Cochrane Update

Evidence to support the needs of children and young people: upcoming reviews from the Cochrane Public Health Group

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Background

The aim of the Cochrane Public Health Group (CPHG) is to inspire and facilitate the generation of evidence relevant to making a difference in population health inequalities, and useful for policy and programme decision-makers. In doing so, it is responsible for the production and publication of systematic reviews of interventions (policies, programmes and initiatives) that are population level in scope and target the social determinants of health, such as food supply and access, employment and the work environment, housing and the built environment. Given the complexity of public health interventions/programmes these reviews consider community involvement and impact, systems, policy, legislation and regulation. CPHG reviews incorporate considerations from public health practice, primary research, knowledge translation and research synthesis in order to provide useful products to promote health, equity and wellbeing.

The CPHG is currently working with international author teams to publish and update 37 topics that span social determinants of health and population-level policy priorities (http://ph.cochrane.org/cphg-reviews-and-topics). The purpose of this paper is to highlight two important reviews that are underway. These reviews are similar because they focus on interventions that aim to make a real difference in improving health, social and other outcomes for children and young people. They differ in terms of the social and physical environmental context within which the interventions are based and levels at which they are intended to affect change. Whilst these two reviews comprise policy-relevant questions in populations of interest internationally, the questions also raise significant methodological issues for the consideration

of evidence with an equity focus, and ultimately primary research as well.

The scope of each review is briefly summarized below with links to the published protocols. The interest in these topics within high-income and low-to-middle-income countries, along with the ongoing need for both evidence innovation and rigour, necessitates thoughtfulness and involvement from a range of public health interests. We welcome feedback on methods, protocols and in particular, suggestions for useful ways in which the information can be synthesized and summarized for users.

Review in highlight: interventions for promoting reintegration and reducing harmful behaviour in street-connected children and young people[1]

Large numbers of children and young people live street-connected lifestyles worldwide, vulnerable to a wide range

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of physical, developmental and psychosocial risks. The aim of this review is to determine the effects of interventions designed to promote reintegration and inclusion, and reduce harmful behaviour in street-connected children and young people. The review will consider the impact of interventions on integration and access into education, training and employment opportunities, promoting healthier and more settled lifestyles. It will also highlight gaps in the current evidence base. The results of this systematic review will be relevant to a large number of street-connected children and young people worldwide, as well as practitioners and policy-makers.

Definitions of concepts in public health reviews often present challenges for authors. Defining 'street-connected children' and 'reintegration' has been an important consideration for this review, as these terms can have different meanings in different contexts and settings. The review authors applied the UNICEF definition for street-connected children[2] in the protocol to define the population as 'children who work and/or sleep on the streets and may or may not necessarily be adequately supervised or directed by responsible adults'. Reintegration was defined as placing the children and young people into a safe and sustainable residential and/or education environment that nurtures physical, personal and spiritual growth.

The protocol includes two preliminary logic models, developed to clarify review scope and document intervention mechanisms, processes and relationship to intended outcomes, as advocated by Anderson *et al.*[3] The CPHG recommends this approach for all systematic review authors, particularly those dealing with complexity. Interventions for review include education projects, vocational training and projects focused on HIV prevention, reducing substance use and those aimed at improving social stability, and physical and mental health. It is hypothesized that the use of participatory models of engagement can help to determine intervention success or failure,[4] and thus is a factor that will be explored in the findings of the review. The authors will identify the processes, or building blocks, of interventions found to be effective, and explore how they may be applied in different contexts, particularly in relation to income status and cultural environment. They also intend to explore differential intervention effects on equity dimensions including by age, gender, ethnicity and possible reasons for being street connected. The authors hope the findings will help to inform policies that promote equity in social systems and universal access to living standards.

The absence of high-quality impact evaluations conducted in low- and middle-income countries has been an emergent issue for the review. It is intended that the authors will explore the application of findings from studies conducted in high-income countries for resource poorer environments, utilizing their logic models (developed for the review) and information obtained from qualitative studies, including those conducted alongside included quantitative studies. A number of themes will be explored in this regard, including those of risk and resilience, young peoples' participation and engagement, process and implementation of interventions and context specific details.

View the published protocol here: http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD009823/abstract.

Review in highlight: later school start times as an intervention to support education, health and wellbeing of high school students[5]

At the request of parents, teachers, school council members and others, school administrators and educational policy-makers in many jurisdictions are currently considering later school start times. There have been a number of single studies of these kinds of interventions[6,7] but it is unclear whether there is sufficient evidence about the effectiveness of these kinds of approaches for students, their families or the school's wider community.[8] This review in-development examines later school start times and the impact this may have on the education, health and wellbeing of students aged 13–19 years, as well as the effects on their families and school communities. This review is underpinned by existing literature related to adolescent sleep needs, sleep deprivation, adolescent peak periods of alertness and most effective learning times for students in different geographic areas, schools or population subgroups.[9–11] Intervention benefits will be assessed according to the following outcomes: student academic outcomes, those related to amount or quality of sleep for students, mental health indicators (e.g. stress and depression), student alertness, attendance rates and health behaviours. Some of the expected adverse outcomes for school staff include longer workdays and less time spent with family. For students, decreased enrolment in extra-curricular and athletic activities will be explored as potential adverse effects of the intervention. The results of this review will be useful for decision- and policy-makers in schools boards, education systems and Ministry's of Education in making decisions

about whether or not to adopt a later start time within their own schools and jurisdictions.

