Appendix

Recommendations for equitable Covid-19 pandemic recovery in Canada

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1. Income

Project title: Income during Covid pandemic recovery period

Subtitle: Effectiveness of income assistance interventions for those who are affected by unemployment or low-income during Covid pandemic recovery period

Problem: Those who lack basic income needed to afford necessities due to unemployment or low-income

Intervention: Income assistance, Cash transfers, Sickness benefits, Access to food programs

Comparison: No intervention, alternative intervention or usual care

Main Outcomes: Income stability or financial security, Mental health, Food Security, Quality of life, Employment, Health Status, Health Outcomes

Background/Problem

Is the problem a priority? *(Our Judgement: Yes)*

Poverty entails more than the lack of income and resources to ensure sustainable livelihoods. Poverty can lead to malnutrition, limited access to education and other basic services, social discrimination, as well as the lack of participation in decision-making. According to the UN, in 2015 more than 736 million people lived below the international poverty line. Around 10 % of the world population is living in extreme poverty and struggling to fulfil the most basic needs such as health, education, food and water.(1,2)

In response to high poverty numbers, social protection policies have become increasingly prominent on development agendas around the world. Social assistance interventions are among some of the intervention types included in these social protection policies. Social assistance interventions are defined as “non-contributory transfer programs targeted in some manner to the poor and those vulnerable to poverty and shocks" to ensure an adequate standard of living”.(3)

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We found 8 systematic reviews investigating social assistance interventions designed to address the inequities experienced by individuals faced by low-income, unemployment, and poverty: cash transfers, microfinancing, in-work tax credits, and therapeutic interventions.

Desirable effects

How substantial are the desirable anticipated effects? *(Our Judgement: Moderate)*

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1A. Cash transfers

Research Evidence

Cash transfers (CTs) are a public health initiative due to the potential to directly address health inequities experienced by those living in poverty. Cash transfers can be conditional, ie., cash transfers that are conditional upon beneficiary households adopting certain positive behaviours (investment in education, healthcare, nutrition) or unconditional (no condition attached). In low-to-middle income countries conditional cash transfers appear to be effective in encouraging some preventative behaviours and increasing the uptake of preventative services. Some programs have reported improvement in health outcomes.(4,5)

Summary of findings table

Study	**Outcomes**	**Plain Language Statements**	**Intervention**	**Control**	**Relative effect** 95% CI)	**Absolute** (95% CI)	**Certainty of the evidence** (GRADE)
The impact of cash transfers on social determinants of health and health inequalities in sub-Saharan Africa: a systematic review (Owusu-Addo, Renzaho, Smith 2018)	Financial Poverty Household Resilience Education Food Security Healthcare Utilization Mental Health Outcomes	Consistent evidence across Kenya, Lesotho, Malawi, Uganda and Zambia indicating that cash transfers reduce short term poverty and increase household food consumption Findings were mixed, households either used CTs to pay off their dept or to	Cash Transfers	No cash transfer	Financial Poverty – CT's reduced poverty gap by 12% and poverty severity by 11% Household resilience – Significant increases in savings ranging from 3 to 24%	-	moderate

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		increase access to credit. Overall, studies found that CT programs increase savings Across 16 studies CTs showed significant increase in school enrollment, largely at the secondary school level. CCTs were found to improve school attendance compared to UCTs Consistent positive program effect on food security across all studies. CT programs showed positive impacts upon care seeking behaviour and helped beneficiaries tackle the financial barriers that limit access to health care Studies showed that CTs improved mental health outcomes by			Education – effect sizes of school enrollment ranged from 0.4% to 44% Food Security – reduced household food insecurity by 25%, reduced food insecurity scale by 1.9 – 2.8 points Healthcare Utilization – Increase of curative healthcare by 24%, increased likelihood of utilizing health services for serious illness (OR 1/410.98) Mental Health Outcomes – Significant improvements om rating scores ranging from 6.3% to 22%		

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		increasing self-esteem and reducing stress, anxiety, worrying and depression					
The impact of conditional cash transfers on health outcomes and use of health services in low and middle income countries (Lararde et al., 2009)	Healthcare Utilization Immunization Coverage Health Outcomes	Conditional cash transfer programs appear to be an effective way to increase the uptake of preventive services and encourage some preventive behaviours. In some cases, programs have noted improvement of health outcomes, though it is unclear to which components this positive effect should be attributed.	Conditional Cash Transfers		Healthcare Utilization - All studies reported an increase in the use of health services in the intervention groups (27% increase in individuals returning for voluntary HIV counselling, 11-20% more children taken to the health centre in the past month, 23-33% more children < 4 yrs attending preventive healthcare visits) Immunisation coverage - Mixed results were found (increased		moderate

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					vaccination rates in children for measles and tuberculosis but only in specific groups or temporarily) Health outcomes - Mixed effects on objectively measured health outcomes and positive effects on mothers reports of children’s health outcomes (22-25% decrease in the probability of children <3 years old being reported ill in the past month)		

