from three universities, three mental health institutions, two medical colleges, and one community health center across India. Out of 28, only 17 mental health

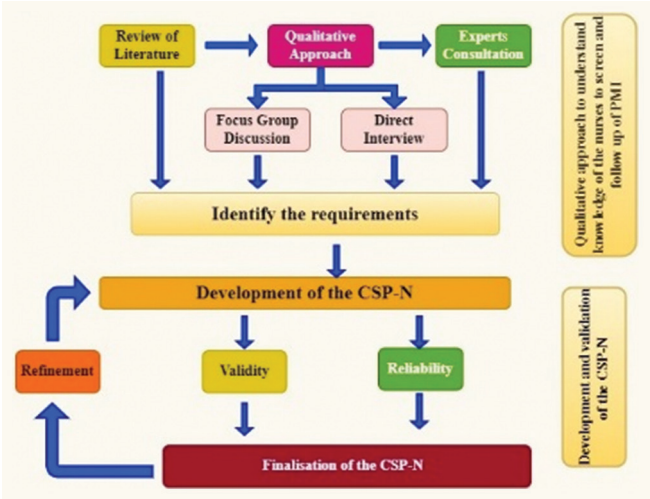


Figure 1: Stages of CSP-N development

Table 1: Socio-demographic data of the participants for the FGD and in-depth interview (*n*=21)

Variable		Mean (S.D.)
Age in years		32.95 (5.05)
Education in years		15.67 (2.06)
Experience in psychiatry (in years)		0.81 (0.87)
Variables	**Category**	**Frequency (%)**
Gender	Male	3 (14.3)
	Female	18 (85.7)
Educational Qualification	ANM	7 (33.3)
	GNM	11 (52.4)
	BSc Nursing	3 (14.3)
Cadre	DMHP Community Nurse	6 (28.6)
	DMHP Psychiatric Nurse	6 (28.6)
	Primary Healthcare Officer	6 (28.6)
	Nursing Officer	3 (14.3)

*ANM: auxiliary nurse midwife, GNM: general nursing and midwifery and DMHP: district mental health program

Table 2: Major themes, subthemes, and verbatim of respondents during the FGDs and interviews (*n*=21)

