

Understanding the Gap: Evaluation of General Practitioner's Awareness and Expertise in Managing Substance Use and Addiction in South Punjab, Pakistan

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ABSTRACT

Objective: To determine General practitioner's (GPs) awareness and expertise in management of substance use disorders in southern Punjab, Pakistan.

Study Design: Descriptive Cross-sectional study

Place and Duration of Study: This study was conducted at the department of Psychiatry, Multan Medical and Dental College, Multan, from May 2020 to April 2021.

Materials and Methods: One hundred and three general physicians/ practitioners practicing in public and private setups in South Punjab were interviewed for the study. A self-formulated questionnaire was filled by health care professionals. Data analysis was done by using SPSS version 23. Mean and frequency were calculated and also chi square test was applied. P value ≤ 0.05 was taken as significance.

Results: The mean age 34.86 ± 9.16 and mean experience of PGs were 7.93 ± 6.89 years. Almost all participants agreed that substance use is a serious issue. However nearly 1/3rd to 1/2 of the respondents could not correctly identify the classical withdrawals of opioid or disadvantages of long term use of benzodiazepines. One-third of the group was unaware that Delirium Tremens is a serious life threatening complication of Alcohol withdrawal. 71% admitted that they don't feel confident in managing addiction related cases and more than 90% showed willingness to attend workshops and CMEs related to management of substance use disorders. There was no statistically significant difference in groups divided on the base of age or experience of respondents.

Conclusion: In southern Punjab, Pakistan, while most GPs agree about the seriousness of substance abuse disorders, majority are not well trained in tackling it and don't feel confident in managing patients related to addiction. There is a dire need for revision courses, lectures and workshops related to this topic for our general practitioners and family physicians on both private and public fronts.

Key Words: General practitioner, Substance use, Addiction and South Punjab

Citation of article: Asif M, Khan YH, Kareem O, Fatima Q, Saghir M, Khan MA. Understanding the Gap: Evaluation of General Practitioner's Awareness and Expertise in Managing Substance Use and Addiction in South Punjab, Pakistan. Med Forum 2022;33(1):30-34.

INTRODUCTION

Substance abuse or addiction is a serious dilemma affecting many globally across all countries and culture.

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Received: August, 2021

Accepted: November, 2021

Printed: January, 2022

This issue is a growing concern as it leads to compromised functionality and productivity on an individual basis as well as of the family unit and society at large. Illicit drugs are drugs for which non-medical use has been banned by international drug control treaties because they cause risks of addiction to users and various physical and psychological adverse effects¹.

UNODC estimated that 149–271 million people aged 15–64 years (3.3–6.1%) had used an illicit drug at least once in 2009². There is also a higher risk of mental health issues as well as infectious diseases transmitted by blood in these individuals³.

Pakistan is one of the ten most populous country in the world (population: 197 million) and holds a very significant position in south Asia in terms of drug trafficking and usage. In the past several years, the rate of drug use has gone up all across the country. A collaborative study done by the Government of Pakistan's Ministry of Interior and Narcotics Control

reports that nearly 6.7 million people had used any controlled substance including misuse of prescribed drugs. Cannabis was the most commonly used drug with a prevalence of 3.6 per cent among individuals with age ranged from 15 to 64 years. About 860,000 individuals are regular heroin users and 320,000 are opium users that are about 0.8 and 0.3 per cent of the population respectively⁴.

Globally, primary care physicians and general practitioners form the first line of defense in identifying and managing addiction related issues even in the western countries. Saitz et al from US emphasizes that there is a dire need to enable and encourage general physician in addiction management across USA⁵. The same argument is followed in an article by Tedeschi et al from New Mexico who opines that “in the face of one of the country’s most pressing and fastest-growing public health crises, few primary care doctors treat substance abuse disorders, even though they are uniquely positioned to recognize problems and help patients before it’s too late”⁶. There is also a growing concern that the general physicians themselves may be playing an unconscious role in adding to the addiction burden by unsafe prescription practices especially of tranquilizers and opioid analgesics⁷. Several studies argue that the possible causes of sub-optimal management of addiction-related issues by general practitioners may include little or no training, lack of confidence in self-competence, lack of support by the government health care structure and limited availability of time and resources⁸⁻⁹.

Considering the burden of substance abuse and drug dependence, Pakistan is not fully equipped in term of expertise in managing drug detoxification and substance use disorders. There are approximately around 500-800 fully qualified psychiatrists in Pakistan which amounts to roughly one psychiatrist for half million population¹⁰.

There is no formally trained addiction specialist in the entire country. The onus of treatment ultimately falls on the general practitioners and family physicians running private or government-based setups. They are the first line of contact for most Pakistanis. In the absence of any CME programs or GP-training forums, it is speculated that the general practitioners in Pakistan may not be very well-versed in identifying and/or managing substance abuse and addiction.