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Unconditional cash transfers for reducing poverty and vulnerabilities: Effect on use of health services and health outcomes in low- and middle-income countries (Pega et al., 2017)	Primary Outcomes: Health Service Use Stunting Illness "Has had any illness in previous 2 weeks to 3 months" Food Security Dietary Diversity Depression (CES-D Score) Secondary Outcomes: Education Engages in Child Labor Adult Works Parenting Quality Extremely Poor	['probably' indicates moderate-quality evidence, 'may/maybe' indicates low-quality evidence, and 'uncertain' indicates very low- quality evidence] UCTs may not impact the likelihood of having used any health service in the previous 1 to 12 months UCTs probably led to a clinically meaningful, very large reduction in the risk of having had any illness in the previous two weeks to three months UCTs may increase the likelihood of having had secure access to food over the previous month	Unconditional Cash Transfer	No Unconditional Cash Transfer	Health Service Use: RR 1.04 (1.00 to 1.09) Stunting: RR 0.96 (0.75 to 1.21) Illness: OR 0.73 (0.57 to 0.93) Food Security: Not Pooled Dietary Diversity (Assessed with: Household Dietary Diversity Score): 0.59 food categories consumed higher Depression: 0.06 of 1SD of the CES-D score lower Education (Attends School): RR 1.06 (1.03 to 1.09)		Health Service Use: Low Stunting: Very Low Illness: Moderate Food Security: Low Dietary Diversity: Low Depression: Very Low Education: Moderate Engages in child labor: Very Low Adult works: Very Low

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	Healthcare Expenditure	UCTs may increase the average number of different food groups consumed in the household over the previous week. Despite several studies providing relevant evidence, the effects of UCTs on the likelihood of stunting and on depression levels remain uncertain UCTs probably led to a clinically meaningful, moderate increase in the likelihood of currently attending school UCTs may increase the amount of money spent on health care			Engages in Child Labor: RR 0.90 (0.79 to 1.02) Adult works: RR 1.00 (0.95 to 1.05) Parenting quality: - Extremely Poor: RR 0.95 (0.89 to 1.00) Healthcare Expenditure: -		Parenting quality: Vey low Extremely poor: Very Low Health expenditure : Low

Summary

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The included studies found that cash transfers can be effective in tackling a variety of inequities faced by poor populations such as poverty, education, child labor, use of health services, nutritional status, poor health and mental health outcomes, and household resilience. Findings presented by Owusu et al. indicate that cash transfers might be more effective for extremely poor households, families with small household size, female headed households, and children aged 0-5 years. This study also found that there were many factors relating to intervention design features, macro-economic stability, household dynamics and community acceptance of financing that could influence the effectiveness of cash transfers. Further research should be done to evaluate the mechanisms by which different programs and contexts bring about various outcomes. Additionally, the evidence on health effects of unconditional compared with those of conditional cash transfers remains uncertain.

1B. Employment insurance

Research Evidence

Unemployment insurance was designed to provide economic support to individuals who are unemployed and seeking work opportunities.(6) There is increasing evidence that policies such as unemployment insurance can positively impact health behaviours and outcomes by alleviating financial strain that can consequently lead to damaging health outcomes.(6–9)

Summary of findings table

Study	**Outcomes**	**Plain Language Statements**	**Intervention**	**Control**	**Relative effect** (95% CI)	**Absolute** (95% CI)	**Certainty of the evidence** (GRADE)
Connections between unemployment insurance,	Poverty related outcomes	Despite different quality rating, time periods,	Unemployment Insurance				Poverty related 3 studies: one weak, one

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poverty and health: a systematic review (Renahy et al., 2018)	Healthy behaviours Well-being Self-rated Health Mental Health	locations and populations, all studies tend to support a protective effect of UI on poverty when UI is the only program considered. Results for healthy behaviors show slightly protective effect to no effect, we, therefore, cannot draw strong conclusions. Based on results from only one strong study, there appears to be no effect of UI on SRH in Germany, a country where					moderate, one strong Health behaviour 2 studies: one weak, one moderate Well-being 3 studies: two moderate, one weak Self-rated health 2 studies: one strong, one weak Mental health 3 studies: 2 weak, one moderate

		market economies are based on coordinated and cooperative values (more economic, social and affective support). A protective effect of UI on SRH was rather found in the United States, country with more liberal and competitive market economies. Conclusions are difficult to draw because of differences in populations, time-periods, geographic locations and political					

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		contexts within the country.					
How strong is my safety net? Perceived unemployment insurance generosity and implications for job search, mental health, and reemployment (Wanberg et al., 2020)	Reemployment speed Mental Health Reemployment quality	The effect from perceived UI generosity to reemployment speed was not significant The results demonstrate a significantly positive total effect from perceived UI generosity to mental health Perceived UI generosity relates to lower time pressure and reduced financial strain, which relate to higher mental health, which positively relates to	Perceived unemployment generosity			Reemployment - not significant (*B* = −.024, 95% CI[−.051, .000]) Mental Health – significant *B* = .120, 95% CI [.094, .147] Reemployment quality - ia time pressure: *B* = .033, 95% CI [.017, .058], and via financial strain: *B* = .010, 95% CI[.001, .025]	