Themes	Subtheme	Verbatim
1) Understanding the need for mental health care in primary health care.	Unwillingness to seek treatment in mental hospitals. Early identification can reduce the treatment gap. Stigma and misconceptions lead to delay in availing treatment. Lack of specialists in the remote areas.	*"Even if we ask them to take the patient to NIMHANS, many are not willing or agree to take the patient…. They are worried that if it is known to someone in the village, it will spoil their life" (D.I-3, N.O-6).* *"Our people are more interested in going to "Devasthana and Masjid" than to the hospital." (C.N-4, C.N- 5).*
2) Nurses' experience in screening, referral, and follow-up of PMI.	Lack of confidence in identifying a PMI. Lack of motivation to do the screening and extra work. Able to identify serious mental illness.	*"… very busy with our regular work related to the RCH programme and not looking much at the mental health aspects …"(C.P-3, C.P-5, D.I-2).* *"….focus only on patients who are…very violent or depressed… not taking food properly…. We are seeing more common problems like alcoholism and wandering behaviour."(DI-3, CN-5, CP-4).*
3) Confidence and educational preparedness to manage mental health problems.	Fewer opportunities exist during diploma in nursing. Lack of knowledge on mental illness and its management.	*"… just GNM qualified, and … very little theoretical knowledge about mental health disorders… can identify the patients who have some serious problems: violent behaviour, very odd Behaviour, wandering, talking and smiling to oneself or some hallucinations…. we do not know much about other illnesses, and not get much time to focus specifically on mental health aspects…."(NO-3).*
4) Management of PMI.	Medication adherence and compliance with treatment. Handling the side effects of medication. Handling expressed emotions. Handling psychiatric emergencies	*"……they will stop the medication once the symptoms are reduced and … family members also will not give much focus to give the medication correctly."(CP-3, CP-6, DI-2, NO-4, NO-6).* *"….It is easy to handle the patients, but it is very difficult to convince the parents…They create more issues."(CP-3, NO-5).* *"We can just give some counselling to the family members and encourage them to go to the hospital and give the medicine properly…"(NO-6).*
5) Barriers in routine screening.	Frustration due to the workload. Lack of knowledge on mental illness and its management. Personal, organizational, and job-related barriers. Time constraints lead to the neglect of mental health aspects.	*"As a part of the MCH program… so much work to do…. mainly focusing on the MCH and RCH programs…"(NO-1, NO-3).* *"submit various reports to the government on a weekly and monthly basis… and otherwise we will get scolded…."(NO-1, NO-4, DI-3).* *"All the programmes end up with the primary care nurses …."(NO-3, DI-2).* *"….focus on mental health only on Tuesdays as a part of the Manochaithanya programme. not getting enough time to focus much on the mental health …."(NO-3, NO-6).*
6) Role of nurse in the prevention of relapse.	Regular follow-up and home visits. Family education on handling PMI. The importance of drug compliance. Teach the family about the early signs of relapse.	*"….follow up will be done by the ASHA workers and . monitor for any worsening of symptoms…. If not improved, then ask them to revisit the PHC for consultation…" (NO-3).* *"…educating the family members about the illness … Give the medication properly and do not stop without advise….".(CP-4, CN-2, NO-6).* *"….Once the illness started, only the family members would understand that the patient was not taking medicine. …." (CP-4, CP-6, NO-5)*
7) Referral services.	Confirm the referral through ASHA. Refer to the DMHP psychiatrist if there is no improvement.	*"We are not specifically looking for any mental health issues… link with ASHA workers…. If there are any cases in their locality… do a home visit to. evaluate the main complaints… minor complaints will be given medicines… if unable to solve the problem, refer to the PHC … Do a follow-up with the ASHA workers .We rarely get mental health problems"…. (DI-1, NO-4).*
8) Empowerment of nurses.	Express the need for guidance. Showing interest in training. Enhance the confidence level in handling PMI.	*"Unable to focus … due to our lack of knowledge…"(NO-5).* *"If we get some training, it should be very useful for us…. less knowledge on what to do if we get any cases."(CN-1, DI-2)* *"….Got some basic training on myths and mis- concepts about mental illness from Dr. Adarsh, DMHP Psychiatrist"(NO-1, NO-4, DI-3).*
9) Support services.	Family and financial support. Supply of free essential drugs in PHC.	*". they do not have money to get even the bus ticket to go to NIMHANS . Sometimes we also feel so helpless and do not know what to do…."(DI-2).* *"Most of the time, the psychiatric medicines are unavailable in the PHCs" (NO-1, NO-2, DI-3).*
10) Components to be included in CSP-N.	Move from general to specific. Special focus on patient and family education and counseling.	*".No time to read big manuals. need simple tips on how to handle them in the community…. no time to do all physical examinations and other things" (CP-3).* *"It is easy to find severe mental illness…."(CP-3, NO-5).* *"…We will say given counselling and family education for the sake of the name. But in reality, nothing has been done…." (CP-3, CN-2, DI-1, DI-2).*

*PMI: person with mental illness, FGD: focus group discussion, RCH: reproductive and child health, MCH: maternal and child health, PHC: primary health center, DMHP: district mental health program, and GNM: general nursing and midwifery course

professionals from the multidisciplinary team sent their comments, and the remaining 11 did not respond [Table 3].

The mental health expert evaluated each item of the CSP-N using a structured questionnaire to determine whether the contents described were applicable. For face validation, the mental health professional gave their opinion on appropriateness and relevancy on a three-point scale (1 = completely meets the criteria, 2 = partially meets the criteria, and 3 = does not meet the criteria) to calculate the I-CVI. The S-CVI was calculated using the average of the I-CVI of each item of the CSP-N.[13,14] After incorporating the suggestions from the experts, CSP-N Module Version 1 was developed. The item-wise content validity index of the CSP-N Version-1 was developed and explained in Tables 4 and 5.

The face validity of the scale was calculated by sending it to experts, and for each item, the item-level content validity index (I-CVI) was computed as the number of experts who gave it a rating of 1 or 2, divided by the number of experts, and the scale-level CVI (S-CVI) was calculated by taking an average of the I-CVI. The S-CVI for the CSP-N was 0.95, very close to 1; it indicated the average proportion of items judged relevant across the 17 experts was 0.95, which is very good.[13,14] The final manuscripts were sent to the experts for evaluation after including all their comments and suggestions.

