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Psychosocial treatment of nalbuphine addicts in war affected area: A retrospective study

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ABSTRACT

Background: Psychosocial treatment for nalbuphine addiction is scarcely reported in the literature. Additionally, it is unclear about the effect of psychosocial treatment on nalbuphine addiction in vulnerable people, such as the war affected people. In current study, we tried to find the possible effect of psychosocial treatment in nalbuphine addicts. **Methods:** In the present study, we evaluated retrospective data from war-torn areas of Pakistan. A total of 13 medical records of subjects who were suffering from nalbuphine addiction were included and analyzed. One group post-test only research design was followed to check the impact of psychosocial treatment on various outcomes, including self-care, social interaction, and daily activates. **Result**s: All of the sub-parameters included in the aforementioned outcomes (self-care, social interactions and daily activities) were analyzed and we found that all outcomes were increased significantly. **Conclusion:** The results of the study suggest that psychosocial intervention poses a huge potential as one of the interventions for the treatment of nalbuphine addiction.

Keywords: addiction, nalbuphine, psychological treatment, rehabilitation

INTRODUCTION

Addiction is a complex and chronic disease condition that affects physiological and psychological functions. An addiction can affect a person well-being, work load, mental health. The individual increases the doses the compensate the detrimental effects

as they least know and expect the adversaries associated with it, [1,2]. Drug addiction is a widespread problem and according to a survey from United Nations office on drugs and crime (UNODC) in year 2015, around 5% of the world adult population had abused addictive substances and 0.6% people were drug addicts [3]. Alone in the US every single day more than 130 people die after overdosing of opioids, and aaccording to center of disease control and prevention the total economic burden of prescription opioids misuse in the US is $78.5 billion a year which include the cost of addiction treatment, work productivity loss, and criminal justice involvement [4]. Pakistan like other developing countries also share a good portion of world addicts' population. According to a survey from Pakistan ministry of interior and narcotics in collaboration with UNODC overall, 6.7 million people had abused addictive substance and 4.2 million were drug addicts in 2013 [5]. During Afghan war, Pakistan was restrained with 70% of Afghanistan's opium which was the major producer (80%) of the opium in the world. A decade before Pakistan has gone through a severe wave of terrorism and war on terror. The problem of drug addiction may be worsened, as studies suggest that war associated psychological factors are strongly associated with the problem of drug addiction [6-8].

Opioid's addiction is extensively reported in drug addiction. The primary medical use of this class of drugs is in analgesia by acting on opioids receptors [9]. Nalbuphine which is structurally related to oxymorphone [10] is a synthetic opioid analgesic [11]. Nalbuphine is characterized as a narcotic drug and is clinically used in the treatment of pain associated with surgery or child birth. It is also used as co-treatment with anesthetics. However, it is not limited to clinical use but is also exposes the individual to addiction or misuse. Hence drug dependence is developed. Once the individual get addicted to this drug then he/she is unable to continue with his normal daily routine.

It is an agonist at kappa opioid receptors and an antagonist at mu opioid receptors having similar analgesic activity to morphine at equivalent doses but has low adverse effects profile and very low dependence and addiction potential as compared to other opioid analgesics such as morphine, heroin, Pentazocine [12-14]. Comparative studies have shown that the side effects profile of nalbuphine have advantage over other opioids regarding nausea, vomiting, pruritus, and respiratory depression [15].

Studies targeting therapeutic and psychosocial treatments of nalbuphine addiction are very scares in literature [16]. We employed one group posttest only research design on psychosocial treatment in nalbuphine addicts in war affected people. Wars are associated with psychological problems and may worsen the problem of drug addiction. Analysis of psychosocial treatment of nalbuphine addiction in war affected people will open a new dimension to the health care providers to tackle this problem in vulnerable people by choosing best practices from the available treatment options.

MATERIALS AND METHODS

This study was comprised of respective data of 2 years duration (2015-2016) considering 13 cases (10 men, 3 women) which were addicted with nalbuphine at Drug detoxification and Health Welfare Research Center, Bannu, KPK, Pakistan. The inclusion criteria are: 1). All the participants were diagnosed by expert psychiatrist to be nalbuphine dependent based on drug abuse screening test (DAST). 2) No other psychological problems. 3) All the participants included in the current study were from the area which was affected from war on terror. Since 2001 the foreign elements and terrorist groups were active in these areas. Patient medical records were used to extract the required information about psychosocial treatment and the outcomes. The various patient identification and demographics information was limited to:

1. Chief Complaints
2. Record of Present Disease
3. Previous Drug Abuse Record
4. Medication Information
5. Clinical Lab Tests : HIV, HCV, HBS Ag
6. Prescription Drugs
7. Addicted Drugs and Substances