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		reemployment quality in the new job					
Family Economic Security Policies and Child and Family Health. (Spencer et al., 2017)	Mental Health Self-reported health	There was a negative association between initial unemployment insurance claims and online search indexes for both depression and anxiety. More generous unemployment benefits were associated with a lower likelihood of self-reported poor health among unemployed.	Unemployment insurance and/or unemployment generosity			Depression (-0.27, p<0.01) Anxiety (-0.33, p<0.01) Self-reported health (b = −0.124; 95% CI= −0.197, −0.0523)	
Social welfare matters: a realist review of when, how, and why unemployment	Poverty Health	When eligibility criteria are generous, poverty levels amongst the unemployed					

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insurance impacts poverty and health (O'Campo et al., 2015)		are reduced because a large proportion of the unemployed receive benefits. When benefit levels are too low, UI does not reduce poverty because (a) the benefits do not replace wages therefore, (b) unemployed are not motivated to apply for benefits as it is not perceived as worthwhile. When UI benefits are generous, unemployed individuals experience better mental health due to					

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		greater financial security and more positive psychosocial well-being. However, Generous UI benefits are unable to fully ameliorate well-being among unemployed individuals because the experience of being unemployed also has negative psychosocial effects.					

Summary

The literature highlights mostly positive and some negative outcomes associated with generous unemployment insurance systems. Many of the studies found good support that unemployment insurance can attenuate the effect of unemployment on both poverty and health. By protecting health through both material and psychological mechanisms, unemployment insurance can moderate many of the harmful consequences of being jobless.

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One negative outcome outlined by is slower reemployment speed via mechanisms such as reduced time pressure and reduced prioritization. However, these same mechanisms have been shown to have positive effects on mental health.

Overall, the limited literature examining unemployment compensation and health provides evidence that more generous unemployment compensation can alleviate potential negative health consequences associated with unemployment.

1C. Microfinancing

Research Evidence

Microfinance interventions include a broadly defined set of financial services with the goal of helping families living in poverty to increase their role in economic activities and reduce their vulnerability to financial shocks. Studies have demonstrated the benefits of combining microfinancing and health related programs and the positive effect on things like neonatal and maternal mortality, infant feeding, sexually transmitted diseases and gender-based violence.(10,11)

Summary of findings table

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Study	Outcomes	Plain Language Statements	Intervention	Control	Relative effect 95% CI)	Absolute (95% CI)	Certainty of the evidence (GRADE)
Evaluating the effect of integrated microfinance and health interventions: an updated review of the evidence (Lorenzetti et al., 2017)	Health Education and Promotion HIV Air, water, and vector-borne diseases Child health and nutrition Health financing and health micro-insurance Access to health products Multiple components	Most interventions combined microfinance with health education, which demonstrated positive effects on health knowledge and behaviours, though not health status Among programs that integrated microfinance with other health components (i.e. health micro-insurance, linkages to health providers, and access to health products), results were generally positive but mixed due to the smaller number and quality of studies	Integrated microfinance and health interventions		Health Education and Promotion – HIV: IPV (Inter partner violence) reduction RR 0.45 95% (0.23 – 0.91) Intervention female sex workers had greater odds of reporting no unprotected sex OR 3.72 (CI= 0.37, 7.80) Air, water, and vector-borne diseases: Significant increases in both awareness and practice scores for airborne diseases (P < 0.001) as well as for waterborne (P < 0.01) and vector-borne diseases (P < 0.01) after the awareness		Moderate

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		Interventions combining multiple health components in a given study demonstrated positive effects, though it was unclear which component was driving the effect			campaign. Average practices scores were generally lower than average awareness scores. Child Health & Nutrition: caregivers in the intervention group were more knowledgeable about diarrhea danger signs (P < 0.01) and doctor's office activities (P < 0.01) significant increases in height-for-age (P 1⁄4 0.02) and weight-for-age (P 1⁄4 0.002) z-scores over time as well as BMI-for-age (P < 0.001) scores at study mid-point for children in the intervention group relative to the control group Health micro-insurance:		

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					HMI clients (those with HMI for at least 5 years) had greater health awareness and were also more likely to utilize health services (P < 0.01) than households without HMI intervention group experienced a significant decrease in child engagement in hazardous occupations and child earnings (P < 0.01) Multiple components: Intervention households exhibited increased health knowledge and awareness of resources. Poverty status also improved, thereby increasing capacity for health expenditures		

