



Population Approaches to Tackle Addictive Behaviours

Social Support and Smoking Cessation

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1 Introduction

- The HKSAR government aims to reduce the smoking prevalence rate to 7.8% by 2025 (Food and Health Bureau, 2018).
- However, as of 2023, approximately 592,100 individuals, equivalent to 9.4% of the population aged 15 and older, continue to smoke (Census and Statistics Department, 2024).
- Extensive research has been conducted on the impact of social support on smoking cessation, examining influences from peers (Westmaas et al., 2022; Yuan et al., 2023), colleagues (Van Den Brand et al., 2019), partners (Choi, 2022), and community organizations (Visser et al., 2024).
- Limited study explore the effect of social support on smoking abstinence while smokers attend a smoking cessation program.

2 Hypothesis

There is a significantly higher validated smoking abstinence rates in individuals who receive any forms of social support compared to those who do not receive any support. The primary outcome examines the relationship between social support and validated smoking abstinence reported in the 6-month follow-up survey.

3 Methods

The data were drawn from the 12th "Quit to Win" (QTW) Contest, an annual smoking cessation promotion initiative in Hong Kong (Guo et al., 2024). Participants (n=1416) were predominantly male (80%), with the majority under 39 years old (42.8%) and holding a secondary level of education (62.7%).

Participants were asked to indicate who provided support in the 3rd and 6th month follow-up survey. The multiple-choice options included: "No Support", "Partner", "Children", "Parents", "Siblings", "Relatives", "Medical staff", "Colleagues", "Friends," and "Others". Participants can select more than one option.

4 Results

Participants who received any form of social support demonstrated significantly better outcomes across all measured categories compared to those who reported no support. Among the 1416 participants, 666 (47%) report receiving no social support while 750 (53%) report receiving some form of social support, with friends, partner and colleagues being the most common type. The table below presents the smoking cessation outcomes based on whether participants received support, adjusted for group, sex, age, education, nicotine dependence level, quit attempts, and readiness to quit.

	No support	Any support	P value	Adjusted OR (95% CI) #
Primary outcome				
Validated abstinence at 6-month	19 (2.9)	132 (17.6)	<0.001	5.47 (3.29, 9.10)***
Secondary outcomes				
Validated abstinence at 3-month	14 (2.1)	139 (18.5)	<0.001	8.18 (4.60, 14.55)***
Self-reported 7-day PPA				
3-month	50 (7.5)	207 (27.6)	<0.001	3.85 (2.72, 5.45)***
6-month	57 (8.6)	224 (29.9)	<0.001	3.60 (2.59, 5.00)***

Adjusted for groups, sex, age, education, nicotine dependence level, quit attempts, readiness to quit. *P < 0.05; ** P <0.01; ***P < 0.001

	No support	Any support	P value	Adjusted OR (95% CI) #
Smoking reduction				
3-month	61 (9.2)	211 (28.1)	<0.001	3.59 (2.59, 4.97)***
6-month	55 (8.3)	224 (29.9)	<0.001	4.72 (3.37, 6.61)***
Quit attempts				
3-month (cumulative)	241 (36.2)	520 (69.3)	<0.001	4.06 (3.17, 5.21)***
6-month (cumulative)	259 (38.9)	572 (76.3)	<0.001	4.89 (3.80, 6.30)***
Use of smoking cessation services				
3-month (cumulative)	34 (5.1)	116 (15.5)	<0.001	3.43 (2.23, 5.29)***
6-month (cumulative)	42 (6.3)	147 (19.6)	<0.001	3.56 (2.41, 5.26)***

5 Discussion

The findings of this study highlight the critical role of social support in enhancing smoking cessation outcomes, replicating and extending previous literature. Smoking cessation interventions should incorporate more strategies to enhance social support.

Further research should explore the relationship between specific types of social support and abstinence within smoking cessation programs, as well as the underlying mechanisms that differentiate their effects. This would provide a more holistic overview of motivation in the context of quitting smoking.

6 Limitation

Several limitations must be acknowledged. Self-reported data may be subject to bias, which could risk the internal validity of the results. Additionally, the specific mechanisms and details of how social support functions are yet to be fully explored, limiting the overall impact of the research.

7 Conclusion

This study provides strong evidence supporting the role of social support in smoking cessation, demonstrating that individuals who receive any form of support are more likely to achieve validated abstinence.

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