Figure 2: Modules of CSP-N

Table 3: Socio-demographic data of the experts who validated the CSP-N (*n*=17)

Variable		Experts for content validation Mean (S.D.)
Age in years		39.53 (11.62)
Education in years		24.41 (2.51)
Experience in psychiatry (in years)		10.41 (9.45)
Variables	**Category**	**Frequency (%)**
Gender	Male	8 (47.1)
	Female	9 (52.9)
Occupation	Psychiatrist	6 (35.3)
	Psychiatric nurses	7 (41.2)
	Primary care nurses	3 (17.6)
	Medical Officer	1 (5.9)

Reliability test

The test–retest reliability of the CSP-N was measured through the single-measure two-way mixed absolute agreement ICC for thirty-nine subjects recruited from the PHC. The test was administered through online google forms, and the participants filled out the Google form in the researcher's presence. Thirty-two subjects completed the retest after 15-day intervals through online Google forms. Seven subjects did not complete the retest, so they were excluded from the process. The single-measure two-way mixed absolute agreement ICC value was calculated (for 32 subjects) for the reliability test, and the ICC value was 0.97 with 95% CI (0.94, 0.99). As this ICC value is very close to 1, it indicates that the test–retest reliability of the developed module is very good.

Results

The present study aimed at developing the CSP-N, which helps and guides the primary care nurse to screen, identify, refer, and follow-up with the person with mental health issues, especially with a particular focus on CMD, SMD, IDD, and SUD. Network analysis was done using Atlas-ti version 8, and the themes and categories derived from the codes and quotations from all the transcribed documents grouped by code manager and network analysis helped to identify the common patterns and major themes between the codes explained in Figures 3 and 4.

The ten major themes identified [Tabel 2] from the FGDs and direct interviews were used to frame the domains of the CSP-N and underwent various rounds of revision from various expert groups, including the nurses who work in primary care settings. The I-CVI calculations for the relevancy of each item are explained in Table 4. Most experts agreed on the content prepared for the CSP-N regarding the topic's relevance, organization, and clarity of the content included in the schedule. All the expert suggestions, including the red flags for referral, were incorporated and revised. The item-level content validity index (I-CVI) of the CSP-N ranged from 0.82 to 1.00. The average scale-level content validity index (S-CVI) of the CSP-N is 0.95, which shows high content validity.

It takes approximately 20–30 minutes to screen a person for any mental health issues using the CSP-N, and the comprehensive assessment yields specific targets or goals of counseling that can be tailor-made to suit the person with SMD, CMD, IDD, or SUD. The major strength lies in the scientific method used to develop the CSP-N through the iterative process and the simplified diagnostic criteria for the provisional impression. The CSP-N is a comprehensive schedule that helps the nurses screen the person for any mental illness and guides the nurses on where to refer, how often to do the follow-up and home visit, and what assessments must be done during the follow-up.

Table- 4: Expert opinion on face validity of CSP-N Modules (*n*=17)