The review authors plan to include a wide range of studies, including randomized controlled trials before and after studies, cluster or cross-over trials and interrupted time series studies with pre- and post measurements, to capture evidence of effectiveness of the intervention. As with the aforementioned review, information from qualitative data (within or as sibling or companion studies of included quantitative studies) will be used to illuminate the impact of context, mechanisms of change and process factors on intervention effects. The acronym PROGRESS (Place, Race, Occupation, Gender, Religion, Education, Socioeconomic status, Social status) will be used to examine the potential impact on equity.[12]

View the published protocol here: http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD009467/abstract.

Conclusion

These two important policy-relevant reviews have attracted a significant amount of interest from a wide range of jurisdictions internationally. They both speak to the issue of what difference programmes that focus on the needs of children and young people can make to improve their outcomes, as well as how best to summarize existing research in order to identify gaps and inform directions for programme development, evaluation and research.

The most useful information for readers of these reviews on completion, arguably, will be the information incorporated alongside effectiveness findings which will highlight programme implementation, process, resource considerations and the potential impact on equity.

For review authors, these reviews highlight current methodological recommendations including:

- the use of logic models to clarify hypothesized intervention processes and outcomes;
- application of findings from high-income settings to low-and-middle-income settings and vice versa;
- consideration of potential adverse effects for a range of different groups (participants and stakeholders);
- consideration of a range of study designs, quantitative and qualitative, to inform review findings in relation to effectiveness, implementation, applicability, transferability and impact on equity.

We invite readers to provide any feedback on the featured protocols, or express an interest to be involved as a peer reviewer for either review by contacting cochrane@ vichealth.vic.gov.au. We also invite feedback or expressions of interest for involvement in any of our other titles, which may be viewed at http://ph.cochrane.org/cphg-reviews-and-topics.

New Cochrane protocols and reviews of interest to health promotion and public health stakeholders from Issues 4 to 7, 2012 of *The Cochrane Library* (*denotes CPHG review/ protocol).

Reviews

- Audit and feedback: effects on professional practice and healthcare outcomes.
- Community-based supplementary feeding for promoting the growth of children under five years of age in low- and middle-income countries.
- Community-based interventions for the prevention of burns and scalds in children.
- Decision aids for people facing health treatment or screening decisions.
- Dietary advice with or without oral nutritional supplements for disease-related malnutrition in adults.
- Effect of restricted pacifier use in breastfeeding term infants for increasing duration of breastfeeding.
- Electronic mosquito repellents for preventing mosquito bites and malaria infection.
- Electric fans for reducing adverse health impacts in heatwaves.
- Enhancing partner support to improve smoking cessation.
- Group-based parent-training programmes for improving emotional and behavioural adjustment in children from birth to three years old.
- Household interventions for preventing domestic lead exposure in children.
- Group-based parent-training programmes for improving parental psychosocial health.
- Individual and group based parenting programmes for improving psychosocial outcomes for teenage parents and their children.
- Intermittent oral iron supplementation during pregnancy.
- Interventions for preventing excessive weight gain during pregnancy.
- Interventions for promoting physical activity.
- Interventions for tobacco cessation in the dental setting.
- Interventions to promote the wearing of hearing protection.
- Mass media interventions for smoking cessation in adults.
- Mobile phone messaging reminders for attendance at healthcare appointments.
- Outreach strategies for expanding health insurance coverage in children.
- Reduced or modified dietary fat for preventing cardiovascular disease.
- Safety education of pedestrians for injury prevention.

- Support for healthy breastfeeding mothers with healthy term babies.
- Training health professionals in smoking cessation.
- Vitamin D supplementation for women during pregnancy.
- Zinc supplementation for improving pregnancy and infant outcome.

Protocols

- **Community-based, population level interventions for promoting child oral health*.**
- **Community coalition-driven interventions to reduce health disparities among racial and ethnic minority populations*.**
- Daily iron supplementation for improving iron status and health among menstruating women.
- Effects of preventive oral supplementation with iron or iron with folic acid for women following childbirth.
- Feeding interventions for improving the physical and psychosocial health of disadvantaged children aged three months to five years.
- **Fortification of rice with vitamins and minerals for addressing micronutrient malnutrition*.**
- Green and black tea for the primary prevention of cardiovascular disease.
- Hepatitis B vaccination for reducing morbidity and mortality in persons with HIV infection.
- Incentives for increasing prenatal care use by women in order to improve maternal and neonatal outcomes.
- Increased consumption of fruit and vegetables for the primary prevention of cardiovascular diseases.
- **Individual-, family- and school-level interventions for preventing multiple risk behaviours in individuals aged 8 to 25 years*.**
- Interventions for managing the movement of health workers between public and private organizations in low- and middle-income countries.
- Interventions for prevention of bullying in the workplace.
- **Interventions for promoting reintegration and reducing harmful behaviour and lifestyles in street-connected children and young people*.**
- **In-work tax credits for families and their impact on health status in adults*.**
- 'Mediterranean' dietary pattern for the primary prevention of cardiovascular disease.
- Mobile phone messaging for communicating results of medical investigations.
- Red-light cameras for the prevention of road traffic crashes.
- School policies for preventing smoking among young people.
- Supportive interventions for enhancing dietary intake in malnourished or nutritionally at-risk adults.
- **Welfare to work interventions and their effects on health and wellbeing of lone parents and their children*.**

Acknowledgements

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