

# Development of a Nurse-Led Drug Avoidance and Therapeutic Adherence Training Module for Inpatients Diagnosed with Substance Use Disorders

Bivin J. B.<sup>1</sup>, Riaz K.M.<sup>2</sup>

Nursing Officer and Ph.D. Scholar in Nursing, National Consortium for Ph.D. in Nursing by Indian Nursing Council, New Delhi, <sup>2</sup>Assistant Professor, Government College of Nursing, Ernakulam, Kerala.

**How to cite this article:** Bivin J. B., Riaz K.M.. Development of a Nurse-Led Drug Avoidance and Therapeutic Adherence Training Module for Inpatients Diagnosed with Substance Use Disorders. International Journal of Psychiatric Nursing/Volume 10 No. 1, January-June 2024.

## Abstract

Psychiatric nurses can effectively maintain sobriety among patients diagnosed with substance use disorders and improve their quality of life through education and training. However, structured formats for training are grossly lacking in the Indian literature. This paper describes the development of a Drug Avoidance and Therapeutic Adherence (DATA) training module that can be effectively implemented by nurses. The DATA Training module was designed and content validated in five stages; 1) an extensive literature search; 2) Focused Group Discussions (FGDs) with psychiatric nurses practicing in the de-addiction units of the selected mental health establishments; 3) development of the preliminary draft; 4) Content validation; and 5) Final draft of the DATA Training module. The FGDs concluded the content and layout of the module and the content validity measured based on the experts' suggestions were good (mean CVI=0.85). The DATA training module provides structured guidelines for nurses in delivering effective strategies to maintain sobriety and improve quality of life.

**Keywords:** Substance use disorders, Psychiatric Nurses, Training module

## Introduction

SUD is a major global issue with vast implications for public health. According to the World Drug Report-2022, around 284 million people aged 15-64 used drugs worldwide in 2020, accounting for a 26 percent increase over the previous decade. Young people are using more drugs, with use levels today in many countries higher than with the previous generation.<sup>(1)</sup> use more drugs, with use levels today in many countries higher than Moreover, the COVID-19 pandemic situation has pushed more people toward deviant behavior associated with illicit or illicit substance use.<sup>(2)</sup>

Risks of relapse and poor therapeutic adherence are the major hurdles to maintaining a healthy

life. Patients with SUDs often benefitted from self-modulated independent interventions based on avoidance strategies to cope with their cravings and to promote treatment adherence. Psychoeducational approaches are effective in facilitating recovery in SUDs along with the pharmacological regime.<sup>(3)</sup>

Available research shows that interventions by a respected care provider, such as a nurse, nurse educator, or physician, in the context of usual medical care can educate and motivate individuals who are misusing substances to understand and acknowledge their risky behavior and to reduce their substance use.<sup>(4,5)</sup>

Many studies have identified nurses to be effective counselors in the management of harmful

---

**Corresponding Author:** Riaz K.M. Assistant Professor, Government College of Nursing, Ernakulam, Kerala.

**Submission** 22nd Sept 2023

**Revision** 31st Oct 2023

**Published date** 18th Jan 2024

---

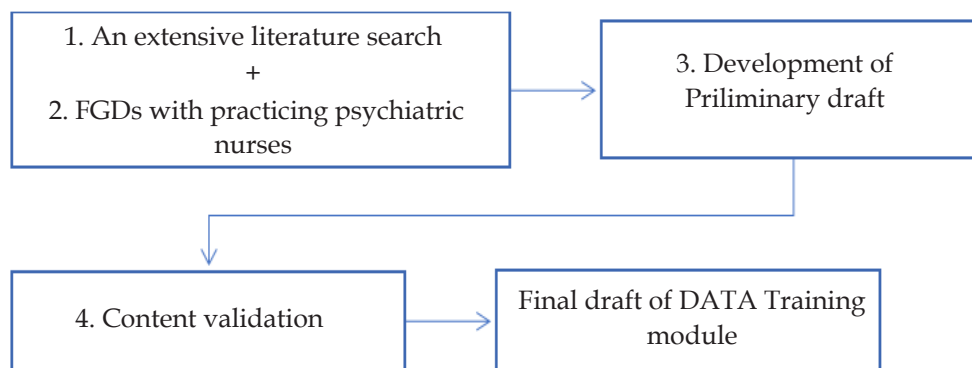
substance use.<sup>(6-11)</sup> Indirect evidence on effectiveness in brief alcohol intervention delivered by nurses was reported in a WHO trial involving 10 countries. This trial reported an average 25% reduction in alcohol consumption by nurse-led intervention compared with assessment-only controls.<sup>(12)</sup>