S.I No	Evaluation criteria	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	Expert agreement	Item CVI
1.	Socio demographic profile	1	1	1	1	1	1	1	2	1	1	1	2	1	1	1	1	1	15	0.88
2.	Clinical Schedule for Primary care psychiatric Nursing (CSP-N) Module-																			
	1. Relevant of the module to the study	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	17	1
	2. Content Organisation.	1	2	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	15	0.88
	3. Clarity of the Items used.	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	16	0.94
	4. Any Other Suggestions.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	17	1
2.1	Part-1 Case Record Form:																			
	1. Relevant of the content to the study	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	17	1
	2. Content Organisation.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	17	1
	3. Clarity of the Items used.	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	16	0.94
	4. Any Other Suggestions.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	17	1
2.2.1	Part-II. Management Guidelines:																			
	1. Diagnostic Guideline																			
	1. Relevant of the content to the study	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	16	0.94
	2. Content Organisation.	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	15	0.88
	3. Clarity of the Items used.	1	1	1	2	1	1	1	1	1	1	1	2	1	1	1	1	1	15	0.88
	4. Any Other Suggestions.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	17	1
2.2.2	2. Nursing Management Guidelines:																			
	1. Relevant of the content to the study	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	17	1
	2. Content Organisation.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	17	1
	3. Clarity of the Items used.	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	16	0.94
	4. Any Other Suggestions.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	17	1
2.2.3	3. Non Pharmacological Management:																			
	1. Relevant of the content to the study	1	2	1	1	2	1	1	1	1	1	1	1	1	2	1	1	1	14	0.82
	2. Content Organisation.	1	1	1	1	2	1	1	1	2	1	1	1	1	1	1	1	1	15	0.88
	3. Clarity of the Items used.	1	2	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	15	0.88
	4. Any Other Suggestions.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	16	0.94
2.3	Part-III. Follow Up Guidelines:																			
	1. Relevant of the content to the study	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	17	1
	2. Content Organisation.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	17	1
	3. Clarity of the Items used.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	17	1
	4. Any Other Suggestions.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	17	1
2.4	Part-IV. Overview of Mental illness																			
	1. Relevant of the content to the study	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	16	0.94
	2. Content Organisation.	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	15	0.88
	3. Clarity of the Items used.	1	1	1	2	1	1	1	1	1	1	1	2	1	1	1	1	1	15	0.88
	4. Any Other Suggestions.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	17	1

*I-CVI: Item level content validity index, Completely meet the criteria=1, Partially meet the criteria=2, and Does not meet the criteria=3

Discussion

The nurses need to be trained and empowered with basic knowledge using simple guidelines to overcome the negative attitude, which may worsen the recovery of PMI due to stigma and discrimination.[15] It is one of the first studies of its kind to develop a simple module that helps the nurses in the primary care setting to screen, identify, refer, and do the follow-up of a person with mental health issues. The CSP-N demonstrated high content validity of 0.95 to screen, identify, refer, and follow-up on PMI. Unlike the previously designed questionnaires to screen for a particular condition like depression, the CSP-N is designed to rapidly screen for highly prevalent mental health disorders like CMD, SMD, IDD, and SUD in a primary care setting.[5,16]

During the focus group discussion, the end users emphasized the importance of a simple and comprehensive module to

Table 5: I-CVI score and experts' comments on each session of the CSP-N (*n*=17)

Topic	I-CVI	Remarks by Validators
Module-1: Case record form		
a) Screening and identification of mental illness tool (SIM Tool): 20 questions very specific to the CMD (panic disorder, generalized anxiety disorder, somatization and depressive disorder along with suicidal risk), SMD (schizophrenia and mania), SUD (alcohol and tobacco addiction), and IDD.	0.96	a) To add more questions to the socio-demographic profile: 1. Have you ever identified and referred any PMI? b) EPS to be explained in full form as "extrapyramidal side effects." c) To simplify the content.
b) Provisional impression: Make a provisional impression and refer to the medical officer.	0.98	a) Case vignettes can be used to discuss arriving at a provisional impression.
Module-2: Management Guideline		
a) Diagnostic guidelines: It briefly explains the signs and symptoms of each disorder in a very simplified manner and helps to form a provisional impression.	0.92	a) Detailed sessions need to be planned in the intervention session, and more focus should be given to the diagnostic guidelines with suitable examples.
b) Nursing Management Guidelines:		
i. Nursing care on medication adherence and handling side effects: Common psychotropic medications' dosage, side effects, and nursing management of side effects with red flags.	0.98	a) Simplify the dosage and action and give more focus on the nurse's role in monitoring and handling side effects. b) To add a "red flag" for referrals.
ii. Non-pharmacological guidelines: Counseling and family education are the keys to preventing relapse and ensuring medication compliance, which varies with each disorder.	0.88	c) To emphasize non-pharmacological management as it will be more beneficial to the nurse.
Module-3: Follow-Up Guidelines		
Assessment and frequency of follow-up.	1	
Module- 4: Overview of Mental illness	0.92	
Average I-CVI of the CSP-N (S-CVI)	0.95	

