Measuring Treatment Readiness Among Patients With Opioid Use

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Abstract:

Objective: To measure treatment readiness in patients with opioid use in the form of problem reorganization, desire for help and taking steps.

Methodology: This was a descriptive and cross-sectional study, conducted at Institute of Behavioral sciences (IBS), Dow University of Health Sciences (DUHS), Karachi, Pakistan. The duration of study was from 1st January 2018 to 1st June 2018. Those patients who fulfilled the criteria of dependent of opioids as per International Classification of Diseases version 10 (ICD-10) were enrolled in study. Those who were using substances other than opioids such as Cannabis or having organic brain disorder such as dementia were excluded from study. Treatment readiness was measured by The Stages of Change Readiness and Treatment Eagerness scale (SOCRATE). The collected data was analyzed by Statistical Package for the Social Sciences (SPSS) version 22.0.

Results: Of the 120 participants, 96 (80%) were males while 24 (20%) were females. Mean age of the patients was 31.57 ± 8.71 years. Among all 48 (40%) were married. Majority of patients 54 (52.9%) were employed. Almost two third were in favor of the strongly agree option as per the Stages of Change Readiness and Treatment Eagerness scale. While talking about ambivalence 54% strongly agreed that they were ambivalent about their addiction. Twenty one percent strongly agreed that they have taken steps to quit. Statistically age group, gender, marital status, educational status and occupational status were not significant.

Conclusion: As the Stages of Change Readiness and Treatment Eagerness scale, mostly opioids users strongly agree for treatment as well as recognition of their problems and desire for change.

Keywords: Opioid Use, SOCRATE, treatment readiness, problem recognition, eagerness.

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:Introduction

Opioid dependence is an overall medical issue that has colossal financial, personal and general well-being outcomes[1]. Most of the substances used including opioids have significant harmful effect on physical as well as on mental health[2]. Globally consumption of opioids has increased day by day. Pakistan is hardest hit by substance use especially opioids. According to United office on Drug & Crime (UNODC) estimates of 2012 during last 12 months, 6% or 6.7 million people took drugs, and opioid is among top of this list. Among drug users detected in these surveys, dependence and severity of dependence were high. Of the 6.7 million past - year users of any illicit substance, 4.25 million are considered to be drug dependent. For those who are

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dependent, there is an overwhelming need for drug dependence treatment and care interventions including low-threshold services, both of which need to be up scaled. Three-quarters of the regular opiate users interviewed reported a strong desire for treatment, but cited either a lack of access or an inability to afford treatment. This report Drug Use in Pakistan 2013 also aims to provide the basis for design and implementation of effective prevention, treatment and care services that are evidence-based, targeted, responsive, and needs led to counter the extent of a diverse nature of drug use in Pakistan[3].

Substance used by clients including opioids and not finishing treatment are generally ascribed to poor inspiration in both network-based medication treatment[4]. Many researches have been done to find out relapsing factors among substance users. Lack of motivation and readiness to change has been found to be among leading cause of relapse[5]. Inspiration, or preparation, might be seen as a person's close to home contemplations, responsibilities, reasons, and expectations that lead to the exhibition of specific practices[6]. Various psychological, social and biological factors contribute to treatment readiness and motivation in different ways in substance users[7]. Treatment readiness in substance use is most important for positive outcome[8]. It has been observed that patients with opioid use who do not enter treatment regimen are poorly motivated or unmotivated and their treatment readiness is at query[9]. Blanchard in his study found that people were less motivated during admission and as a result outcome were not as expected[10]. The gap between the quantity of individuals who need treatment for substance use disorders (SUDs) and the quantity of individuals who look for and complete substance use treatment speaks to a genuine general well-being concern. Recuperation from enslavement is long process that requires time, duty, inspiration and backing. Inspiration and treatment status ought to be the center which is lamentably a missing measurement in the treatment routine[11]. If a person with proper motivation to give up is managed, the long term effects are positive[12]. The treatment preparation constructs, for example, problem recognition, desire for help, and readiness are commonly utilized in depicting substance abusers' mentalities about their substance use and need to get help.To my knowledge no research is done in Pakistan to measure treatment readiness. Thus this study was aimed to find treatment readiness and motivation so that a missing part in early management can be overcome. Objective is to measure treatment readiness in patients with opioid use in form of problem reorganization, desire for help and taking steps.