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					Prevention knowledge increased in credit-only villages, but the effect was greater when microfinance and health were combined		
Group-based microfinance for collective empowerment: a systematic review of health impacts (Orton et al., 2016)	Mortality and morbidity Women's sexual health Violence against women Nutrition Well- being and healthcare use	The results of the higher quality studies indicated an association between membership of a microfinance scheme and improvements in the health of women and their children. The observed improvements included reduced maternal and infant mortality, better sexual health and, in some cases, lower levels of interpersonal violence. According to the results of the few studies in	Group-based microfinance scheme		Mortality and morbidity: Decline observed in the risk of infant death over a period of 10 years was greatest (53%) for infants of mothers who joined the BRAC scheme, followed by the infants of rich non-members (41%) and then the infants of poor non-members (31%) Women's sexual health: The intervention was not associated with any significant changes in rate of unprotected sexual intercourse with a		

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		which changes in empowerment were measured, membership of the relatively large and well established microfinance schemes generally led to increased empowerment but this did not necessarily translate into improved health outcomes. Qualitative evidence suggested that increased empowerment may have contributed to observed improvements in contraceptive use and mental well-being and reductions in the risk of violence from an intimate partner			non-spousal partner RR: 1.02, 95% CI (0.85-1.23) or HIV incidence RR: 1.06, 95% CI (0.66 – 1.69) female participants (14-35) higher levels of HIV-related communication aRR: 1.46 CI 95% (1.01 – 2.12), more likely to access voluntary counselling and testing aRR: 1.64 CI 95% (1.06-2.56), less likely to have unprotected sex with non-spouse aRR: 1.64 CI 95% (0.60-0.96) Nutrition: Prevalence of stunting was found to be higher (84.6%) among children of poor non-members than among the children of BRAC members (67.3%) or rich non-members (69.4%)		

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					Weight-for-height *z*-scores of children aged 24–35 months from BRAC households were significantly higher ($P < 0.05$) than those of their counterparts Well-being and healthcare use: -		

Summary

This evidence supports the integration of microfinance and health education or promotion programs. These interventions regularly improved health knowledge and behaviours but rarely successfully measured changes in broader health outcomes. Future research should include more indicators of health status and document the pathway from knowledge to behaviour to outcome and assess negative as well as positive social and health impacts.

Undesirable Effects

How substantial are the undesirable anticipated effects? *(Our Judgement: Could be moderate for some interventions)*

Cash Transfers

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Owusu-Addo et al advises that CTs may have a significant negative impact on social cohesion. Therefore, it is important that their design, implementation and evaluation move beyond a focus on material impacts (e.g., poverty, education, nutrition, etc.) to take account of their impact on social relations.

Cash transfer programs, both unconditional and conditional (although more stigma associated with conditional cash transfers), can carry social stigmas and decrease positive health effects.

Microfinancing

Microfinance schemes could potentially cause debt stress associated with the repayment of loans.

There have been indications of increased violence between intimate partners as the result of the female empowerment promoted by microfinance, though the most robust relevant studies have shown overall reductions in such violence, at least in the long term.

It has been argued that the enthusiasm for microfinance has outstripped the evidence of its effectiveness and that microfinance schemes have the potential to do harm. Schemes can suffer from so-called mission drift and end up favouring those who are more credit-worthy while excluding the ultra-poor.

Certainty of evidence

What is the overall certainty of the evidence of effects? (*Our Judgement: Low to Moderate)*

Balance of effects

Does the balance between desirable and undesirable effects favor the intervention or the comparison? (*Our Judgement: Probably favors the intervention for most interventions)*

Overall, the desirable effects were more widely reported and confirmed than the possible undesirable effects. Note of the undesirable effects should serve as a caution before implementing the intervention. Microfinance intervention might be the only one where undesirable effects may outweigh favorable effects.

Values

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Is there important uncertainty about, or variability in, how much people value the main outcomes? *(Our judgement: Probably no important uncertainty or variability)*

Cash Transfers

Conditional and unconditional cash transfers in low-to-middle income countries and their benefits are highly valued and positively perceived by beneficiaries. Recipients of conditional cash transfers highly value both the value of the cash transfer amount and their potential health benefit.(13) Recipients of unconditional cash transfers report reduced stress, increased purchasing power and food security, and fewer debts.(14)

Unemployment Insurance

Support for unemployment schemes relies on an individual's existing attitudes and background characteristics. Beneficiaries of unemployment benefits notably support and value the policy.(15)

Resources required & Cost-effectiveness

How large are the resource requirements (costs)? (*Our Judgement: Large costs required for most interventions)*

What is the certainty of the evidence of resource requirements (costs)? *(Our Judgement: Moderate for all interventions)*

Does the cost-effectiveness of the option favour the option or the comparison? (*Our Judgement: Probably favors the option for all interventions)*

Cash Transfers

Several modelling studies have indicated substantial economic benefits of cash transfers including an increase in GDP and job creation.(16,17)

Mobile cash transfers demonstrate a cost-efficiency within the same range as other humanitarian programs. Implementation of cash transfer program by local government would likely reduce costs compared to those found in this study context and improve cost-efficiency.(18)

