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Quality of Life in Methadone Treatment Patients: The Morocco Experience

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Abstract:- Opioid use disorder is a pattern of problematic opioid use, leading to impaired functioning or clinically significant suffering. The Treatment options include symptomatic withdrawal, withdrawal with selective alpha-2 noradrenergic agonist mimetics (clonidine or Lofexidine), and finally, withdrawal with opioid agonists (methadone and Buprenorphine), which remains the most effective in reducing morbidity and mortality.

The main objective of our work was to study the long-term effect of methadone substitution therapy on the quality of life of patients undergoing outpatient treatment in Morocco, then to determine the factors influencing this quality of life, before concluding with recommendations for improving the overall management of the patient.

The total number of patients responding to the questionnaire was 60 participants. Social and environmental components were moderately improved in methadone-treated patients. Negative feelings such as melancholy, despair, anxiety or depression were present in the majority of our participants, with varying frequencies, with a significant alteration in the psychic component.

For several years, quality of life has been a major preoccupation of healthcare professionals in a bio-psycho-social approach. In this vision of care, quality of life should now be part of the clinical criteria for monitoring patients on methadone.

I. INTRODUCTION

Opioid use disorder is defined by the DSM-5 as a pattern of problematic opioid use, leading to impaired functioning or clinically significant suffering [1].

The disorder affects nearly 16 million people worldwide and over 2.1 million in the United States, with over 120,000 deaths worldwide attributed to opioids each year [2].

This significant prevalence of opioid use disorder underlines the importance for clinicians to better understand opioids and be able to refer patients to specialized treatment centers.

Treatment options include symptomatic withdrawal, withdrawal with selective alpha-2 noradrenergic agonist mimetics (clonidine or Lofexidine), and finally, withdrawal with opioid agonists (methadone and Buprenorphine), which remains the most effective in reducing morbidity and mortality [3].

Non-pharmacological behavioral therapy is also beneficial. Patients with opioid use disorders often benefit from 12-step programs, support from peers and mental health professionals, and individual and group therapy [4].

Morocco, a pioneer in the Arab world in the field of opiate substitution, is no exception to this rule, and has found itself confronted with a situation where opiate use is much more widespread in the north of the country. Morocco's geographical proximity to Europe and the multiple interactions fostered by migratory population flows undoubtedly contribute not only to the spread of hard drug use, particularly heroin, but also to the diversification of consumption methods (injection drugs) [5].

This consumption is also linked to numerous risk behaviors that expose drug users to infections transmitted by sharing injection equipment (HIV, hepatitis B and C, tuberculosis), to overdoses, and also to acts of delinquency.

The decision taken by Moroccan officials to introduce methadone in June 2010 on a pilot basis in three centers (Salé, Casablanca and Tangiers), came in response to a situation that had become worrying in recent years, given the increase in the number of heroin users. [6].

Indeed, methadone substitution treatments are considered an effective way of reducing craving, reducing or eliminating withdrawal symptoms, criminal activity and mortality rates. They have also proved effective in reducing the risk behaviors associated with injection drug use, including behaviors that present risks of transmission of the human immunodeficiency virus (HIV), hepatitis C virus and sexually transmitted infections (STIs).

Consequently, methadone substitution treatment improves physical and mental health, social life and quality of life. [7].

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II. OBJECTIVES

The main objective of our work was to study the long-term effect of methadone substitution therapy on the quality of life of patients undergoing outpatient treatment in Morocco, then to determine the factors influencing this quality of life, before concluding with recommendations for improving the overall management of the patient.

III. MATERIALS AND METHODS

A. *Type and location of study*

We conducted a cross-sectional, analytical study in the Addictology Department at Ar-razi Hospital in Salé, which provides oral methadone substitution therapy for around 80 patients.

B. *Study target population*

The target population for the study was patients with opioid use disorders who had been on methadone substitution therapy for at least 06 months.