8. DAST Test

DAST (Drug Abuse Screening Test) sample

The following questions is based on last 12 months usually asked from the patients

1. Have you used drugs other than those required for medical reasons?
2. Have you abused prescription drugs?
3. Do you abuse more than one drug at a time?
4. Can you get through the week without using drugs? (consider as negative)
5. Are you always able to stop using drugs when you want to? (consider as negative)
6. Have you had "blackouts" or "flashbacks" as a result of drug use?
7. Do you ever feel bad or guilty about your drug use?
8. Does your spouse (or parents) ever complain about your involvement With drugs?
9. Has drug abuse created problems between you and your spouse or your parents?
10. Have you lost friends because of your use of drugs?
11. Have you been in trouble at work because of drug abuse?
12. Have you neglected your family because of your use of drugs?
13. Have you lost a job because of drug abuse?
14. Have you gotten into fights when under the influence of drugs?
15. Have you engaged in illegal activities in order to obtain drugs?
16. Have you been arrested for possession of illegal drugs?
17. Have you ever experienced withdrawal symptoms (felt sick) when you stopped taking drugs?
18. Have you had medical problems as a result of your drug use e.g. memory loss, hepatitis, convulsions, bleeding, etc.)?
19. Have you gone to anyone for help for a drug problem?
20. Have you been involved in a treatment program specifically related to drug use?

All the medical records were screened for outcomes after psychosocial treatments, including daily activities, daily life care, social interactions (i.e., with room fellows, psychologists, and doctors etc.). Different type of psychosocial interventions which were provided during treatment and rehabilitation.

1) Motivational interview, which included conversations about the change and was used to help drug users identify their need for change.

2) Cognitive behavioral therapy (CBT).

3) Family therapy which was mainly focused on problematic behaviors associated with drug addiction.

RESULTS

3.2 Check list of Psychosocial Rehabilitation

Self-Care: Table and figure 3.2.1 demonstrate the average percentages of the self-care activities by the patients. A total of five self-care activities were included in this study to evaluate the outcomes of the psychosocial treatment. As shown 95.3 percent subject took morning tea, 94.6 percent took the dinner, 49.2 percent use to change clothes after appropriate time, 74.6 percent used to cut the nail and maintained nail hygiene, and 60 percent maintained oral hygiene by brushing teeth.

Table: 3.2.1 Average percentages of self-care activities

Brush Teeth	Cutting Nails	Changing Clothes	Taking Dinner	Taking Tea
60	74.6	49.2	96.4	95.3

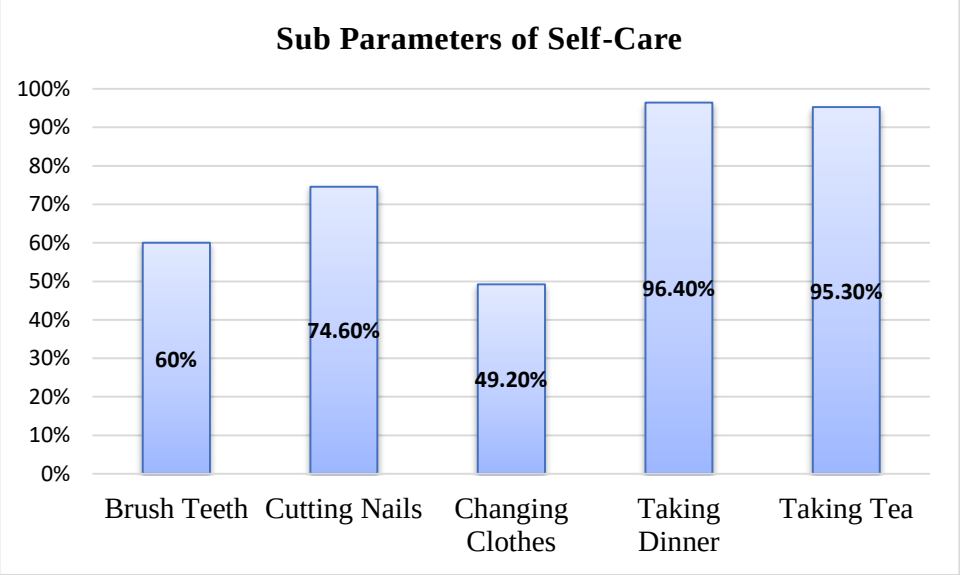

Figure: 3.2.1: Average percentages of self-care activities

Daily Activities: Table and figure 3.2.2 represent total number of average percentages for all the daily activities of all the individuals. The daily activities assessed in this study, includees 5 times prayers, morning walk, watching TV, sport activities, religious speeches and attending lectures. A total of 85.4 percent subject used to attend night prayer and watch TV. The percentage for evening, afternoon, noon, and morning prayers were 90, 88.4,88.4and 80 percent. While morning walk, lectures and religious speeches were attended on average by 80, 87 and 74.2 percent.