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Policy makers should carefully study the cost implications of CCT programmes, if no targeting mechanism is put in place. Indeed, some have shown that not targeting the groups who have the least access to health services will increase the marginal cost per person covered, and therefore increase the opportunity cost of CCT programmes.(4)

The relative effectiveness and cost-effectiveness of UCTs versus CCTs for improving the use of health services and health outcomes in LMICs is unclear. Some authors have hypothesised that UCTs, under certain conditions, are more effective. The reasons are that conditioning a cash transfer results in additional direct, indirect and opportunity costs to the recipients from having to comply with the conditions, as well as additional costs to the administrator for monitoring recipients' compliance with the conditions. Costs to recipients are often higher in people with a lower socioeconomic position, with a potential perverse effect on health equity.(5)

A basic income was estimated by the Parliamentary Budget Office to cost $78 billion per year.(16)

Explicit evidence of required resources is not stated in most of the studies reviewed. Cost would depend on the population and type of intervention used.

Unemployment Insurance

In Canada, like the UK and United States, the EI system is managed and distributed through the government but contributed to by employers and employees. Though the contribution rates are low, in 2002, the government of Canada received $18.8 billion in EI premiums from employers and workers and paid out $14.3 billion in EI benefits. Therefore, after considering all costs, the EI account showed an annual surplus of about $3.5 billion.(19)

Microfinancing

Evidence suggests that utilizing microfinance groups and self-help groups is a reliable, low-cost and sustainable way to reach poor mothers and children with vital health information, products, and services.(10)

Equity

What would be the impact on health equity? (*Our Judgement: Probably increases equity for all interventions)*

Cash Transfers

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Some argue that conditional cash transfers may result in power imbalances, or infringements on freedom and dignity. Decisions about CCTs should therefore be a context-dependent process requiring transparent, informed and deliberative decision-making.(20) Providing unconditional cash transfers to low-income families may increase women's autonomy in the household and overall gender equity.(14)

Microfinancing

Providing affordable loans to low-income women may increase gender equity.(21)

Acceptability

Is the option acceptable to key stakeholders? (*Our Judgement: Probably yes for most interventions)*

These interventions would most likely be accepted by individuals experiencing poverty or unemployment. Among low-income residents in Washington, individuals identified employment benefits as one of the highest priority socioeconomic interventions. Specifically, job training and job placement were chosen by over 70% and 67% of participants respectively.(22)

Studies that looked at individual preferences for the Unconditional Basic Income (UBI) in Europe found that almost three quarters of voters indicated they would likely vote for UBI.(23) Findings suggest that (based on European Social Survey data) low-income individuals, young people, the unemployed, those on lower incomes, workers in operator and elementary occupations and left-leaning individuals are more likely to support a UBI.(23,24) The most convincing argument for introducing unconditional basic income being the reduction of poverty, "it reduces anxiety about financial basic needs".(23)

A nation-wide survey found that Canadians broadly support the idea of guaranteed incomes and 34% would be willing to pay more in taxes to support such a program.(25) Guaranteed income advocates have attested the economic freedom it could provide to individuals who may wonder where their next paycheque is coming from. Two-in-three Canadians (66%) agree with this line of reasoning.(25)

Cash Transfers

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Key informants and community members from eastern Zimbabwe describe a community-led cash transfers program as fair and transparent, limiting social divisiveness.(26)

Microfinancing

In a study about the Intervention with Microfinance for AIDS and Gender Equity, most women reported they received various types of support pertaining to financial, business, personal and emotional concerns from other women. Just under half the women were highly positive about all aspects of the training and over half of the women reported that all types of support were provided by the group members.(27)

Unemployment Insurance

The overwhelming majority of Canadians (85%) either support (47%) or somewhat support (38%) Employment Insurance benefits being temporarily extended to workers in sectors that have been hit particularly hard in the recent economy due to the pandemic.(28)

Feasibility

Is the option feasible to implement? (*Our Judgement: Probably yes for all interventions)*

Cash Transfers

Cash transfer pay-outs can require substantial administrative resources. Recommendations to consider: a reliable and effective payment method, a regular and consistent payment schedule, and consistent monitoring and evaluation of program.(29)

Microfinancing

Social services may be important to implement alongside microfinance of affordable loan services.(21,30)

Unemployment Insurance

Throughout the pandemic countries have shown that implementing social policies, such as unemployment insurance, coupled with public health policies have been both feasible and critical to the effectiveness of non-pharmaceutical interventions.(31)

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Guidelines/ other resources:

Income Security: A Roadmap for Change(32)

The province of Ontario invited three working groups to put together a 10-year "road map" of recommendations for income security reform in Ontario. The working groups came up with three overarching themes: Investing in People, Addressing Adequacy and Recognizing the Experience of Indigenous Peoples. The three working groups came up with a total of 18 specific recommendations. These recommendations include adopting a minimum income standard in Ontario, introducing a provincial wide housing benefit, enhancing the current working income tax benefit, making health benefits available to all low-income/unemployed individuals, changing the current legislative framework for social assistance programs to make support more accessible, ensuring disability benefits are adequately supporting the individuals who require it, taking steps to ensure that social services are controlled by and specific to First Nations, broadening programs to encompass social inclusion and adapt a more holistic approach.