This is especially true for south Punjab where the burden is huge and expertise is low. However, to our knowledge, no such study has been conducted in Pakistan till date to validate or invalidate this assumption. This study aims to explore the current knowledge, perception and management expertise of general practitioners in managing substance use related issues in South Punjab, Pakistan. It is hoped that it will shine light on the expertise vacuum [if any] and pave

way for robust educational and training measures for our GPs in terms of addiction management.

MATERIALS AND METHODS

Study was conducted at department of Psychiatry, Multan Medical and Dental College, Multan, from May 2020 to April 2021. Total 103 general physicians/practitioners practicing in public and private setups in South Punjab were interviewed for the study. After taking informed written consent from the participants and approval from the institutions, a self-formulated questionnaire will be filled by health care professionals. This questionnaire includes various parts including the demographic details of the participants, their knowledge about the identification of symptoms and withdrawal effects of various common drugs of abuse as well as their current management protocols in contrast or in keeping with the current NICE guidelines [each question will either have four options, [one being the correct one] or a true/false statement question]. Participants were ensured confidentiality and ethical approval from relevant institution were taken.

Data was entered in Statistical package for social sciences (SPSS) and analyzed. Mean and standard deviation were calculated for numerical data like age, experience in years and frequency, percentages were calculated for categorical data like gender, questions regarding expertise and awareness etc. Chi-square test was applied for categorical variables. P value ≤ 0.05 was taken as significant.

RESULTS

One hundred and three GPs were interviewed in this study, the mean age 34.86 ± 9.16 and mean experience of GPs were 7.93 ± 6.89 years. Majority of the participant were male, age upto 35 years, experience up-to 5 years followed by 6-10 years and working in public sector [78 (75.7%), 74 (71.8%), 52 (50.5%), 32 (31.1%) and 93 (93.2%) respectively]. (Table. I).

According to our study results regarding knowledge and awareness 102 (99%) GPs agreed that drug addiction is a common worldwide problem. According to all participants knowledge (in terms of answering) pattern showed that 61% of the GPs could correctly identify body aches/lacrimation 66 (64.1%) as the classical withdrawals of opioid addiction whereas the remaining chose wrong options (confusion/psychological craving (19.4%), agitation/psychosis (12.6%) and fever/tachycardia (3.9%)). 63 % of the participants correctly guessed delirium tremens as the serious life threatening complication of Alcohol withdrawals. [Remaining chose respiratory depression 28 (27.2%), alcoholic hallucinosis 9 (8.7%) and dementia 1 (1.0%)].

Only 20% of the GPs could correctly guess that long term use of Benzodiazepines can cause dementia whereas roughly more than half incorrectly chose the

option of seizures 56 (54.4%). Only 38% rightly identified nicotine as the substance with most psychological craving related withdrawals. Buprenorphine was correctly chosen as an option used globally for opioid detoxification by 82 GPs (79.6%). About half of the respondents correctly identified Methamphetamine 54 (52.4%) as a stimulant drug whereas rest chose LSD 40 (38.8%), Marijuana 6 (5.8%) and alcohol 3 (2.9%) as answers. Nearly 62% of the respondents were rightly aware that Ice is the new stimulating drugs commonly used among university/college students.

In this study, majority of General practitioners 74 (71.8%) reported having no confident and competent in managing addiction related issues and 52 (50.5%) admitted that they do not prescribe with clear justification. 93 (90.3%) of the respondents agreed that workshop and training will benefit them and 94 (91.3%) GPs showed willingness to attend. General practitioners narrated different factors which are involved in lack of management regarding addiction-related cases i. e. due to lack of knowledge on recent management guidelines, lack of time in patient interaction, lack of resources/medicine availability and stigma/fear about handling such patients 34 (33%), 30

(29.1%), 26 (25.2%) and 13 (12.6) respectively. When asked about how frequently do they see addiction related cases in their clinics, 67 (65%) reported at least more than once a month. There was no significant difference in answers between groups divided on basis of age of GPs and/or their years of experience (Table-2).

Table No.1: Demographic detail of participants in the study

Variables	Mean & SD	Mean & SD
Age (years)		34.86±9.16
Upto 35 years	74 (71.8)	
More than 35 years	29 (28.2)	
Gender		
Male	78 (75.7)	
Female	25 (24.3)	
Experience (years)		7.93±6.89
Upto 5 years	52 (50.5)	
6-10 years	32 (31.1)	
More than 10 years	19 (18.4)	
Working place		
Public sector	93 (93.2)	
Private sector	5 (4.9)	
Both sectors	2 (1.9)	

Table No.2: Expertise in management of addiction related issues with age & experiences