C. *Study variables*

Our study variables were organized into three groups:

- The patient's sociodemographic data: age, sex, family, socio-economic and professional situation, living conditions.
- Personal medical and surgical history, and history of psychoactive substance use.
- Quality of life variables: For this study, we used the World Health Organization's abbreviated version of quality of life (WHOQOL-BREF), which comprises 26 questions, and addresses four domains of quality of life: physical health, psychological health, social relationships and environment. The final section asks patients about their expectations and desired improvements in their quality of life: health, fitness, sleep, negative mood, love life, libido and sex life, work life, family life and daily life. Patients indicate whether or not they would like to see an improvement.

D. *Statistical analysis of the data:*

The data were analyzed using SPSS software. Qualitative variables are expressed as percentages, and quantitative variables as mean and standard deviation, or median and interquartiles. Scores for the various instruments were calculated according to the scoring procedures provided by the tool designers. Links between QoL scores and sociodemographic, health and psychobehavioral parameters were explored using Spearman correlation coefficients (quantitative variables) and Mann-Whitney tests (binary variables). The significance level was set at 0.05.

IV. RESULTS

The total number of patients responding to the questionnaire was 60 participants.

A. *Presentation of the study population:*

The population of methadone-treated patients in our study was 83.33% (n = 50) male and 16.67% female (n = 10).

The most common age group in our study was between 31 and 45 (71.67%). 36.67% were married (n=22), 80% (n=48) lived with their family, 83.34% (n=50) had a secondary school education or higher, while the vast majority 63.33% (n=38) had no fixed occupation.

96.7% (n=58) of participants were of Moroccan nationality, against only 3.3% who were foreigners (n=2).

B. *History of opiate use :*

The main indication for methadone withdrawal in our patients was heroin use (66.67%), followed by Codeine, then Tramadol. The daily doses of methadone delivered ranged from 04 to 200 mg/patient, with an average of 75 mg.

The main adverse effects reported by our patients were libido disturbance, constipation, fatigue and sleep disturbance.

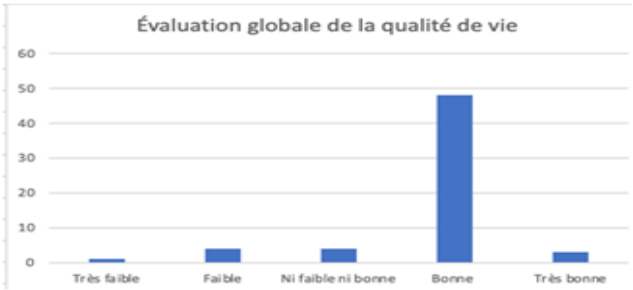
63.33% (n=38) of patients continued to use other psychoactive substances on a regular basis, mainly tobacco, followed by cannabis.

13.33% (n=8) reported persistent craving, and the vast majority claimed to be supported by a family member (70%, n=40).

C. *Overall assessment of quality of life:*

Scoring the two items of the WHOQOL-BREF scale, which assess general quality of life and perceived physical health respectively, showed that 80% of participants (n=48) considered their quality of life to be "good" or "very good", while 20% (n=12) described it as "poor" or "very poor". (Graph I).

70% (n=42) also said they were "satisfied" or "very satisfied" with their health, while 25% (n=15) were "dissatisfied" or "very dissatisfied". (Graph II).



Graph I: Quality of life.

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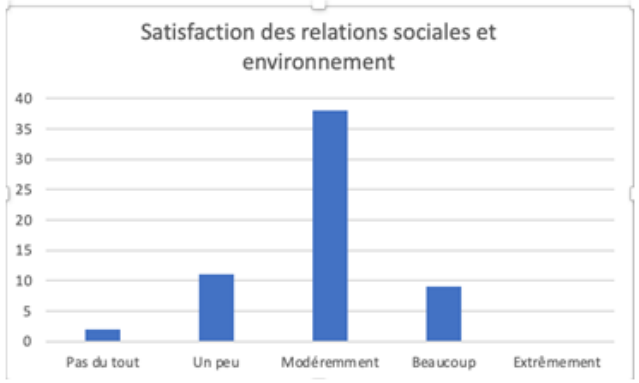
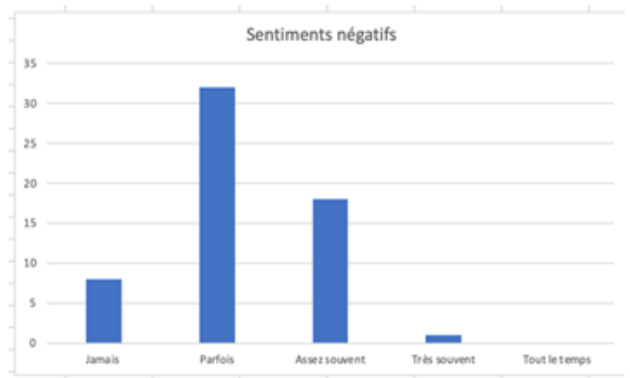
Graph II: Perception of health.