Most substance use-related intervention studies have focused on nurses supporting physician-led interventions.<sup>(13,14)</sup> When nurses and physicians delivered interventions compared, no statistically significant difference in effectiveness has been reported in Western literature. Structured, evidence-based practice guidelines made available to practicing psychiatric nurses will be beneficial in terms of favorable patient healthcare outcomes. The present study aimed at the development of a nurse-led Drug

Avoidance and Therapeutic Adherence (DATA) training module.

## Methodology

The DATA Training module was designed and content validated in four stages; 1) an extensive literature search; 2) focused group discussion with psychiatric nurses practicing in the de-addiction units of the selected mental health establishments; 3) development of the preliminary draft; 4) Content validation of DATA Training module. The validated DATA training module can serve as a referral material to practicing psychiatric nurses in delivering structured training programs to improve quality of life and maintain sobriety.



**Figure 1. Stages of Development of DATA training module**

Ethics approval was obtained from the institutional ethics committee of the Mental Health Center, Thiruvananthapuram. Permission from the Department of Health Services, Government of Kerala was obtained before data collection. Only subjects with written, informed consent were included in the study.

### Stage 1: An Extensive Literature Search

The literature search was done using MeSH terms such as sobriety management, relapse prevention, and role of psychiatric nurses from several databases such as PubMed, PsycINFO, Science Direct, and CINAHL for the existing and the latest articles related to drug avoidance and therapeutic adherence strategies. The researcher identified 18 studies on the various effective practicing strategies for patients with SUDs on drug avoidance and therapeutic adherence.

### Stage 2: Focused Group Discussion with Psychiatric Nurses

Second, to have an in-depth understanding of the practicing psychiatric nurses' opinion on the effectiveness of teaching drug avoidance and therapeutic adherence strategies and their views and opinions on the mode of delivering instruction to practice these strategies, Focus Group Discussions (FGDs) were carried out with the practicing psychiatric nurses at de-addiction units attached to selected Mental Health establishments ( $N=3$ ) in Thiruvananthapuram, Kerala. A detailed description of the process of FGDs is published elsewhere.<sup>(15)</sup>

### Stage 3: Development of the preliminary draft

Based on the review of the literature and the inputs from the FGDs with the practicing psychiatric nurses in the de-addiction units, a preliminary draft

of the DATA Training module was developed. Later, proofreading on the content of the module was done by the researcher. Grammar checking was done using the Grammarly application. An English language expert also did the proofreading.

#### Stage 4: Content validation of the DATA Training module

The module was sent for content validation among Psychiatry and Mental Health subject experts. The expert panel was composed of two psychiatrists, three psychiatric social workers, three psychiatric nurses, and two psychologists.

The subject experts evaluated the content of the training module to determine whether the contents described were appropriate. They gave their agreement on the appropriateness and relevance of the contents on a 4-point scale (1 for strongly disagree; 2 for disagree; 3 for agree and 4 for strongly agree). Content validity was evaluated in five aspects such as scientific accuracy, organization, language, presentation, and practice assignments. Specific suggestions on the individualized sessions were also asked along with this checklist. To obtain the Content validity index, CVI, the number of experts agreeing (that is, rating 3 or 4) on an aspect was divided by the total number of experts. Judgment on each item

was made as follows; if the CVI was higher than 0.79, the item was deemed relevant; if the CVI was between 0.70 and 0.79, the item needed revisions; and if the CVI was less than 0.70, the item was eliminated. The suggestions from the experts were incorporated to form the final module.