*I-CVI: item-level content validity index, S-CVI: scale-level content validity index, CMD: common mental disorder, SMD: severe mental disorder, SUD: substance use disorder, and IDD: intellectual developmental disorder

screen for commonly seen mental health problems within the limited time available in their busy schedules, even though assessment tools were available in the resource book for the DMHP nurses.[17] Most of the screening tools, like the Patient Health Questionnaire (PHQ-9) for depression and the Screening Tool for Autism, are specifically focused on one illness, and a common screening tool to screen mental illness as a whole is the need for the hour during the busy schedule of primary care nurses. The CSP-N is tailor-made for primary care nurses based on the needs and suggestions of the nurses and further refined by the experts on the multidisciplinary team. It was adopted from the clinical schedule for primary care psychiatry (CSP) for doctors, with a high sensitivity of 91% and a fairly high specificity to detect mental illness.[4] The major strength of CSP-N was the qualitative strategy adopted for the schedule's development that took into consideration the needs and requirements of the end users (nurses) as well as feedback on how to overcome the barriers while screening, identifying, and following up with people with mental illness in the community.

As with any preliminary module, its design had some limitations. The study's limitations include 1) the potential lack of generalizability, 2) the risk of using a self-reported measure, and 3) the length of the module. In therapeutic settings, CSP-N should be viewed as a knowledge booster rather than a competence enhancer. Therefore, rather than focusing on the skill-improving effects of a clinical training program, the results of this paper should be viewed as translating the CSP-Ns' knowledge-enhancing effect into a clinical situation. Although the CSP-N was designed for the primary care nurses who work in the PHC and sub-centers, their generalizability to other nurses in a different setting is unknown and must be tested. There is a risk of recall bias or inflated answers in the self-reported measures due to the high workload among the nurses. The CSP-N Module also takes about 25 to 30 minutes to complete.

The next step will be the validation and field testing of the CSP-N with concurrent validity and inter-rater reliability with a larger sample to improve the clinical skill-based training of primary care nurses in primary care settings. CSP-N refinement would also be necessary to improve its usefulness, effectiveness, and acceptability by primary care nurses working in real-life community settings. The module also should be prepared in various local languages for extensive utilization by primary care nurses.

Conclusion

The CSP-N is designed to use the (Appendix-1) by primary care nurses in screening and identifying people with mental health issues in primary care, thereby preventing the delay in the PMI reaching mental health professionals. Empowering and equipping primary care nurses through CSP-N can become a powerful strategy to bridge the treatment gap present in the mental health area in developing countries like India.

Figure 3: Barriers for nurses in screening and identification of mental illness

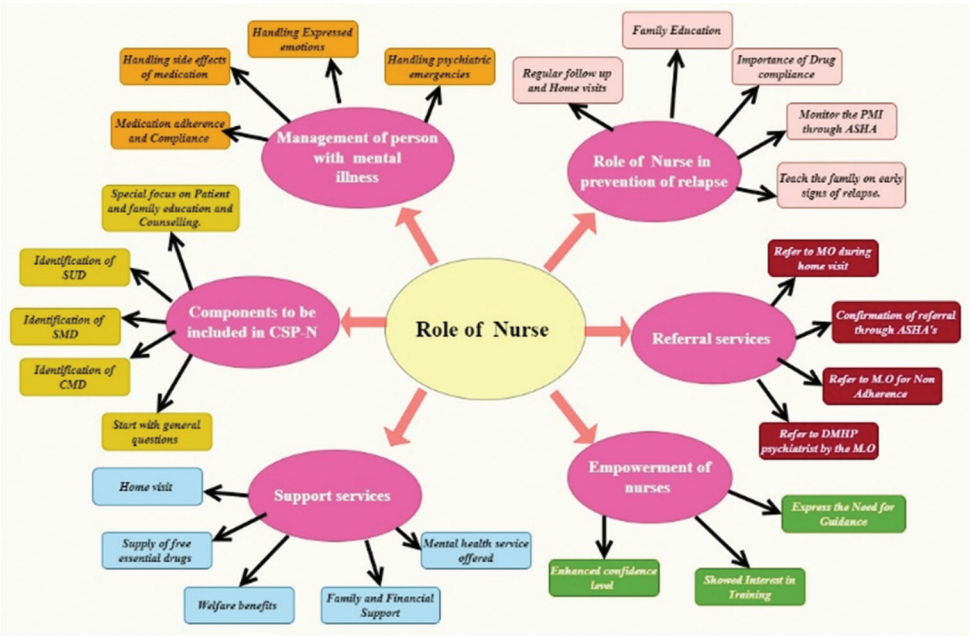


Figure 4: Role of nurse in screening and identification of mental illness

Ethical clearances

This research project received ethical clearance from the NIMHANS IEC, Ref No. NIMH/DO/IEC (BEH.Sc. DIV)/2018 Dated: 17/12/2018 with approval from the TAC, Govt. of Karnataka, Ref No. D.D./Mental Health/50/2019-20. Permission was obtained from the DHO and MO of each PHC. The ICF was obtained from all the mental health experts and nurses, and confidentiality was maintained.

