# A Comparative study of quality of life and marital satisfaction in Male patients before and after institution of Oral Substitution Therapy in Opioid dependent patients

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Date of Submission: 10-12-2020 Date of Acceptance: 25-12-2020

**ABSTRACT: Background**: Opioid dependence has a magnitude of problems associated with it affecting not only the addict but also his family especially his wife, affecting his quality of life overall and marital satisfaction specifically, we aim to compare the above two parameters before and after institution of oral substitution therapy.

**Methods**: 40 patients with opioid dependence under treatment were evaluated, quality of life and marital satisfaction of patients were evaluated using the Short form health survey(SF36) and Marital adjustment test(MAT).

**Results**: The results show a significant improvement in quality of life scale(SF 36) score, average score on physical component summary increased from 60.95 to 75.6 and emotional component summary from 69.52 to 75.5, and marital satisfaction scale(MAT) score before and after institution of OST increased from 7.0 to 9.3, which was highly significant indicating improvement in QOL and marital satisfaction after institution of therapy.

**Conclusion**:Our study concludes that there is a significant impact of opioid dependence on quality of life and marital satisfaction of patients, more emphasis is to be given to improvement of overall quality of life and marital satisfaction and attempts should be made to bring the addicts in mainstream life, by providing OST.

# I. INTRODUCTION

Opioids are one of the most problematic illegal substances globally. Opioid abuse is associated with complications in various spheres of life, his/her family, user's and society<sup>1</sup>.Opioid dependence is a major public health problem in Indiaas well<sup>22</sup>.It affects the quality of life of patient, his family and brings a lot of dissatisfaction in his marital life, which leads to developing of a myriad of physical, psychological, legal and emotional problems<sup>6,7</sup>. Medications form an important cornerstone in the

treatment of opioid dependence. Treatment strategies such as "detoxification" alone or long-term treatment with opioid antagonist have limited acceptability and retention rates. Opioid substitution therapy (OST) has demonstrated better retention rates than other existing treatment strategies and helps improve the individual's functioning as well as his/her quality of life 15.

ISSN: 2582-6018

OST supplies illicit drug user with a replacement drug,a prescribed medicine like methadone or buprenorphine which is usually administered orally in a supervised clinical<sup>2</sup> setting. The effectiveness of this therapy is recognized in developed countries where OST is a fundamental component of dual public health programme of injecting drug use and HIV transmission.OST programmes are effective in substantially reducing illicit opioid use,HIV risk behaviours, death from overdose and criminal activity, and financial and other stresses ondrug users and their families. Many injecting drug users who have who would otherwise have no contact with any health services are attracted by these programmes and act as a gateway to complete evaluation.It also ensures mobilization of affected individuals when they are not fully occupied with obtaining an ongoing supply of illicit drugs<sup>21</sup>.

India is a good example of a developing country that is gradually integrating the provision of opioid substitution therapy into public health policies and programmes. Following two successful pilots in 1999–2002 and 2006–07, the National AIDS Control Organization has included opioid substitution therapy in its third five-year plan..

OST helps in retaining the patient in treatment, reducing the use of illicit opioids and other substances, and in improving the individual's productivity and his/her quality of life. OST is, perhaps, the most researched treatment strategy. Various systematic reviews, including Cochrane review, meta-analysis, and review of reviews have



# International Journal Dental and Medical Sciences Research Volume 3, Issue 1, pp 50-54 www.ijdmsrjournal.com

rnal.com ISSN: 2582-6018

found OST to work well in opioid dependence. Therefore, most treatment guidelines recommend that OST should be provided to all opioid-dependent individuals, unless there are specific contraindications to start OST in an individual.

An adequate dose of OST gives much needed relief to the user for an entire day, and provides him/her with an opportunity to take charge of his/her life and consequently should improve his/her overall quality of life including marital life. There is paucity of studies pertaining to impact of OST on quality of life and marital satisfaction, especially in Indian context hence the study was done<sup>22</sup>.

## II. METHODS

After obtaining the required Institutional Ethical committee approval, the study was carried out at the Department of Psychiatry of a tertiary care centre attached to a medical college in north India, during the period of April 2019 to June 2019. The Department provides inpatient and outpatient services for substance use disorders. The patients came by self-referral or referral from other hospitals or various clinical departments and were accompanied by their family members, including the spouses. Only Married patients were recruited. The cases for the study constituted 40 patients with opioid dependence diagnosed according to ICD-10 criteria coming for Oral Substitution therapy. This was a single arm intervention study with "pre-post design". Recruitment was by purposive sampling for subjects fulfilling the specified inclusion and exclusion criteria as below.