## Results

### Socio-Demographic Characteristics of the Subjects for FGD

Psychiatric nurses (n=18) who gave consent were included in the FGDs. The mean age of the subjects recruited for the FGD was 28.4 years. Most (81.82%) of the subjects had a diploma in nursing qualification. All the participants had a minimum of 9 months of working experience in the de-addiction unit at the time of recruitment. A detailed description of the qualitative findings from FGDs is included in another publication<sup>(15)</sup> by the researchers.

### The Preliminary draft of the DATA Training module

The preliminary draft of the training module was developed based on information obtained from the FGDs and the recommendations referring to content, language, organization, layout, illustration, learning, and motivation. The module has five units. The brief structure of the module is summarized in Table 1.

**Table 1. Units, sessions, and duration of the DATA Training module**

No.	Name of the sessions	Duration	Sessions
Unit 1 Introductory			
1.1	Key objectives and introduction of participants	60 minutes	Session 1
1.2	Pre-assessment	30 minutes	Session 2
Unit 2: Substance Use Disorders Literacy			
2.1	Substance use disorders- Basic concepts	30 minutes	Session 3
2.2	Etiology of substance use disorders	30 minutes	Session 4
2.3	Health consequences of substance use	30 minutes	Session 5
Unit 3: Drug Avoidance Training			
3.1	Craving management	60 minutes	Session 6
3.2	Managing high-risk situations	30 minutes	Session 7
3.3	Motivation for recovery	30 minutes	Session 8
Unit 4: Promoting Therapeutic Adherence			
4.1	Treatment for substance use disorders	30 minutes	Session 9
4.2	Anticipating and preventing relapse	60 minutes	Session 10
4.3	Repairing relationships and personal life	30 minutes	Session 11
Unit 5: Summary			
5.1	Summarizing	30 minutes	Session 12
5.2	Post assessments	30 minutes	Session 13

## Content Validation by the Expert Panel

**Table 2. Content Validity Index for DATA Training Module by the Expert Panel Members (n=10)**

Criteria for evaluation/Item description	Agreement (Rating 3/4)	Disagreement (Rating 1/2)	CVI*	Interpretation**
<b>Scientific Accuracy &amp; Content</b>				
Comprehensiveness	8	2	0.80	Relevant
According to the interest of the participants	8	2	0.80	Relevant
According to the learning needs of the participants	9	1	0.90	Relevant
According to the mental status of the participants	10	0	1.00	Relevant
Matches the research objectives	8	2	0.80	Relevant
<b>Organization of the Content</b>				
Easy to difficult	8	2	0.80	Relevant
Concrete to abstract	8	2	0.80	Relevant
Simple to complex	9	1	0.90	Relevant
<b>Language of the Content</b>				
Easy	10	0	1.00	Relevant
Understandable	10	0	1.00	Relevant
Free from ambiguity	9	1	0.90	Relevant
<b>Presentation of the Content</b>				
Sequential	10	0	1.00	Relevant
Theoretical and demonstrative	8	2	0.80	Relevant
Use of a multisensory approach	9	1	0.90	Relevant
Scope for explanations	8	2	0.80	Relevant
<b>Practice Assignment &amp; Evaluation Forms</b>				
Appropriateness to the sessions	9	1	0.90	Relevant
Easy to administer	9	1	0.90	Relevant
*CVI (Content Validity Index): The number of expert panel members who rated the unit as agreed (ratings 3 or 4) divided by the total number of expert panel members (n=10).				
**CVI is higher than 0.79, the item is relevant.				

The overall CVI of the module was 0.85, indicating that the module was deemed validated for its content. Table 2 represents the unit-wise CVI and its interpretation. At the end of the validation ratings, the subject experts were asked to provide a general opinion about the module. The recommendations were incorporated to finalize the DATA training module.

The content validation of the DATA training module required no major revisions, other than minor modifications, such as wording and grammar. This content-validated module can guide psychiatric

nurses to conduct training programs for patients diagnosed with substance use disorders during their inpatient stay.

