

S1 - A Proactive Family Smoking Cessation Intervention for Parents of Children 0-18 Months: A Randomised Controlled Trial

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Introduction and Aims: The evidence from various interventions in helping fathers with a new-born child to quit and in reducing household secondhand smoke exposure is conflicting. The present trial examined the effectiveness of an intensive family intervention to help fathers to quit and stop smoking in the home.

Methods: A single-blinded randomised controlled trial was conducted from June 2008 to October 2010. 1,158 families with a smoking father, non-smoking mother and child (aged 0-18 months) were recruited in 22 Maternal and Child Health Centres (MCHCs) of Department of Health. The fathers of the intervention group (n=598) received telephone counselling by nurse counsellors based on the transtheoretical model. The mothers were motivated by the counsellors to support the fathers to quit, and to restrict smoking in the home. Both parents were invited to attend a nurse-led family session to discuss the smokefree home policy and enhance mutual understanding between the couple. The Control group (n=560) received a 2-page pamphlet on the importance of establishing smoke-free home and smoking cessation tips.

Results: At the 12-month follow-up, the intervention group had a higher self-reported 7-day point prevalence of abstinence (13.7% versus 8.0%; Adjusted odds ratio = 1.82, p<0.01) and 30-day continuous abstinence (13.4% versus 7.5%; Adjusted odds ratio = 1.90, p<0.01) than the Control group. In the two groups combined, father's smoking at home declined from 78.5% at baseline to 36.8% at 12-month follow-up. Smoking near the children also declined from 16.3% to 6.4%. There was no significant difference in father's smoking at home (Intervention: 36.1% versus Control: 37.6%; Adjusted odds ratio = 0.80, p=0.18), and smoking near the children (5.2% versus 7.7%; Adjusted odds ratio = 0.68, p=0.22) between the two groups.

Conclusions: The family smoking cessation intervention provided by nurse counsellors was effective to increase quitting in smoking fathers with a new-born child. However, it had insignificant effect on mothers to maintain a smokefree home policy. Promoting quitting and smokefree home is important to reduce secondhand smoke exposure among infants and young children. More effective family interventions and more stringent tobacco control measures are also needed.

Impact on health policy and practice: The findings offered some evidence to support Hospital Authority's new policy including smoking cessation services and use of drugs such as nicotine replacement therapy in the Drug Formulary. It helped Hong Kong Council on Smoking and Health to support research projects in engaging families with smoking fathers to quit smoking.

S2 - A School-based Survey on Adolescent Alcohol Drinking in Hong Kong

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Introduction: The effective control of underage drinking requires a thorough understanding of its risk factors and effects, but little is known about the drinking pattern in Hong Kong adolescents.

Objectives: We investigated the drinking pattern and associated risk factors and problems in Hong Kong secondary school students.

Methods: In a territory-wide survey of 44 randomly selected schools, 21627 Secondary 1 to 6 students (mean age 14.7, SD 1.8; 51.6% boys) provided valid data using an anonymous questionnaire in 2012-13. Data on socio-demographic characteristics, alcohol drinking, peer and co-residents' drinking, exposure to pro-drinking and anti-drinking messages, parental pro-drinking practices and health outcomes were collected. Descriptive data were weighted by sex, age and grade distribution of students in Hong Kong. Risk factors and problems associated with adolescent drinking were analysed using multilevel logistic regression adjusting for covariates and school clustering.

Results: Ever drinking prevalence was 54.1% (95% CI 53.4%-54.7%) overall, 54.0% in boys and 54.1% in girls. Current drinking (past 30 days) prevalence was 21.5% (95% CI 21.0%-22.1%) overall, 22.2% in boys and 20.8% in girls. Binge drinking in the past 30 days was reported by 7.5% of adolescents, with a slightly higher prevalence in boys (8.3%) than girls (6.7%) ($p=0.002$). Hazardous drinking was identified in 3.8% of adolescents overall, 4.0% in boys and 3.7% in girls.

Generally, older age, born in Hong Kong, higher socioeconomic status, and non-intact family structure were linked to current drinking. Current drinking was also associated with increasing number of co-residing drinkers and family pro-drinking practices, drinking in good friends, perceiving over half of adolescents drank, positive expectation of drinking, smoking in the past 30 days, intended acceptance of alcohol offered by good friends, and perceived attraction of alcohol product displays. Factors that were negatively associated with alcohol drinking included perceived parental disapproval of adolescent drinking and negative expectation of alcohol drinking. Both current and binge drinking were associated with depressive symptoms, poor academic performance, and sleep problems.