Ethics Approval Ref No

NIMH/DO/IEC (BEH.Sc. DIV)/2018 Dated: 17/12/2018 and approval from the TAC, Govt of Karnataka, Ref No. DD/ Mental Health/50/2019-20. Permission was obtained from the DHO and MO of each PHC.

Acknowledgements

The author acknowledges the support and cooperation from the nursing staff at the primary care centers in Ramanagara, DMHP nurses of the state of Karnataka, India.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

References

1. Math SB, Chandrashekar CR, Bhugra D. Psychiatric epidemiology in India. Indian J Med Res 2007;126:183–92.
2. Pradeep BS, Gururaj G, Varghese M, Benegal V, Rao GN, Sukumar GM, *et al*. National Mental Health Survey of India, 2016-Rationale, design and methods. PLoS One 2018;13:e0205096.
3. Kohn R, Saxena S, Levav I, Saraceno B. The treatment gap in mental health care. Bull World Health Organ 2004;82:858-66.
4. Kulkarni K, Adarsha AM, Parthasarathy R, Philip M, Shashidhara HN, Vinay B, *et al*. Concurrent validity and interrater reliability of the "clinical schedules for primary care psychiatry." J Neurosci Rural Pract 2019;10:483–8.
5. Shia N. The role of community nurses in the management of depression. Nurse Prescr 2009;7:548–54.
6. Fleury MJ, Imboua A, Aubé D, Farand L, Lambert Y. General practitioners' management of mental disorders: A rewarding practice with considerable obstacles. BMC Fam Pract 2012;13:19.
7. mhGAP Intervention Guide for Mental, Neurological and Substance Use Disorders in Non-Specialised Health Settings: Mental Health Gap Action Programme (mhGAP): Version 2.0. Geneva: World Health Organization; 2016.
8. Saxena S, Thornicroft G, Knapp M, Whiteford H. Resources for mental health: Scarcity, inequity, and inefficiency. Lancet Lond Engl 2007;370:878–89.
9. Kakuma R, Minas H, Van GN, Dalpoz MR, Desiraju K, Morris JE, *et al*. Human resources for mental health care: Current situation and strategies for action. Lancet Lond Engl 2011;378:1654–63.
10. World Mental Health Report: Transforming Mental Health for All. World Health Organization. Geneva: 2022. p. 14-109.
11. Ohri U, Nirisha PL, Poreddi V, Manjunatha N, Kumar CN, Math SB. Dual clinical collaborator: A pragmatic role of nurses from developing countries. Investig Educ Enferm 2022;40:e01.
12. Patel V, Cohen A. Mental health services in primary care in developing countries. World Psychiatry 2003:e6842202.
13. Polit DF, Beck CT, Owen SV. Is the CVI an acceptable indicator of content validity? Appraisal and recommendations. Res Nurs Health 2007;30:459–67.
14. Polit DF, Beck CT. The content validity index: Are you sure you know what's being reported? Critique and recommendations. Res Nurs Health 2006;29:489–97.
15. Reilly S, Planner C, Hann M, Reeves D, Nazareth I, Lester H. The role of primary care in service provision for people with severe mental Illness in the United Kingdom. PLoS One 2012;7:e36468.
16. Kennedy CW, Polivka BJ, Chaudary R. Public health nurses' role in the care of adults with mental disabilities. Psychiatr Serv 1997;48:514–7.
17. Gandhi S, Nattala P, Radhakrishnan G, Jothimani G. Resource Book for Karnataka District Mental Health Programme- Psychiatric Nurses. Bengaluru: NIMHANS Publication No-147; 2018;51–2.