## Discussion

The present study successfully developed a validated DATA Training module. The mean CVI was 0.85, thus confirming the content validity. Studies identified that validating educational material using CVI measurement improves its content quality.<sup>(16,17)</sup> Incorporating suggestions from subject experts makes the instructional materials more scientifically rigorous and effective.<sup>(18,19)</sup>

The various forms of educational interventions were used to decrease substance abuse among the various populations. The available literature suggests the involvement of nurses as a therapist in reducing substance use in diverse settings such as school health settings.<sup>(20)</sup> The nurse's role in delivering family-based therapies includes counseling, promotion of self-care activities, developing strengths and resources, providing supportive therapy, education, health teaching, and ultimately, building resiliency in youths and their families.<sup>(21)</sup> Nurses also address adolescents' substance use and related problems by enhancing family function through building skills related to communication and conflict resolution. <sup>(22)</sup> Interventions may include developing contracts to reinforce behaviors associated with abstinence from drugs, implementing skill-based interventions and training, developing communication skills, and facilitating access to education and training opportunities that can help the young person develop the skills necessary to obtain employment or attend school.<sup>(23)</sup>

The strength of the present study is that the DATA Training module will serve as a guide in facilitating drug avoidance and therapeutic adherence training among practicing psychiatric nurses. Maintenance of drug-free lifestyles warrants careful adaptation of drug avoidance skills and effective therapeutic adherence. <sup>(24)</sup> This can be better facilitated by nurses following structured psychoeducational interventions while patients are in the hospital. <sup>(25)</sup>

A likely limitation of this study is that the opinions and views have purely relied on the subjects' retrospective recall. However, the opinions of nurses who have appropriate working experience in caring for persons diagnosed with SUDs are of valid addition. Data from the present study justify that more in-depth qualitative studies are to be conducted to explore the roles of religion, and orientation to the self-help groups in increasing drug avoidance and therapeutic adherence among persons with SUDs.

### Conclusion

The DATA Training module was developed specifically for use in the de-addiction settings, targeting the patients with SUDs facilitated by the nurses. The module was content-validated and found to be appropriate for patients with SUDs.

**Acknowledgment:** The authors are grateful to the practicing psychiatric nurses for their commitment to the study and to the expert panel members for their valuable support and guidelines.

**Conflict of Interest:** The authors declare no conflict of interest.

**Source of Funding:** Self

### References

1. UNODC, World Drug Report 2022, United Nations publication, 2022.
2. Schifano F, Chappini S, Corkery JM, Guirguis A. Abuse of prescription drugs in the context of novel psychoactive substance (NPS): A systematic review. *Brain Sci.*, 2018; 8: 73-90.
3. Sarkhel S, Singh OP, Arora M. Clinical Practice Guidelines for Psychoeducation in Psychiatric Disorders General Principles of Psychoeducation. *Indian J Psychiatry.* 2020;62(Suppl 2): S319-S323.
4. Gür F, Can Gür G, Okanlı A. The Effect of the Cognitive-behavioral Model-based Psychoeducation and Exercise Intervention on Quality of Life in Alcohol Use Disorder. *Arch Psychiatr Nurs.* 2017;31(6):541-548.
5. Agosti V, Nunes EV, O'Shea D. Do manualized psychosocial interventions help reduce relapse among alcohol-dependent adults treated with naltrexone or placebo? A meta-analysis. *The American Journal on Addictions.* 2012;21(6):501-7.
6. Schulte SJ, Meier PS, Stirling J, Berry M. Dual diagnosis competency among addiction treatment staff: Training levels, training needs and the link to retention. *Eur Addict Res.* 2010;16(2):78-84.
7. Kazemi DM, Troutman-Jordan M, Whitfield JE, Pappa EV. Effectiveness of e-Health Technology-Based Interventions in Reducing Substance Misuse Among Older Adults: A Systematic Review. *Journal of gerontological nursing.* 2021;47(10):23-9.
8. McCall MH, Wester KL, Bray JW, Hanchate AD, Veach LJ, Smart BD, Morris CW. SBIRT administered by mental health counselors for hospitalized adults with substance misuse or disordered use: Evaluating hospital utilization and costs. *Journal of Substance Abuse Treatment.* 2022; 132:108510.
9. Gonzalez Y, Kozachik SL, Hansen BR, Sanchez M, Finnell DS. Nurse-Led Delivery of Brief Interventions for At-Risk Alcohol Use: An Integrative Review. *Journal of the American Psychiatric Nurses Association.* 2020;26(1):27-42.