#### **Inclusion criteria**

- The male adult outpatients with a diagnosis of opioid dependence syndrome according to ICD-10 criteria.
- Age group between 21 and 50 years.
- At least 3 years of opioid use.
- Self report of opioid use in last 15 days.

## **Exclusion criteria**

- Age below 21 and above 50 years .
- Patients having physical and psychiatric disorders not related to opium use.
- Patients not consenting for the study.
- •Substance use other than tobacco in the patients.

Subjects who gave written informed consent were included in this interventional follow-up sectional study. Socio-demographic data were obtained from the subjects and their marital satisfaction was assessed using Marital Adjustment

Test(MAT) while quality of life was assessed using Short Form Health Survey-36 (SF-36) on their first visit. They were again assessed after 6 weeks of institution of OST.

Marital Adjusment Test (MAT): This scale is a 15 item scale that measures marital satisfaction. It was initially used to differentiate well adjusted couples from distressed (unsatisfied) couples. It is a scale with a dot line pattern 15 items are answered with a score of 0(Very unhappy) ,2,7,15(Happy-represents the degree of happiness which most people get from marriage, and the scale gradually ranges on one side to 20, 25, and 35(those few who experience joy or felicity in marriage).

Quality of life was assessed using Short form health survey (SF36) which is multipurpose with only 36 questions divised by John E Ware Jr.It yields an 8 scale profile of functional health and wellbeing scores, is self administered, it takes about 5 to 10 minutes for respondent tocomplete the scale. Scores can be transformed to make minimum and maximum possible scores of 0 and 100. Lower scores reflect poorer health, long standing illness and medical consultations in past 2 weeks.

Relevant data was collected and analysed using SPSS. paired t test was used to find out change in MAT and SF-36 scores before and after institution of OST while pearsons correlation was used to find out any association between duration of opioid use and marital satisfaction and quality of life.

#### III. RESULTS

First of all descriptive datas were analysed by frequencies ,percentage,means and standard deviation. The patients were analyzed using socio demographic profile. The mean age of opioid dependant men was 28±5.5 years, most of them were educated upto 9<sup>th</sup> standard with mean of 9±5.8 vears.70% were employed(usually self employed) and 30% were unemployed, mean age of wives was24±6.72 years, mean duration of marriage was9±6.3 years,70% were Hindus and 30% were Muslims,40% belonged to rural background and 60% belonged to urban ,70% were living in nuclear family and 30% in joint and average family income of 60% was below 10000 per month and of40% 10000.Characteristic of opioid more than dependence Patients were using substance in amount of 29±63 miligrams morphine equivalent per day with mean age of onset being 19±6.3 years.All the patients were treated on outpatient basis.



# **International Journal Dental and Medical Sciences Research** Volume 3, Issue 1, pp 50-54

www.ijdmsrjournal.com

ISSN: 2582-6018

Table 1Socio-demographic profile of patients

Age(in	Educatio	Emplo	Duration of	Religion		Domicile		Monthly	income(in
years)	n(in	yment	marriage(in					rupees)	
	Years)		Years)						
				Н	M	U	R	1*	2*
28±5.0	9.0±5.8	70%	9.0±6.3	70%	30%	60%	40%	60%	40%

H- Hindu U-Urban 1\*- < 10000 M-Muslim R-Rural 2\* >10000

On administration of SF36 scale we found significant difference between the scores before and after administration of OST in domains ofphysical functioning,role physical,vitality,mental health, social functioning, bodily pain, general health and role emotions, all the differences were significant(p<0.005),we have found more improvement in PCS(Physical component score) summary as compared to MCS(Mental component score) summary.

Table 2. Short form survey - 36

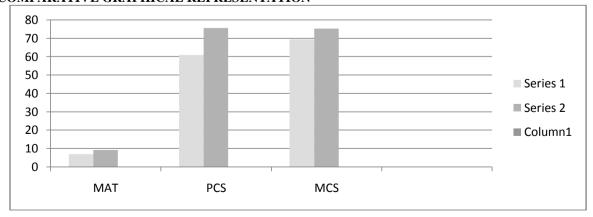
	Mean	before	Mean after OST	t	р
	OST				
Physical	72.60		80.10	6.04	0.0038
functioning					
Role physical	60.60		71.10	4.0	0.0014
Role emotional	72.00		76.32	3.2	0.0030
Vitality	64.80		71.10	4.26	0.013
Mental health	82.00		86.3	3.5	0.023
Social functioning	59.32		68.10	5.58	0.005
Bodily pain	41.10		78.20	11.8	0.003
General health	69.50		73.0	2.7	0.04
PCS	60.95		75.5	3.6	0.001
MCS	69.52		75.4	5.2	0.006