Various Supports for Low-Income Families Reduce Poverty and Have Long-Term Positive Effects On Families and Children(33)

The United States has developed a set of supports to help low-income individuals and people with disabilities make ends meet and obtain health care. Federal assistance and public programs such as Social Security, Earned Income Tax Credit (EITC) and the Child Tax Credit (CTC), SNAP (food stamps), and Medicaid lifted 40 million people out of poverty in 2011 according to the Census Bureau's Supplemental Poverty Measure. Supports such as SNAP, the EITC and CTC, and Medicaid have been shown to boost employment rates among parents which consequentially can have positive impacts on children.

Recommendations

During the pandemic recovery period, we strongly recommend cash transfers ensuring a living income that allows people to afford basic necessities such as food (moderate certainty in estimates).

During the pandemic recovery period, we strongly recommend the universal availability of unemployment insurance, parental leave and paid sick leave (low certainty in estimates).

During the pandemic recovery period, we recommend affordable credit or loans for low-income individuals (very low certainty estimates).

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2: Housing

Project title: Housing during Covid pandemic recovery period

Subtitle: Effectiveness of Housing Interventions for homeless or vulnerably housed individuals during Covid pandemic recovery period

Problem: Homelessness and vulnerable housing

Intervention: Permanent Supportive Housing, Income Assistance, Case Management, Eviction Prevention

Comparison: No intervention, alternative intervention or usual supports

Main Outcomes: Housing Stability, Mental Health, Quality of Life, Substance Abuse, Healthcare Utilization, Employment and Income-related outcomes

Background

As of 2016, at least 135,000 Canadians experience homelessness in a given year.(1) Evidence-based interventions could significantly improve health outcomes of homeless and vulnerably housed people in Canada. We synthesized the existing evidence from several systematic reviews to develop recommendations to improve social and health outcomes of people experiencing homelessness in Canada.

Problem

Is the problem a priority? *(Our Judgement: Yes)*

In 2016, it was estimated that 235,000 Canadian experience homelessness in a year and 35,000 are homeless on any given night.(1) Historically, people that experience homelessness are single, older men, however, more women (27% as of 2016), youth (19%) and families are now experiencing homelessness.(1) Compared to the general population, people who are homeless have less access to healthcare and poorer health outcomes.(2) They are also more likely to have higher all-cause mortality and higher multiple morbidities.(3,4)

Desirable effects

How substantial are the desirable anticipated effects*? (Our Judgment: Overall: Large for housing stability)*

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2A. Permanent supportive housing

The Permanent Supportive Housing (PSH) intervention combines affordable housing assistance with voluntary services to address the housing needs of homeless people. Several studies internationally have provided permanent supportive housing to homeless people in an intervention known as “Housing First"(5–10) which provides immediate access to permanent supportive housing and physical and mental health community supports with no “housing readiness” conditions. Housing First is often used synonymously with permanent supportive housing.

We found 4 systematic reviews (Hwang et al. 2005, Fitzpatrick-Lewis et al. 2011, Bassuk et al. 2014, Aubry et al. 2020) that present the evidence for the benefits and effectiveness of permanent supportive housing alone or in combination with other interventions such as income assistance, intensive case management (ICM), in which a case manager provide tailored, patient-centered services to a homeless person, or assertive community treatment (ACT), in which a team of doctors, nurses, social workers at a small client-to-staff ratio provides comprehensive psychiatric or other care, medication monitoring, intensive case management and crisis management in the community.(11–14)

Outcomes measured included housing stability, mental health, quality of life, substance abuse, employment and other income-related outcomes

We also found 1 recent clinical guideline that provides strong recommendations for permanent supportive housing for homeless people that could be adapted in this recommendation.(15)

Summary of findings table

Outcome	**Study**	**Plain Language Statements**	**With Permanent Supportive Housing (PSH)**	**Usual Care**	**Relative effect** 95% CI)	**Absolute** (95% CI)	**Certainty of the evidence**
Housing Stability	At Home/Chez Soi RCT (Aubry, Goering et al. 2016, Aubry, Bloch et al. 2020) % stably housed at 24 months:	74% stably housed at 24 months compared to 41% of control pts	With PSH + Assertive Community Treatment (ACT): 74% CI 69%-78%) (273/369)	Treatment as Usual: 41% CI 35%-46% (138/337)	Odds ratio [OR] 4·10; 95% CI 2·98–5·63	330 more per 1,000 (from 264 more to 387 more)	high