Subjects and Methods

This descriptive cross-sectional study was conducted at Institute of Behavioral Sciences (IBS), DUHS, Karachi Pakistan. The department has state of art Drug Rehabilitation Center (DRC) along with in patient facility. One hundred and twenty male and female patients selected through consecutive method were included in the study between the periods of January 2018 to June 2018. The patient age ranged between 15 years to 60 years. The patients who were suffering from substances other than opioids and those having organic brain disorder such as dementia were excluded from study. The patients fulfilling the dependency criteria of opioids were included in study. The dependency was judged through ICD-10 criteria of Substance dependence (ICD-10)[13]. A semi structured questionnaire containing demographic data such as age, gender, education, employment, monthly income was administrated in interview format. Treatment readiness was measured by the state of change readiness and treatment eagerness scale (SOCRATE). SOCRATES is designed to asses motivation and readiness to change in patients with substance use disorder. The scale has three sub parts to assess readiness to change: recognition, taking steps and ambivalence. Answers may be recorded in questionnaire proforma. Each column score is summed up to yield three scale score. Current version is 19 item scales based on factor analyses with previous versions[14]. The shorter form was developed using the items that most strongly

marked each factor. The respondents were asked to rate their response on 5 points scale from strongly agree to disagree. The approval was taken by departmental ethical review committee. An informed consent regarding the inclusion of patient's data in this study was obtained after assuring them confidentiality. The data collected was analyzed using computer package SPSS (Statistical Packages of Social Sciences) version 22.0. Clinical characteristics were summarized in terms of frequencies and percentages for outcome variables (for example marital status, education. Mean and standard deviation was computed for quantitative variables (for example age, duration of opioid use, age of onset, monthly income).

Results

Of the 120 participants, 96 (80%) were males and 24 (20%) were females. Mean age of the patients was 31.57 ±8.71 years. Among all 48 (40%) were married and 72 (60%) were single. Among all 15 (13.9%) were not formally educated while 18 (16.7%) were literate up to primary and 9 (8.3%) were middle passed, 24 (22.2%) were matriculated, 15 (13.9%) were intermediate and 27 (25%) were graduated. Among 120 patients 54 (52.9%) were employed while 48 (47.1%) were unemployed. Statistically age group, gender, marital status, educational status and occupational status were not significant as shown in Table 1. Characteristics of substances abused, route of substance administration,, duration of use, age of onset, cost per month, income per month have been stratified with recognition, ambivalence and taking steps as shown in Table 2. As per The stages of change readiness and treatment eagerness scale, the three factors, recognition, ambivalence and taking steps. Questions numbers 1,3,7,10,12, and 17 were regarding recognition and among all 120 participants more than two third were in favor of strongly agree option. While talking about ambivalence portion of same scale over questions 2,6,11,16 more than 50% were in favor of strongly agree but other options including unsure, disagree and strongly disagree were also prominent. On the turn on taking steps same pattern was observed, majority were in favor of strongly agree but other options were also significant as shown in Table 3.

Discussion

As per results of current study, there were mostly younger-aged patients, predominantly male, half of them were unemployed and more than half of them were single. Among all participants mostly were educated up to school level. This is in consistent with a study carried out in Turkey in 2006[15]. The current study has measured the stages of change readiness and treatment eagerness among clients using different types of opioids and it has revealed that most of them do recognize their problem of substance taking behavior but most of them are ambivalent regarding their problem and while talking about taking steps mostly are ready for change in their behavior. Nonetheless, the estimation of phases of progress represents a few issues for the professional and analyst: how to survey organize status of people with various substance misuse issues and in various kinds of projects has made critical frustration[16,17]. Definitional and estimation issues have likewise driven some to scrutinize the significance of the stages and their pertinence to treatment results and treatment practices[18,19].

There is likewise a discussion with respect to whether inspiration or status to change is best conceptualized as a continuum or by discrete stages[20]. Preparation is a more nonexclusive idea than stages. Preparation ordinarily demonstrates an ability or receptiveness to take part in a specific procedure or to embrace a specific conduct and speaks to an increasingly commonsense and centered perspective on inspiration as status for stopping. Research has assessed two particular however related parts of preparation: availability to change and status for treatment. Status to change has been conceptualized by some as a blend of the patient's apparent significance of the issue and trust in their capacity to change[21,22]. Persuasive preparation to change has additionally been portrayed utilizing the assignments of the phases of progress so as to rec-

Table 1. Baseline characteristics of the patients (n=120)