Table 3.2.2 Average percentages of personal involvement and participation in daily activities

Religious Speech	Morning Walk	Lectures	Noon Prayer	Afternoon Prayer	Evening Prayer	Sports	TV	Night Prayer
74.2	80	87	88	88	90	92	85	85

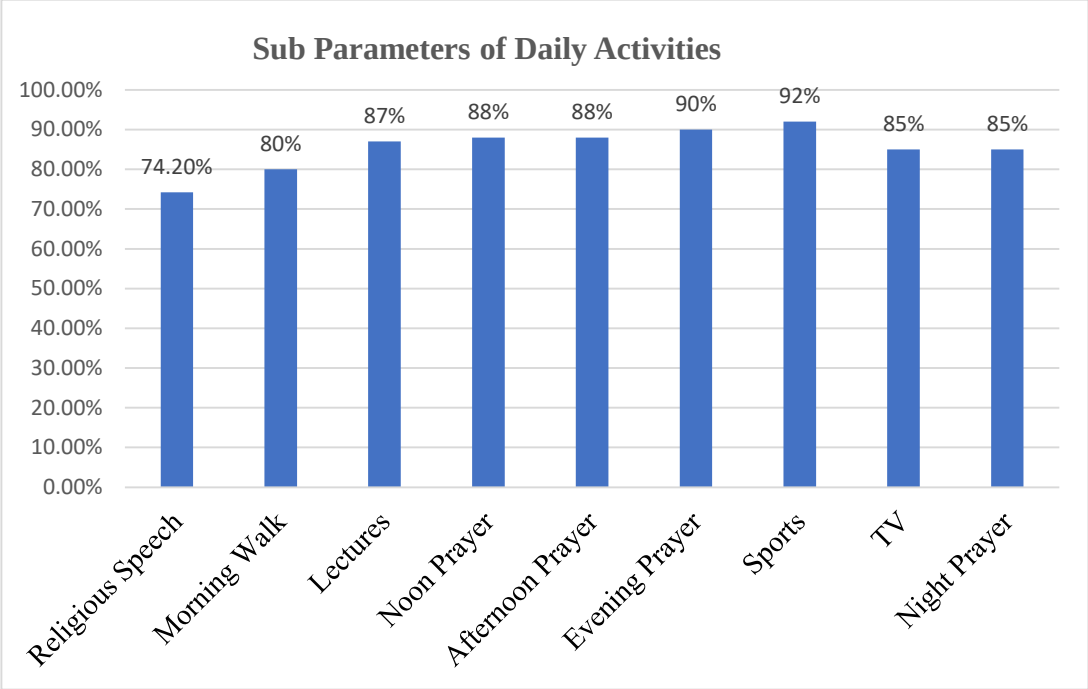

Figure: 3.2.2 Average percentages of personal involvement and participation in daily activities

Social Interactions: Table and figure 3.2.3 demonstrate the average percentages of the social interactions of the patients with administrator, doctor, psychologist, room fellows, social workers and with the spiritual counselor. The table and figure show that the percentages of subject interacting with doctor (88.5), psychologist (80.8%), room fellows (94.6), social workers (94.6%), spiritual consolers (88%) and administrator (80.8).

Table: 3.2.3 Average percentages of social interactions

Administrator	Doctor	Psychologist	Room Fellow	Social Worker	Spiritual Counselor
80.80	88.50	80.80	94.60	94.60	88