Conclusions: The prevalence of current and binge drinking was 21.5% and 7.5% in Hong Kong Secondary 1-6 students. Socioeconomic, environmental and personal risk factors of current drinking were identified. Parental alcohol-related attitudes and pro-drinking practices, and adolescent expectations of alcohol drinking were modifiable risk factors that could be targeted in alcohol prevention programmes. Adolescent drinking was associated with depressive symptoms, poor academic performance, and sleep problems. Prospective studies should be conducted to confirm the identified risk factors and potential effects.

S3 - Breast Cancer Incidence and Mortality in a Transitioning Chinese Population: Current and Future Trends

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Background: Projections of future trends in cancer incidence and mortality are important for public health planning. Moreover, as the most economically developed city in China, Hong Kong may provide a sentinel for a substantial proportion of the global population.

Objectives: To model and evaluate recent trends in breast cancer incidence and mortality in Hong Kong, and to project the trends on short to medium terms, which have significant implications on future burdens on our health care system.

Methods: Based on recent breast cancer incidence and mortality trends, we projected disease burden in the rapidly transitioning Chinese population of Hong Kong. We used local data on breast cancer incidence and mortality and mid-year population figures in 1976-2010. We fitted Poisson age-period-cohort models with autoregressive priors on the chronological age, calendar period and birth cohort effects, and used projections of these effects to forecast future incidence and mortality to 2025.

Results: Age-standardised breast cancer incidence is projected to increase from 56.7 in 2011-2015 to 62.5 per 100,000 women in 2021-2025. Age-standardised mortality is projected to decline from 9.3 in 2011-2015 to 8.6 per 100,000 women in 2021-2025. Strong cohort effects were evident, with higher disease risk for the first generation of women (~1930s birth cohorts) who reached maturity in a more economically developed environment and downward changes in mortality risk for women born around the ~1950s. Disparities in the disease rates by age group were observed.

Conclusions: In the developed Chinese population, breast cancer mortality has remained relatively stable during the past decades despite certain degree of increased projections in older women, while incidence has slowly risen. These patterns are likely to continue in short to medium term. Increased disease risk may call for more resources for better cancer care and service delivery.

S4 - The Hong Kong Mental Morbidity Survey 2010

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Introduction: Mental disorders are highly prevalent conditions that constitute substantial disease burdens globally. In particular, common mental disorders (CMDs) including anxiety and depressive disorders pose significant challenge to primary health care. It is recognised that rates and risk factors of mental disorders vary considerably across regions and populations. It is essential to obtain local psychiatric epidemiological data for service planning. The Hong Kong Mental Morbidity Survey (HKMMS) is the first territory-wide, population-based study in Hong Kong to systematically examine prevalence of CMDs, their associated factors and impacts on psychosocial disability.

Methods: A two-phase design was adopted in the HKMMS. In Phase I, 5,719 randomly selected and demographically representative Chinese participants aged 16 – 75 years were interviewed with assessments examining psychological symptoms, psychosocial functioning, alcohol and substance use, history of suicide attempt, physical health, service utilisation, and a comprehensive array of socio-demographic factors between November 2010 and May 2013. Screening for psychosis was also conducted. Phase II comprised clinician-rated diagnostic ascertainment for participants with positive psychosis screen, and evaluation of rate and correlates of self-harm behaviors.

Results: The weighted prevalence of any ICD-10 diagnosis of CMDs was 13.3%. The most common mental disorders were mixed anxiety and depressive disorder (6.9%), generalised anxiety disorder (4.2%), and depressive disorder (2.9%). The prevalence of other anxiety disorders including panic disorder, phobia and obsessive-compulsive disorder was 1.5%. The prevalence of psychotic disorders, alcohol dependence, substance dependence, and suicide attempt was 2.5%, 2.2%, 2.1% and 0.3%, respectively. CMDs were associated with female gender, worse functioning, poorer quality-of-life, higher degree of physical health burden, and more adverse socio-economic situations. Approximately 30% of participants with CMDs had sought professional help for their mental health problems in the past one year. Service users were significantly more likely to be female, older in age, unemployed, and had lower household income.

Conclusions: Findings of the HKMMS concurred with the literature that depressive and anxiety disorders are highly prevalent conditions affecting adult population. Significant relationships of CMDs with poorer functioning and physical health indicating that enhanced social and occupational support as well as optimisation of physical state may facilitate improvement of mental health. Prevalence estimate of psychotic disorders highlights substantial unmet treatment needs for people with psychosis who have not yet received any psychiatric care (estimated as 1.5% of the population with psychosis). In sum, the HKMMS provided valuable data to guide future development of mental health service in Hong Kong.