		Recognition			Ambivalence			Taking Steps		
		n (%)	n (%)	p-value	n (%)	n (%)	p-value	n (%)	n (%)	p-value
Age										
years	31.57 ± 8.71									
≤32	75 (62.5)	36 (52)	39 (76)	0.117	30 (53)	45 (71)	0.220	51 (63)	24 (62)	0.931
>32	45 (37.5)	33 (48)	12 (24)		27 (47)	18 (29)		30 (37)	15 (39)	
Gender										
Male	96 (80)	54 (78)	42 (82)	0.749	48 (84)	48 (76)	0.527	63 (78)	33 (87)	0.613
Female	24 (20)	15 (22)	9 (18)		9 (16)	15 (24)		18 (22)	6 (15)	
Marital Status										
Married	45 (37.5)	24 (35)	21 (41)	0.680	21 (37)	24 (38)	0.935	27 (33)	18 (47)	0.433
Unmarried	72 (60)	45 (65)	30 (59)		36 (63)	39 (62)		54 (67)	21 (54)	
Educational status (n=36)				0.996			0.862			0.368
1	15 (13.9)	9 (14)	6 (13)		9 (18)	6 (11)		15 (21)	0 (0)	
2	18 (16.7)	9 (14)	9 (20)		6 (12)	12 (21)		9 (13)	9 (25)	
3	9 (8.3)	6 (10)	3 (7)		6 (12)	3 (5)		6 (8)	3 (8)	
4	24 (22.2)	15 (24)	9 (20)		9 (18)	15 (26)		15 (21)	9 (5)	
5	15 (13.9)	9 (14)	6 (13)		6 (12)	9 (16)		6 (8)	9 (25)	
6	27 (25)	15 (24)	12 (27)		15 (29)	12 (21)		21 (29)	6 (17)	
Occupation (n=34)										
Employed	54 (52.9)	36 (63)	18 (40)	0.179	27 (60)	27 (47)	0.464	36 (55)	18 (50)	0.801
Unemployed	48 (47.1)	21 (37)	27 (60)		18 (40)	30 (53)		30 (46)	18 (50)	

Table 2. Characteristics of substance abuse, it's route, duration and expenses (n=120)

	n	Recognition		Ambivalence			Taken Steps		
Route of administration									
Oral	39	27 (39)	12 (24)	0.298	24 (42)	15 (24)	0.217	30 (37)	9 (23)	0.377
Nasal	39	24 (35)	15 (29)	0.720	12 (21)	27 (43)	0.141	15 (19)	24 (62)	0.007
IV	21	6 (9)	15 (29)	0.088	3 (5.3)	18 (29)	0.053	18 (22)	3 (8)	0.257
IM	3	3 (4)	0 (0)	0.384	3 (5)	0 (0)	0.287	0 (0)	3 (7.7)	0.144
Duration of use, in years	7.31 ±5.64									
≤6	63 (52)	33 (48)	30 (59)	0.491	21 (37)	42 (67)	0.059	36 (44)	27 (69)	0.141
>6	57 (48)	36 (53)	21 (41)		36 (63)	21 (33)		45 (56)	12 (31)	
Age of onset, in years	24.37 ±4.37									
≤24	72 (60)	42 (61)	30 (59)	0.896	33 (58)	39 (62)	0.796	45 (56)	27 (69)	0.408
>24	48 (40)	27 (39)	21 (41)		24 (42)	24 (38)		36 (44)	12 (31)	
Cost per month	13512 ±12215.21									
≤13000	84 (70)	54 (78)	30 (59)	0.185	45 (79)	39 (62)	0.240	60 (74)	24 (62)	0.418
>13000	36 (30)	15 (22)	21 (41)		12 (21)	24 (38)		21 (26)	15 (39)	
Income per month (n=20)	25450 ±19179.14									
≤20000	33 (55)	15 (46)	18 (67)	0.343	15 (50)	18 (60)	0.653	21 (54)	12 (57)	0.888
>20000	27 (45)	18 (55)	9 (33)		15 (50)	12 (40)		18 (46)	9 (43)	

Table 3. Personal drug use questionnaire (n=120)