The scores on marital adjustment scale before instituition of OST was 7±1.3 which increased to 9.3±1.9 after 6 weeks of institution of therapy and difference between the two was significant

**Table-3 Comparative study** 

		Mean score before OST	Mean score after OST	t	P
SF36	PCS	60.95	75.6	3.6	0.001
	MCS	69.52	75.4	5.2	0.006
MAT		7±1.3	9.3±1.9	8.63	0.001

# COMPARATIVE GRAPHICAL REPRESENTATION



# **International Journal Dental and Medical Sciences Research** Volume 3, Issue 1, pp 50-54

www.ijdmsrjournal.com

ISSN: 2582-6018

## IV. DISCUSSION

Opioid dependence is a major health problem worldwide including India. Presence of a substance dependent person in the family changes the whole dynamics of the family in a negative way increases conflicts and cause stress not only to the patient but to each and every member of the family spouse is one of the severely affected member. Due to paucity of research available on affect of opioid quality of life and marital dependence on satisfaction in India this study was undertaken.

On the basis of findings of this study we Infer that there is overall worsening of quality of life in opioid dependent patients and our findings found an improved quality of life score 6 weeks after institution of OST, the reason beingclear pharmacological distinction between illicit opioids and the opioids used as medicines governs the practice of OST. The amount and the route of consumption of illicit opioids lead to their rapid onset of action and peak action lasting for short time. This compels the individual user to repeat the act of consumption several times a day. The repeated acts of consumption, experiencing the high at peak, and the withdrawals and craving at trough do not leave the individual with any time to focus on his/her work or family. Furthermore, the prohibitive cost of illicit opioids such as heroin leads the individual to spend his/her earnings on drugs, or worse, commit crimes to continue his/her drug use. The opioids used as OST medicine, on the other hand, have slower onset of action, longer duration of action, and are absorbed through safer routes. An adequate dose of OST gives much needed relief to the user for an entire day, and provides him/her with an opportunity to take charge of his/her life. First, improvements in the physical QOL domain may have resulted from physical recovery as a consequence of agonist maintenance programme itself. Second, differences in the magnitudes of the score changes across the four domains might reflect the sensitivities of different domains as well as the effects of intervention programme.

Our study also found poor marital adjustment and satisfaction in patients of opioid dependence and a significant improvement in marital satisfaction scores 6 weeks after instituition of therapy.which is almost similar to study conducted by Erfanian et al who assessed the addicts and their couples on qualitative and quantitative dyadic satisfaction and concluded that dyadic satisfaction between addicts and their couples is at medium level of satisfaction <sup>13</sup>.

Patients using illicit opioids while on OST are not punished; rather their dose is

optimized. Even those who want to restart OST after relapse are provided smooth re-entry. In our study there 4 patients were lost to follow up 2 of whom were provided reentry and two could not be followed up, continuation rate of treatment is satisfactory and the only reasons which could be identified was either lack of motivation as they left treatment in first 2 weeks or left the place mainly because of occupational reasons. Besides having a positive effect on OOL and marital satisfaction,OST has role in dual public health programmes of injecting drug users and HIV transmission.OST is not a cure for drug dependence rather it is a therapy for management of a chronic condition.one striking finding in patients on OST is decrease in indulgence in high risk behavior.

## Limitations

- 1. Sample size is small.
- Follow up period is of 6 weeks which is a bit short and further follow ups are warranted.
- The version is of patients only and a parallel study with wife will validate the findings.
- Representation of females in study is nil.

## V. CONCLUSION

Our study concludes that there is a significant impact of opioid dependence on quality of life and marital satisfaction of patients, more emphasis is to be given to improvement of overall quality of life and marital satisfaction and attempts should be made to bring the addicts in mainstream life.

# Financial support and sponsorship

Nil.

## **Conflicts of interest**

There are no conflicts of interest.

## Ethical clearance

The study was approved by institutional ethics committee

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# **International Journal Dental and Medical Sciences Research**

Volume 3, Issue 1, pp 50-54 www.ijdmsrjournal.com ISSN: 2582-6018

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