Expertise and management skills		Age groups (years)		P-value	Experience (years)			P-value
		Upto 35 n - (%)	> 35 n - (%)		Upto 5 n - (%)	6-10 n - (%)	> 10 n - (%)	
Confident & competency level	Yes	22(21.4)	07(6.7)	0.634	15(14.6)	07(6.8)	07(6.8)	0.510
	No	52(50.5)	22(21.4)		37(35.9)	25(24.3)	12(11.6)	
Benefit from training	Yes	69(66.9)	24(23.3)	0.140	48(46.6)	29(28.2)	16(15.6)	0.593
	No	05(4.9)	05(4.9)		04(3.8)	03(2.9)	03(2.9)	
Prescribe with justification	Yes	38(36.9)	13(12.6)	0.662	23(22.3)	16(15.6)	12(11.6)	0.368
	No	36(34.9)	16(15.6)		29(28.1)	16(15.6)	07(6.8)	
Workshops on safe description guidelines	Yes	70(68.0)	24(23.3)	0.113	50(48.6)	28(27.2)	16(15.6)	0.191
	No	04(3.8)	05(4.9)		02(1.9)	04(3.8)	03(2.9)	
Factors manage addiction due to lack of time, medicine, knowledge & stigma or fear	Time	19(18.4)	11(10.7)	0.479	14(13.6)	11(10.7)	05(4.9)	0.888
	Medicine	20(19.4)	06(5.8)		13(12.6)	07(6.8)	06(5.8)	
	Knowledge	24(23.4)	10(9.7)		18(17.5)	09(8.7)	07(6.8)	
	Stigma/fear	11(10.7)	02(1.9)		07(6.8)	05(4.9)	01(0.9)	

DISCUSSION

Early services can be provided through different settings like primary care offices and school clinics. Provision of management facility at mild substance disorders can provide better management¹¹. Purpose of early intervention is to reduce the disadvantages of substance misuse that may lead to serious injury. But

for achievement of goals with use of this intervention needs training of practitioners¹².

In our study mean age of practitioners was 34.86±9.16 years and mostly were upto 35 years of age. We observed statistically insignificant correlations between age of participant and their attitude towards substance use. A study conducted by Barral et al¹³ who reported contrast findings to our study. He reported statistically

significant correlation between age and attitude after training of practitioners.

In our study, it was noteworthy that almost all participants agreed that substance use is a serious issue. However nearly 1/3rd to 1/2 of the respondents could not correctly identify the classical withdrawals of opioid or disadvantages of long term use of benzodiazepines. One-third of the group was unaware that Delirium Tremens is a serious life threatening complication of Alcohol withdrawal. 71% admitted that they don't feel confident in managing addiction related cases. This reflects on the concerning gaps in the knowledge base of our family physicians and general practitioners and makes a strong case for need of workshops, CMEs and revision courses as more than 90% showed willingness to attend such sessions.

A study was conducted by Gomes et al¹⁴ in 2003 and reported a significant gap between skills/expertise of physicians regarding diagnosis of alcohol related health problems. About 1/4th of general practitioners were unaware of drinking symptoms among men and women. Roche et al¹⁵ reported that experience of GPs regarding patients using alcohol or alcohol products varies according to their role and perception of practice. Prochaska et al¹⁶ conducted a study on training of physicians to treat substance use and concluded that training and education of physicians gained too much attention and training guidelines have been developed to improve substance abuse education in practitioners. Geller et al¹⁷ hypothesized that development of curriculum to manage end stage substance abuse is necessary and lack of expertise in this field contribute to negative attitude.

In a survey conducted by National center of substance abuse at Columbia University and 648 physicians were recruited. Survey reported that only 510 subjects receiving substance use treatment. About 50% of patients visiting these clinics described that their physician didn't considered substance abuse¹⁸. Similarly Chappel and Veach¹⁹ concluded that course of substance use should be included in curriculum of medical education. A minimum 28 hours lecture briefing is sufficient for improvement in attitude of medical professionals towards substance use.

Strang et al²⁰ conducted a study on this topic and reported that in England half of GPs are prescribing medications for control of drug abuse and 32% of GPs were involved in treatment of substance use at primary care level. Primary care organizations need to plan different programs and refresher courses on substance use and control of its harmful effects.

CONCLUSION

Southern Punjab belt in Pakistan is often ignored in terms of health care facilities. Substance abuse disorder is a huge issue in this region and the quality of treatment centers as well as expertise of physicians

treating is sub-optimal. General practitioners and family physicians are usually the first point of contact for majority of the patients and as per our study findings, our GPs are currently not well-equipped in handling these cases in terms of expertise and knowledge. The heartening news is that they are willing to learn and update their knowledge according to the new guidelines.

The authors propose conducting similar studies in other regions of Pakistan and developing a uniform educational tool and platform to train our GPs in managing and identifying substance use disorders. These educational activities should be time-conscious and more practical and hand-on for optimal utilization. Both public and private health sector needs to hold hands to achieve this much needed milestone together.

Author's Contribution:

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Conflict of Interest: The study has no conflict of interest to declare by any author.

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