

# EFFECT OF CORONAVIRUS PANDEMIC ON METHADONE MAINTENANCE TREATMENT

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## INTRODUCTION

. Methadone and buprenorphine are the major modalities on the opioid substitution therapy (OST) for opioid dependence in North Macedonia. Some studies reported that coronavirus pandemic in methadone maintenance patients(MMT) increase levels of stress, anxiety, depression and craving of substance use. The negative emotions aroused by the COVID 19 outbreak and the accompanying social isolation to patients on MMT maybe are an important factor of this occurrence. The aim of this study is to evaluate the effect of coronavirus pandemic on mental health and consumption of legal and illegal substances.

## MATERIALS AND METHODS

. The prospective study included group of male patients on methadone therapy (N=30) between 20-51 years evaluated in Day hospital of heroin addicts-department of Psychiatric Hospital Skopje. The study was conducted for 6 months so the patients was evaluated before coronavirus pandemic and after six month of beginning the epidemic. The patients were assess using sociodemographic information by semi-structured questionnaire specially designed for the study. The sociodemographic data was: age, marital status, education status and employment. Urinary tests for determination of psychoactive substances, BDI scale to determinate depression and Zung scale to determinate the anxiety. Results of this study were determinate buy descriptive methods and Students t-test.

## RESULTS

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In our study we got not statistically significates result between sociodemographic characteristic between examination groups Table 1 Sociodemographic characteristic between examination groups

parameters	Group 1	Group 2	T test	plevel
Age(year)				
Married status Y/N %				
Employment%				
Education years				

But we got statistically significates results between score of BDI and Zung scale in examination groups (table2,3)

group	BDI ≤10	t-test	P level
Group 1		1,24	0,02
Group 2			

parametrs	Group 1	Group 2	T test	plevel
Normal range				
Mild to moderate				0,002
severe				
Extreme anxiety level				

Also in our study we got that alcohol , tobacco use and recidivism of heroin use were statistical significantly higher in MMT patients after six months of coronavirus pandemic.

parametrs	Group 1	Group 2	t-tst	plevel
Alcohol use				0,03
Tobacco use				0,03
Heroin recidivism				0,05

## DISCUSSION

The results in our study show that the psychological and behavioral changes of the patients reciving MMT during the epidemical were recoded. Also the rate of drug relapse during the post epidemic period was increased significantly and the amount of tobacco use increased gradually as the epidemic progressed. The speed of COVID =19 transmission and the severity of the infection as well as the accompanying strict social stress factor for ever citizen including and the MMT patients. Our researches results also confirm that MMT receiving patients showed high level of psychological stress, anxiety and depression during the outbreak. The adverse effects of stress on substance dependence were mediated through the action of corticotropin-releaping factor and other stress hormones. These hormones weakly the hippocampus and the prefrontal cortex, but strengthen the amygdala which leads to development of negative emotion and increase risk of relapse.

## CONCLUSION

. Results in our studies , suggested that coronavirus pandemic attack mental health in MMT patients. So, maybe psychological counseling to patients on MMT therapy uiring severe epidemic will lead to alleviating the negative emotions and reduce the risk of substance abuse legal or illegal

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