10. Seabra P, Nunes I, Sequeira R, Sequeira A, Simões A, Filipe F, Amaral P, Abram M, Sequeira C. Designing a Nurse-Led Program for Self-Management of Substance Addiction Consequences: A Modified e-Delphi Study. *International Journal of Environmental Research and Public Health*. 2023;20(3):2137.
11. Platt L, Melendez-Torres GJ, O'Donnell A, et al How effective are brief interventions in reducing alcohol consumption: do the setting, practitioner group, and content matter? Findings from a systematic review and meta-regression analysis *BMJ Open* 2016;6: e011473.
12. Global status report on alcohol and health 2018. Geneva: World Health Organization; 2018.
13. Kargin M, Hicdurmaz D. Psychoeducation Program for Substance Use Disorder: Effect on Relapse Rate, Social Functioning, Perceived Wellness, and Coping. *Journal of Psychosocial Nursing and Mental Health Services*, 2020;58(8): 39–47
14. Williams KA, Selwyn CN, Wilmoth M, Bydalek K. SBIRT and MI Training among School Nurses and Psychiatric Mental Health Nurse Practitioner Students: A Pilot Study of Competency and Acceptability. *Madridge J Nurs*. 2021; 6(1):173-179.
15. Bivin JB, Riaz KM. Facilitating Drug Avoidance and Therapeutic Adherence in Substance Use Disorders: A Focus Group Analysis of Psychiatric Nurses' Perspectives. *Asian Journal of Nursing Education and Research*. 2023 Apr 1;13(2):83-7.
16. Rubio DM, Berg-Weger M, Tebb SS, Lee ES, Rauch S. Objectifying content validity: Conducting a content validity study in social work research. *Social work research*. 2003 Jun 1;27(2):94-104.
17. Knebel MT, Costa BG, Santos PC, Sousa AC, Silva KS. The conception, content validation, and test-retest reliability of the Questionnaire for Screen Time of Adolescents (QueST). *Jornal de Pediatria*. 2022 Apr 20;98:175-82.
18. Polit DF, Beck CT. The content validity index: are you sure you know what's being reported? Critique and recommendations. *Research in nursing & health*. 2006 Oct;29(5):489-97.
19. Almanasreh E, Moles R, Chen TF. Evaluation of methods used for estimating content validity. *Research in social and administrative pharmacy*. 2019 Feb 1;15(2):214-21.
20. Nattala P, BA A, Murthy P. Nurses' perspectives regarding integrated nursing interventions for psychoactive substance use cessation: A mixed methods study from South India. *Perspectives in Psychiatric Care*. 2022 Oct 1;58(4).
21. Joseph J, Khakha DC, Varkey BP. Nurse-Led Interventions in the De-Addiction Setting: Current State of Evidence. *ARC Journal of Nursing and Healthcare*. 2020;6(1):2455-4324.
22. Tamayo N, Lane A. Effective Nursing Recovery-Oriented Interventions for Individuals With Substance Use Disorder: A Literature Review. *Journal of Addictions Nursing*. 2022 Oct 1;33(4):233-46.
23. Devi C.G., N. Kokilavani. Motivational Interviewing Approach to Change Addictive Behaviour in Alcoholic Abusers. *Int. J. Nur. Edu. and Research* 2(2): April-June 2014; Page 170-172.
24. Sumanpreet Kaur. A Pre-experimental Study to Assess the Effectiveness of Structured Teaching Programme on Knowledge regarding Awareness about Sexual Abuse among the Adolescents studying in selected Schools of District Gurdaspur, Punjab. *Int. J. Nur. Edu. and Research*. 2017; 5(1): 33-43.
25. A. V. Naga Mallika, MamidiSushmitha. Drug Abuse, Addiction, its Causes, and Treatment. *Res. J. Pharm. Dosage Form. & Tech*. 2018; 10(4): 259-265.