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	At Home/Chez Soi RCT and US Pathways Study (Stefancic and Tsemberis 2007, Aubry, Goering et al. 2016, Aubry, Bloch et al. 2020) (meta-analysis) Number of pt stably housed at 18+ months	65% stably housed at 18+ months compared to 45% of control pts	PSH + Assertive Community Treatment (ACT): 376/578 (65%)	Treatment as Usual: 152/388 (45%)	OR 3·58 [95% CI 2·36– 5·43]	306 more per 1000 (between 112 to 386 more participants housed)	high
	Toronto Site At Home/Chez Soi RCT (Stergiopoulos, Mejia-Lancheros et al. 2019, Aubry, Bloch et al. 2020) Long Term: Number (%) of days stably housed at 6 years	In the long-term at 6yrs, small difference favored the intervention high and moderate needs groups	With PSH + Intensive case management (ICM) High needs group: 85% of days stably housed N= 97	Treatment as Usual: High needs group: 60% of days stably housed N= 100	rate ratio [RR] High needs group: 1·42 [95% CI 1·19–1·69]	-	high
			Moderate needs group: 88% of days stably housed n= 204	moderate needs group: 78% of days stably housed n=174	moderate needs group: RR 1·13 [95% CI 1·01–1·26]		

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	Sound Families Initiative (Northwest Institute for Children and Families 2007b, Bassuk, DeCandia et al. 2014) % of pt that retained permanent housing at 2 years	The majority of pts (89%) who completed the program were stably housed at 2 years	1487 families (Transitional housing with ICM and assistance with securing permanent housing at exit)	No comparison group	-	89% secured and remained in permanent housing for at least 2 years	low
Mental Health (most studies showed no benefit of PSH on mental health)	McHugo et al (2004) (McHugo, Bebout et al. 2004) Severity of psychiatric symptoms using the total score of the Colorado Symptom Index	There was a significant decrease in psychiatric symptoms for pts with PSH + integrated ICM versus PSH + parallel ACT	With PSH + integrated ICM N=63	With PSH + parallel ACT N=62	MD (6 mo): 3.6 MD (12 mo): 6.8 MD (18 mo): 4.1	-	moderate
	At Home/Chez Soi RCT (Aubry, Goering et al. 2016)	Negative result: Small difference favored the control group	PSH + ACT: n= 469	Treatment as usual: n=481	ASMD=.17, CI=.05–.30, p=.01).	-	moderate

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Quality of life	At Home/Chez Soi RCT (Stergiopoulos, Gozdzik et al. 2015, Aubry, Goering et al. 2016) Quality of Life scores from Lehman's Quality of Life Interview (QOLI-20)	Small improvements in quality of life measures for intervention vs control groups	PSH + ACT: High needs: n= 469 (Aubry, Goering et al. 2016)	Treatment as usual: n=481(Aubry, Goering et al. 2016)	MD 4.37, 95% CI 1.60 to 7.14 (at 6 months)	-	low
			PSH + ICM Moderate needs: n=689 (Stergiopoulos, Gozdzik et al. 2015)	Treatment as usual: n=509 (Stergiopoulos, Gozdzik et al. 2015)	ASMD 0.15, 95% CI 0.04 to 0.24 (at 2 years)		
Substance Abuse (most studies showed no impact on substance abuse)	SHIFT Study (Hayes 2013, Bassuk, DeCandia et al. 2014) AA/NA meeting attendance	Negative result: 35% of women reported attending AA/NA meetings at 30 months	Total: 294 families PSH n=31	Emergency shelter n=131 Transitional housing n=120	-	-	low
Health Care Utilization	At Home/Chez Soi RCT (Aubry, Goering et al. 2016) Emergency department (ED) visits and number of days hospitalized	Significant decrease in ED visits and number of days hospitalized with intervention	PSH + ACT: n= 469	Treatment as usual: n=481	Incidence rate ratio (ED visits): 0·68 [95% CI 0·52–0·90]; p=0·007),	Pooled decrease of 53% in ED visits and 62% in number of days hospitalized	moderate

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	The Chicago Housing for Health Partnership's Housing and Case Management Program (Sadowski, Kee et al. 2009, Basu, Kee et al. 2012) Number of hospital admissions, days hospitalized and ED visits over 18 months vs usual care	Fewer hospital admissions (29%), days hospitalized (29%) and ED visits (24%) with intervention	PSH + case management n=201	Treatment as usual n=206	Number of hospital admissions: 29% reduction 95% CI –10 to –4]; p=0·005	Number of days spent in hospital: 29% reduction [8 to 45]; p=0·01 Number of ED visits (24% reduction [3 to 40]; p=0·03)	moderate
Income (most studies showed no significant differences in stable employment	Sound Families Initiative (Northwest Institute for Children and Families 2007b, Bassuk, DeCandia et al. 2014)	% of pts employed doubled upon program exit (1 yr follow-up)	1487 families (Transitional housing with ICM and assistance with securing permanent housing at exit)	No comparison group	-	45% employed full or part-time, compared with 22% at entry	low
Cost offset (cost effectiveness)	Cost-Effectiveness of Housing First With Assertive	The mean total per person cost for Housing First	Housing First	Treatment as usual	Difference (housing first-	--	moderate