Appendix-1: Screening and Identification of Mental Illness Tool (SIM Tool)

CLINICAL SCHEDULES FOR PRIMARY CARE PSYCHIATRIC NURSING (CSP-N)

SCREENING AND IDENTIFICATION OF MENTAL ILLNESS TOOL FOR NURSES (SIM TOOL)

CASE RECORD FORM

Hospital No: ..... **Date:** .....

Name: ..... **Age:** ..... years, **Gender:** .....

SES: APL ☐ **BPL** ☐ **Past H/O Illness:**

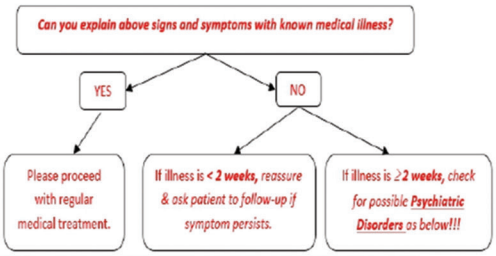
Psychosocial Factors: Poverty ☐ **Homelessness** ☐ **Financial crisis** ☐ **H/O Abuse** ☐

Father/Husband Name:..... **Mob No:**.....

Postal address with parent/Guardian name:

Presenting complaints with its duration:

1. .....
2. .....
3. .....
4. .....



Please begin with these general enquiries!

1.	How is your sleep?	Normal	/ Disturbed
2.	How is your appetite?	Normal	/ Disturbed
3.	How is your interest in doing your daily work?	Normal	/ Disturbed

Now, begin with specific questions for possible psychiatric disorders!!!!

4.	*In the past year, are you drinking alcohol heavily or regularly?*	*YES/ NO*	If YES to any, check for ***Alcohol Disorder***
5.	*In the past year, are you not getting sleep without alcohol?*	*YES/ NO*	
6.	*In the past year, are you getting shaking of hands/body whenever you reduce or stop alcohol?*	*YES/ NO*	
7.	*Do you use Beedi/Cigarettes/Gutka or any other tobacco products within one hour of getting up from bed in the early morning?*	*YES/ NO*	If YES, check for ***Tobacco Addiction***
8.	*In the past few weeks, did you get sudden attack of fear or anxiety?*	*YES/ NO*	If YES to any, check for ***Panic disorder (PD)***
9.	*In the past few weeks, does the above attack/s come without any reason/s?*	*YES/ NO*	
10.	*In the past few months, are you often getting tensed/ stressed up with no reason or for small trivial reasons?*	*YES/ NO*	If YES to any, check for ***Generalized Anxiety Disorder (GAD)***
11.	*In the past few months, are you unable to control or stop this tension?*	*YES/ NO*	
12.	*In the past many months, does this patient have any physical symptom/s (listed in diagnostic criteria of Somatization disorder) which is unexplainable with current medical knowledge or with depression/anxiety?*	*YES/ NO*	If YES to any, check for ***Somatization Disorder***
13.	*In the past many months, does this patient shown the signs of doctor shopping (repeatedly consulting different doctors) for these similar physical symptoms?*	*YES/ NO*	
14.	*In the past few weeks, have you been feeling tired all the time?*	*YES/ NO*	If YES, check ***Depressive disorder***
15.	*In the past few weeks, have you lost interest or pleasure in your regular daily activities?*	*YES/ NO*	
16.	*In the past few weeks, have you been feeling sad / depressed?*	*YES/ NO*	
17.	*In the past few days, did you experience any death wishes, self-harm thoughts or aggressive behaviour*	*YES/ NO*	Provide ***Psychological First Aid*** & Refer.
18.	*In the past few weeks, does he/she have talking or smiling to self / hallucination*	*YES/ NO*	If YES to any, check for ***Schizophrenia Disorder***
19.	*In the past few weeks, does he/she have poor self-care / wandering aimlessly*	*YES/ NO*	
20.	*In the past few weeks, does he/she have suspiciousness/ big claims/ delusion*	*YES/ NO*	
21.	*In the past few weeks, does he/she talking excessively/ sleeping less/hyperactive*	*YES/ NO*	If YES, check for ***Manic Disorder***
22	*During the early childhood, does the child have any significant developmental delay (delayed mile stones) compared with Siblings (If He/she have) or with other children of same age.*	*YES/ NO*	*If YES, check for* ***Mental Retardation/ Intellectual developmental Disorder***
23	*Does he/she have below average intelligence or very poor school performances compared with Siblings (If He/she have) or with other children of same age.*	*YES/ NO*	

Note: *Items 1-11 &14- 16 for patients, 18-23 for family & friends, 12, 13 & 17 for clinical interpretation of Nurses*

1

PREPARED BY DEPARTMENT OF NURSING AND TELE-MEDICINE CENTRE, NIMHANS

CLINICAL SCHEDULES FOR PRIMARY CARE PSYCHIATRIC NURSING (CSP-N)

Behavioural observation/s: .....

