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The Hong Kong Jockey Club Charities Trust

The 9th Global Conference of the Alliance for Healthy Cities

"SMARTER HEALTHY CITIES BEYOND COVID-19"

3-5 November 2021

Effectiveness of follow-up care on the reduction of suicidal attempts in patients with OUD during the COVID-19 pandemic in Tainan.

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Mental Health Under and Beyond COVID-19 4 November 2021





Background

- The follow-up care could be the mainstay strategy for patients with opioid use disorder (OUD).
 - the patients with OUD may more likely to loss follow up during the COVID-19 pandemic
 - the patients under stressful conditions during the COVID-19 pandemic may more likely to cause suicidal behavior.





Two strategies during COVID-19 pandemic

- > BSRS-5 (5-item Brief Symptom Rating Scale)
 - using (BSRS-5) to identify high suicidal risk patients

- » "Parallel-track Case Managers" program
 - performing program to facilitate a better connection of patients between hospitals and district health centers.



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BSRS-5 scores

Year BSRS-5 scors	2018 N (%)	2019 N (%)	diffrence N (%)	2019 N (%)	2020 N (%)	diffrence N (%)
6-9	144 (23.8%)	141 (23.3%)	-3 (-0.5%)	145 (24.1%)	138 (23.0%)	-7 (-1.1%)
10-14	110 (18.2%)	78 (12.9%)	-32 (-5.3%)	80 (13.3%)	78 (13.0%)	-2 (-0.3%)
15-20	23 (3.8%)	22 (3.6%)	-1 (-0.2%)	31 (5.2%)	15 (2.5%)	-16 (-2.7%)
N=604			N=601			

Scores and Recommendations :

- 1) Lower than 5 : Congratulations ! You are very well adjusted.
- 2) Within 6 to 9 : You have slight mental stress. We recommend that you seek emotional support by talking to your friends or families.
- 3) Higher than 10 : You are under great mental stress. We recommend that you seek psychological counseling and medical service.



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"Parallel-track Case Managers"

- Case management
 - the first in the country
 - facilitates a better connection of patients between hospital and public health bureau, helping to dispel suicide ideation.





Data sources

- > National Suicide Prevention Reporting System (NSPRS)
- Drug Abuse Case Management System (DACMS)
 - Enrollment types

輔導模式	服務對象(個案來源)	服務頻率		
第一類	緩起訴 遭警查獲3次以上施用毒品個案	服務期間至少2年。 1. 前6個月:每個月電訪2次及家訪1次。 2. 第7至14個月:每個月電訪1次;每2個月訪 視1次。 3. 第15至24個月:每個月電訪1次;每3個月 訪視1次。		
	出矯正機關之少年			
第二類	緩刑	服務期間至少2年。 1. 前6個月:每個月電訪2次及每2個月家訪1次。 2. 第7至14個月:每個月電訪1次及每3個月訪 視1次。		
	少年法院(庭)裁定保護處分及保護管束 個案			
第三類	期滿出監所、勒戒所、戒治所	服務期間至少半年。 6個月間每個月電訪1次。		
	假釋期滿			
	自行求助個案			

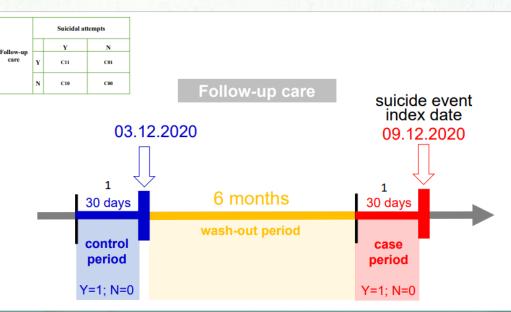
- followed-up care duration
 - home visit, telephone interview



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Study Design

- case-crossover study
 - The first date of suicide attempt were considered as event date.
 - The dates 3, or 6 months (i.e., the wash-out period) prior to the date of suicide attempt/suicide were considered as reference dates, respectively.
- Statistical analysis
 - We performed conditional Poisson regression to obtain the odds ratios (OR) and the confidence intervals (CI) to evaluate the risk of suicidal attempts between exposure and non-exposure group





Results-1

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Before the COVD-19 pandemic During the COVID-19 pandemic Characteristics Year 2019 Year 2020 **OUD** popular 1295 1326 Cases of suicidal attempts 51 23 Patients of suicidal attempts 40 22 Incidence rate (%) 3.1 1.7 44.8 ± 7.8 Age (yr) 47.3 ± 8.9 Gender (%) 22 (55%) Male 14 (63.6%) Education status(%) Less than high school 4 (10%) 5 (22.7%) High school grad 36 (90%) 16 (72.7%) Some college/Associate Degree 0 0 Unknow 0 1 (4.5%) Married status(%) 7 (17.5%) Married 9 (40.9%) Widowed/Divorced/Separated 20 (50%) 7 (31.8%) Never been married 13 (32.5%) 6 (27.3%) 0 Unknow 0 Employed (%) 9 (22.5%) 10 (45.5%) Suicide attempts (%) 34 (85%) 21 (95.5%) 1 2 3 (7.5%) 1 (4.5%) 3(7.5%) ≥3 0

Table 1. Baseline characteristics demographics of OUD in the suicidal attempts.



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Results-2

Suicidal attempts	Cases, No	OR (95% CI)	Reduced Odds	Increased Odds
2019 (Before the COVID-19 pandemic)			_	
6 months (the wash-out period)	102	0.89 (034-2.32)		
3 months (the wash-out period)	102	0.71 (0.28-1.82)		>
2020 (During the COVID-19 pandemic)			_	
6 months (the wash-out period)	46	0.68 (0.20-2.31)		\longrightarrow
3 months (the wash-out period)	46	1.24 (0.34-4.49)		▲ →

Odds Ratio (95% CI)

Table 2. The Odds ratio for suicidal attempt events.



Discussion and Conclusion

- Compared to before the COVID-19 pandemic, the incidence rate of suicide attempts during the COVID-19 pandemic was decreased.
- We found the follow-up care was associated with reduced risk of suicidal attempts in patients with OUD whatever during the COVID-19 pandemic, although no statistical significance.

Thanks for your attention