		Strongly Disagree n (%)	Disagree n (%)	Unsure n (%)	Agree n (%)	Strongly agree n (%)
Recognition						
1	I really want to make changes in my use of drugs.	0 (0)	6 (5)	15 (12.5)	30 (25)	69 (57.5)
3	If I don't change my drug use soon, my problems are going to get worse.	6 (5)	12 (10)	12 (10)	21 (17.5)	69 (57.5)
7	I have a drug problem.	3 (2.5)	12 (10)	12 (10)	39 (32.5)	54 (45)
10	I have serious problems with drugs.	0 (0)	24 (20)	18 (15)	33 (27.5)	45 (37.5)
12	My drug use is causing a lot of harm.	0 (0)	18 (15)	18 (15)	30 (25)	54 (45)
17	I am a drug addict.	3 (2.5)	18 (15)	15 (12.5)	27 (22.5)	57 (47.5)
Ambivalence						
2	Sometimes I wonder if I am an addict	6 (5)	12 (10)	18 (15)	30 (25)	54 (45)
6	Sometimes I wonder if my drug use is hurting other people.	6 (5)	21 (17.5)	9 (7.5)	33 (27.5)	51 (42.5)
11	Sometimes I wonder if I am in control of my drug use.	0 (0)	18 (15)	21 (17.5)	36 (30)	45 (37.5)
16	There are times when I wonder if I use drugs too much.	3 (2.5)	18 (15)	15 (12.5)	39 (32.5)	45 (37.5)
	Taking Steps					
4	I have already started making some changes in my use ofdrugs	3 (2.5)	21 (17.5)	12 (10)	63 (52.5)	21 (17.5)
5	I was using drugs too much at one time, but I've managedto change that.	3 (2.5)	18 (15)	12 (10)	45 (37.5)	42 (35)
8	I'm not just thinking about changing my drug use, I'm already doing something about it.	0 (0)	15 (12.5)	15 (12.5)	60 (50)	30 (25)
9	I have already changed my drug use, and I am looking for ways to keep from slipping back to my old pattern	0 (0)	42 (35)	15 (12.5)	27 (22.5)	36 (30)
13	I am actively doing things now to cut down or stop my use of drugs	3 (2.5)	21 (17.5)	18 (15)	60 (50)	18 (15)
14	I want help to keep from going back to the drug problems that I had before.	0 (0)	9 (7.5)	12 (10)	45 (37.5)	54 (40)
15	I know that I have a drug problem.	3 (2.5)	9 (7.5)	6 (5)	36 (30)	66 (55)
18	I am working hard to change my drug use.	0 (0)	21 (17.5)	39 (32.5)	24 (20)	36 (30)
19	I have made some changes in my drug use, and I want some help to keep from going back to the way I used before	0 (0)	3 (2.5)	24 (20)	39 (32.5)	54 (45)

ommend mediation strategies[23,24] and measure inspiration to change drinking conduct[25,26,27]. Stages of change and treatment eagerness scale in this study the clients were assessed before admission in facility for substance detoxification. At the beginning of the treatment, there was no difference in recognition, ambivalence or taking steps according to the marital status. However, after the treatment, there was the difference in ambivalence and taking steps according to the marital status; ambivalence is lower in the single patients, and taking steps is higher in the married group. It could be interpreted that married patients are motivated to the treatment more because of the higher responsibility to the family or due to family pressure. It could be the theme for subsequent studies though in current study majority of clients were single. Same findings were also stated by a study carried out at University in Nitra, Slovak Republic in 2018[28]. The outcomes of our study also show the patients in action stage deny that the abuse of substance is a serious problem for them in SOCRATES questionnaire. Paradoxically, patients expressed a particularly high readiness to change, but the relatively small insight of the harm of substance in their life. We suppose that this high level of readiness to change can reflect the situation in which they have already finished the painful process of decision making to our knowledge this study was first of its kind in Pakistan. It also has some limitations. First of all, it was a short duration study and also the sample size was small. Study was done in a public sector hospital; it should also be done in private sec-

tor hospital and sociodemographic characters may be compared with the current study. Finally, because the study was undertaken in an urban setting its results may be generalized with caution as far as rural populations are concerned. Despite of these limitations the current study had put light on a basic & very important issued related to treatment of opioid addiction.

Conclusion

This study concluded that patients with opioid use recognized their problem and were motivated to quit substance use. The findings of this study will be useful in formulating new strategies regarding management in the field of substance use which will help in successful biopsychosocial treatment of patients with opioid use.

Conflict of Interest

Authors have no conflict of interest and no grant/funding from any organization.

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Answer of Picture Quiz:

Torsion of right ovarian cyst.