PROVISIONAL IMPRESSION: *(Tick appropriately)*

1.	**Alcohol Disorder:** ***Harmful use*** *(Frequent ☐ / Infrequent type ☐)* **/ *Addiction*** ☐
2.	**Tobacco Addiction:** **Occasional use ☐ / Regular ☐ / Addiction ☐**
3.	***Common Mental Disorders (CMDs)***
	a. Predominantly Depressive Disorder ☐
	b. Predominantly Anxiety Disorder (Panic Disorder ☐ /Generalised Anxiety Disorder ☐)
	c. Predominantly Somatization Disorder ☐
	d. Mixed Disorder (Depressive ☐ , anxiety ☐ or somatic symptoms ☐)
	e. Depressive Disorder with Suicidal Ideas. ☐
4.	**Severe Mental Disorders (SMDs)/ Psychotic Disorders:** *Acute* ☐ */ Episodic* ☐ */ Chronic* ☐
	a. Mania ☐
	b. Schizophrenia ☐
5.	**Mental Retardation/ Intellectual Developmental Disorder** ☐
6.	**Other**.....

*(This **Provisional Impression** is only to be used for the early identification and referral and the **diagnosis** to be done in consultation with a Doctor)*

NURSING MANAGEMENT PLAN:

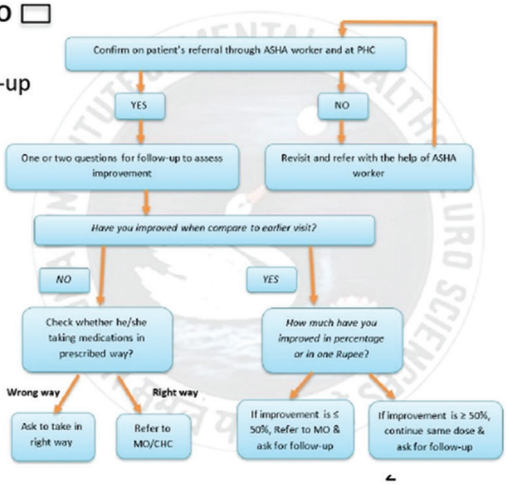
1. Brief counselling provided on

a) **Family understanding about the Illness : YES ☐ / NO ☐**
b) **Collaborating with patient and family members for Doctors Consultation: YES ☐ / NO ☐**
c) **Emphasis on Continuity of longer treatment : YES ☐ / NO ☐**
d) **Emphasis on Regular follow-up : YES ☐ / NO ☐**

2. FOLLOW-UP: 1 **(Date: ...../...../.....)**

a) **Confirm Referral through ASHA Worker : YES ☐ / NO ☐**
b) **Impression made by Doctor :**
c) **Confirm on treatment compliance : Regular ☐ / Irregular ☐ / Not Taking ☐**
d) **Check for Improvement : Improved ☐ / Status Quo ☐ / Worsened ☐**
e) **Monitoring for Side Effects** : (EPS, Dry Mouth, Nausea, Vomiting, Sedation, Diarrhoea, Weight Gain, Orthostatic Hypotension, Tremor, Constipation, Urinary Retention)
f) **Educate and management of side effects : YES ☐ / NO ☐**
g) **Focus on Family intervention**

- ❖ Assess for the need of psychosocial interventions at each follow-up
- ❖ Maintain realistic hope and optimism during treatment
- ❖ Involvement of caretakers is critical during such periods
- ❖ Take feedback about their understanding and clarify doubts.



FOLLOW-UP NOTES

-
-
-
-

PREPARED BY DEPARTMENT OF NURSING AND TELE-MEDICINE CENTRE, NIMHANS