Social and environmental components were moderately improved in methadone-treated patients (Graph III). Negative feelings such as melancholy, despair, anxiety or depression were present in the majority of our participants, with varying frequencies, with a significant alteration in the psychic component (Graph IV).



Graph III: Perception of social life.



Graph IV: Perception of psychic component.

For participants with the same quality of life, those with a level of education greater than or equal to high school tended to score higher than those with a lower level of education, women younger subjects, and those with a steady job tended to score higher.

For participants with the same quality of life, heroin users tended to score higher on the physical health, psychic and social relations items.

Men reported significantly higher WHOQOL-BREF physical quality-of-life scores than women. Older subjects report lower levels of quality of life on the WHOQOL-BREF psychological and environmental dimensions. Individuals living with a family reported higher levels of quality of life on the physical, psychological and environmental dimensions of the WHOQOL-BREF than individuals living alone. All three variations were statistically significant.

Generally speaking, individuals with a stable professional activity report better levels of quality of life, but this is not statistically significant.

Individuals' emotional state is significantly correlated with their QoL levels for virtually all QoL dimensions. Individuals with better emotional management skills report better quality of life as assessed by the WhoQoL on all dimensions.

V. DISCUSSION

The concept of quality of life has emerged at the same time as the development of chronic diseases, the aging of the population and the increase in the number of people with disabilities. The World Health Organization (WHO) defines quality of life as follows: "Quality of life is how people perceive their position in life, in the context of the culture and value system in which they live and in relation to their goals, expectations, norms and concerns. It is a broad concept, incorporating in complex ways a person's physical health, psychological state, degree of independence, social relationships, personal beliefs and relationship with important elements of the environment." [8] [9].

Quality of life encompasses a subjective and a multidimensional component, which takes into account multiple elements: physical, functional, emotional and social well-being.

Our survey enabled us to assess the quality of life of patients receiving methadone treatment at the Ar-razi hospital in Salé. Over and above the finding of a deteriorated psychological quality of life, this study sheds light on the role of the various determinants that make up this quality of life.

Our population is 83.33% male and 16.67% female. This panel is a small sample, and the male/female ratio and average age are in line with the French or American population on opiate substitution therapy (OST). [12].

However, it is important to note that the number of opiate-dependent women is undoubtedly underestimated. This under-reporting can be explained in particular by women who are mothers. Fear of having their children placed in care may hinder their efforts to seek treatment [13]. According to the literature, the increase in quality of life is observed in both methadone- and BHD-treated patients. It is observed rapidly from the first months of

treatment, whatever the OST, and is accentuated by total abstinence from opiates [14].

The improvement in quality of life is modest in the literature, ranging from 5 to 15% [15]. The greatest improvements were in overall health and emotional well-being [16], which is in contradiction with our results. 13.33% of participants in our survey reported experiencing withdrawal despite taking their medication. In our sample, subjects reporting opioid cravings had a lower quality of life score than other patients.

OSTs help reduce cravings. With psychological treatment, in association with OSTs, cravings can be reduced and quality of life increased [16].

Opiates are not the only substance used by patients. In a study published in 2017, only 6.7% of participants were abstinent from all substances (amphetamines, BZDs, cocaine and opiates) throughout the survey. Patients with regular opiate use, as well as dependence, have a deteriorated quality of life [18].

Improvements were mainly observed during the first 30 days of treatment. Being married and less psychological distress were associated with improved quality of life. In the area of social relationships, men showed a significantly higher quality of life than women.