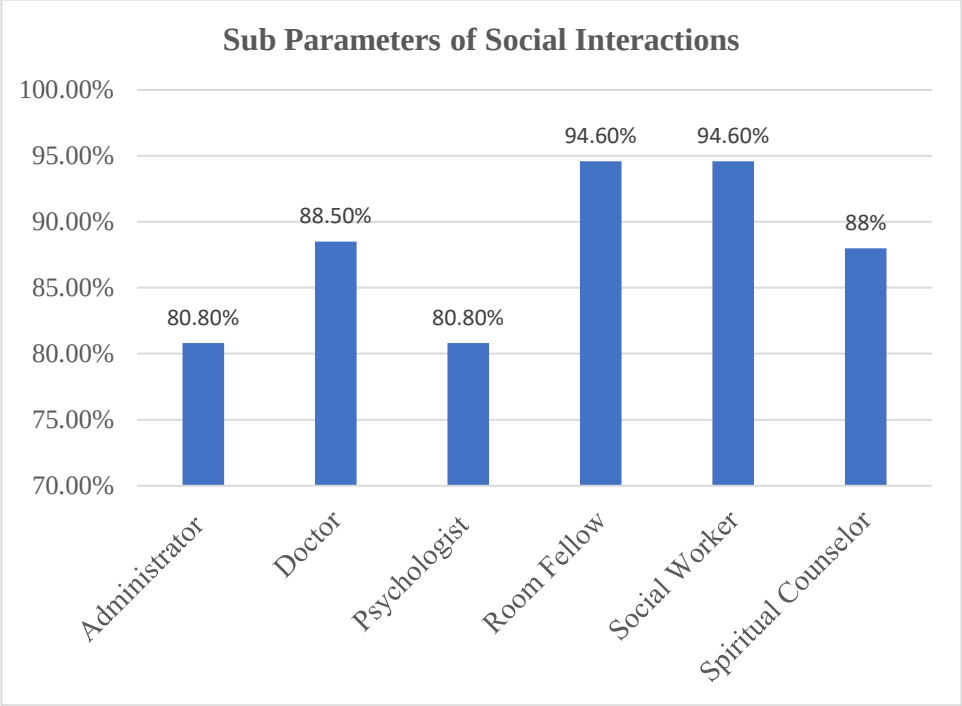

Figure 3.2.3 Average percentages of social interactions

The various responses from the individuals when subjected to DAST test is listed below in the table.

Table. 3.3Positive responses from individuals

Q	1	2	3	4	5	6	7	8	9	10
# YES	12	10	7	8	11	8	11	92	6	6
%YES	92.3	76.9	53.8	61.5	69.2	61.5	84.6	69.2	46.2	46.2

Q	11	12	13	14	15	16	17	18	19	20
# YES	8	2	2	6	5	2	10	2	11	11
%YES	61.6	15.4	15.4	46.2	38.5	15.4	76.9	15.4	69.2	69.2

DISCUSSION

The current study reported nalbuphine addiction and the impact of psychosocial treatment on various outcomes including psychological functions and quality of life assessed by self-care. This study recruited subjects who were resident of the war affected area. They were directly or indirectly (know someone who was affected by war, or any event of war happened nearby)

affected by the war. Studies have reported that wars and traumas have deleterious effects on the brain, cause psychological problems and further complicate the problem of drug addiction [7]. For example, it has been shown that war associated stress and depression cause relapse to addictive substances [6]. The principal findings of this study were that psychosocial treatment improves various psychological functions and improve quality of life of nalbuphine addicts who were affected by war.

Nalbuphine addiction has been reported very poorly in literature. As compared to other type of addictions, nalbuphine addition is not very common in society. However, due to it favorable pharmacological profile in terms of adverse effects it can become drug of choice for the addicts [16]. Previously, nalbuphine dependence in anabolic steroid users has been reported. They suggest that nalbuphine could be a new drug of abuse among athletes and especially in anabolic steroid users [17] so the legal state of its availability should be revised.

In our study the city selected was Bannu, is located in KPK province of Pakistan. The Bannu city is comparatively backward having a lot of social problems including unemployment as well as lack of education which is compelling the young generation and common people towards addictive and psychotropic drugs and substances. As we know that the abusive potential and the extent of abuse of scheduled substances is focused everywhere but unscheduled drug substances which have abusive potential are often neglected from this point of view. That's why we selected nalbuphine which is not scheduled drug and the city of Bannu being backward, had faced war on terror and facing social problems having high risk for the abuse of drugs including nalbuphine.

Psychosocial treatment had been provided to the patients, containing components like motivational interviews, cognitive behavioral therapy, and family therapy. Varity of psychological and quality of life outcomes were measured which were presented in the patient medical record including social interaction, participation in daily life activities and self-care. We reported that post treatment percentage of every single outcome was high. For example, food habits of addicts improved as shown that on average 94.6 percent of the patients did not skip the dinner. Similarly, the results suggest that other outcomes were also highly improved.

CONCLUSION

The results of our study carried out at Drug detoxification and Health Welfare Research Center, Bannu, KPK, Pakistan, concluded that psychosocial therapy for the treatment of addition of nalbuphine works effectively in war affected people when given and prescribed in a rational manner by competitive professionals. We also concluded that psychosocial therapy plays a very crucial role and integrate back the patient with society through involving them in planed social and religious activities. We recommend that health care professionals should focus intensively on the psychosocial treatment of nalbuphine addicts. Psychosocial treatment possesses huge therapeutic potential in vulnerable addicts, such as war affected addicts. However, some limitations should be noted: first that the sample size was very small due to limited availability of data. Second is the study employed one-group posttest only design with a lack of control group for comparison.

Limitation

The current study addressed one of the important issue of drug addiction with reference to nalbuphine in the modern world. However, in-depth study is needed as the current sample size was small.

CONFLICT OF INTEREST

The author declares no conflict of interest which can affect the current submission.

AUTHOR CONTRIBUTION

All author contributed equally.

FINDING SOURCE

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