VI. CONCLUSION

For several years, quality of life has been a major preoccupation of healthcare professionals in a bio-psycho-social approach. In this vision of care, quality of life should now be part of the clinical criteria for monitoring patients on methadone.

REFERENCES

[1]. Korownyk C, Perry D, Ton J. Prise en charge du trouble de consommation d'opioïdes en première ligne: Lignes directrices simplifiées de PEER. Can Fam Physician. 2019 May 173-e184.
[2]. Chang HY, Kharrazi H, Bodycombe D, Weiner JP, Alexander GC. Healthcare costs and utilization associated with high-risk prescription opioid use: a retrospective cohort study. BMC Med. 2018 May.
[3]. Vallersnes OM, Jacobsen D, Ekeberg Ø, Brekke M. Mortality, morbidity and follow-up after acute poisoning by substances of abuse: A prospective observational cohort study. Scand J Public Health. 2019 Jun;47(4):452-461.[
[4]. Behar E, Bagnulo R, Coffin PO. Acceptability and feasibility of naloxone prescribing in primary care settings: A systematic review. Prev Med. 2018 Sep;114:79-87.
[5]. M. Sabir, F. El Omari, J. Mehssani, J. Toufiq. Les thérapies de substitution aux opiacés Maroc Médical, tome 35 n°2, juin 2013
[6]. Dispositifs de réduction des risques liés à l'usage des drogues injectables dans la région de Tanger - Tétouan. Service de la Santé Mentale et des Maladies Dégénératives. Royaume du Maroc : Direction de l'Epidémiologie et de lutte contre les maladies, 2008.
[7]. Imtiaz S, Shield KD, Fischer B, Elton-Marshall T, Sornpaisarn B, Probst C, Rehm J. Recent changes in trends of opioid overdose deaths in North America. Subst Abuse Treat Prev Policy. 2020 Aug 31;15(1):66.
[8]. The World Health Organization quality of life assessment (WHOQOL): Position paper from the World Health Organization. Soc Sci Med. 1 nov 1995;41(10):1403
[9]. Cella DF. Le concept de qualité de vie : les soins palliatifs et la qualité de vie. Rech Soins Infirm. 2007;N° 88(1):25-31.
[10]. Durrani M, Bansal K. Methadone. 2023 Apr 29. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2023 Jan
[11]. Direction de l'Evaluation Médicale, Economique et de Santé Publique. Évaluation des technologies de santé à la HAS : place de la qualité de vie [Internet]. Haute Autorité de Santé. [18 oct 2019].
[12]. Brisacier A-C. Tableau de bord « Traitements de substitution aux opioïdes » Mise à jour 2019. mars 2019;(4):19.
[13]. Simmat-Durand L, Vellut N, Jauffret-Roustide M, Michel L, Mougel S, Lejeune C, et al. Trajectoires de femmes en sortie des addictions : quelle place pour les grossesses ? Psychotropes. 2013;Vol. 19(3):35-60.
[14]. Blevins CE, Abrantes AM, Kurth ME, Gordon AL, Stein MD. Quality of Life and Well- being following Inpatient and Partial Hospitalization Treatment for Opioid Use Disorder. Arch Psychiatr Nurs. juin 2018;32(3):505-9.
[15]. Burns L, Gisev N, Larney S, Dobbins T, Gibson A, Kimber J, et al. A longitudinal comparison of retention in buprenorphine and methadone treatment for opioid dependence in New South Wales, Australia. Addiction. 2015
[16]. Kelty E, Hulse G, Joyce D. A comparison of blood toxicology in fatalities involving alcohol and other drugs in patients with an opioid use disorder treated with methadone, buprenorphine, and implant naltrexone. Am J Drug Alcohol Abuse. 3 mars 2020
[17]. Ahmadi J, Jahromi MS, Ghahremani D, London ED. Single high-dose buprenorphine for opioid craving during withdrawal. Trials [Internet]. 10 déc 2018 [cité 17 mars 2021];19. Disponible sur: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6288888/
[18]. Greg Rhee T, Rosenheck RA. Association of current and past opioid use disorders with health-related quality of life and employment among US adults. Drug Alcohol Depend. 1 juin 2019