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	Community Treatment: Results From the Canadian At Home/Chez Soi Trial (Latimer, E et al. 2020)	participants exceeded that for treatment-as usual participants by $6,311. Thus 69% of the cost of the intervention was offset, reducing its net cost to $6,311.	Total including intervention cost: 62,395 95% CI: 58,843, 65,897	Total including intervention cost: 56,084 95% CI: 51,501, 60,828	treatment as usual) 6,311 95% CI: 309, 12,350		

CI: Confidence interval; OR: Odds ratio; MD: Mean difference; RR: Risk ratio, ASMD: Adjusted standard mean difference

Summary

Outcome 1: Housing Stability

The systematic review by Aubry et al. (2020), which included data from 15 studies across 41 publications showed that housing stability was significantly improved by Permanent Supportive Housing.(14)

The main study referenced was the At Home/Chez Soi RCT(9) with 950 participants 74% of participants with high support needs who received permanent supportive housing with assertive community treatment (ACT) were in stable housing at 24 months compared with 41% of the high need participants in the usual services group (odds ratio [OR] 4·10; 95% CI 2·98–5·63; p<0·0001; moderate certainty evidence).

There were also long term housing-stability benefits. Over 6 years, participants at the At Home/Chez Soi study spent more time stably housed than usual care (rate ratio [RR] of days stably housed 1·42 [95% CI 1·19–1·69] for the high needs group vs RR 1·13 [95% CI 1·01–1·26] for the moderate needs group). A rapid meta-analysis of two major housing studies (the Pathways study and the At Home/Chez Soi study) also showed that at 18 months+, permanent supportive housing resulted in more participants stably housed than in usual care (between 112 to 386 more participants housed in the intervention group vs usual care (OR 3·58 [95% CI 2·36– 5·43]).

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Another systematic review by Bassuk et al. (2014) focusing on homeless families which included data from 7 research articles, showed that housing circumstances were greatly improved for homeless families that were provided with housing subsidies or affordable housing. Although in many cases, upon exiting the programs, families were still vulnerably housed, they were not literally homeless.(13)

One study highlighted in the review was the Sound Families Initiative with 1,487 families that combined transitional housing with intensive case management and assistance securing permanent housing at exit (Northwest Institute for Children and Families 2007b). Of these families, upon exiting the program, 89% secured and remained in permanent housing for at least 2 years (weak quality rating). Another study referenced was the SHIFT study(16) with 294 families, which provided emergency shelter, transitional housing or permanent supportive housing, all in combination with intensive case management. About 50% of families in all three housing conditions were stable at 30 months. Those in permanent supportive housing were most stable, followed by transitional housing and emergency shelter (moderate quality rating, EPHPP).

Systematic reviews by Hwang et al. (2005) and Fitzpatrick-Lewis et al. (2011) highlight the several positive benefits of housing interventions including permanent supportive housing on housing stability on homeless youth and homeless people with mental illness, substance abuse, HIV.(11,12) Overall, Hwang et al. showed that although housing interventions reduced the amount of time spent homeless, many studies do not measure its effects on mental health, physical health and substance abuse of participants.(11)

Outcome 2: Mental Health

Aubry et al found that there were no additional benefits of permanent supportive housing on mental health outcomes (from 10 studies), although permanent supportive housing with intensive case management was associated with a greater reduction in psychiatric symptoms that permanent supportive housing with assertive community treatment.(9) Other systematic reviews did not find any major benefits of permanent supportive housing on mental health outcomes. Fitzpatrick-Lewis et al, suggests that permanent supportive housing with intensive case management may improve health outcomes in homeless people with mental illness.(12)

Outcome 3: Quality of life

In the At Home/Chez Soi study, moderate (mean difference 4.37, 95% CI 1.60 to 7.14)(17) and high needs participants (adjusted standardized mean difference 0.15, 95% CI 0.04 to 0.24)(9) receiving permanent supportive housing showed small improvements in quality of life scores compared to usual care at 6 months and 2 years respectively. Although, this difference was not seen in the long-term at 6 years.(17) Other studies showed signification improvements in life and housing satisfaction among permanent supportive housing participants but not quality-of-life scores.

One RCT highlighted in Hwang et al showed that providing intensive case management with temporary housing significantly improved participants' mental health (psychiatric symptoms) and quality of life.

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Outcome 4: Substance Abuse

In Aubry et al, no trials found any impact of permanent supportive housing on substance abuse.(14) Also, in Bassuk et al, no housing intervention studies showed a significant change in reported substance abuse. In the SHIFT study, 35% women reported attending AA/NA meetings at 30 months.(16)

Outcome 4: Healthcare utilization

The At Home/Chez Soi study showed a significant decrease in emergency department visit of high needs participants receiving permanent supportive housing than usual care participants. One other RCT highlighted in Aubry et al, showed a 29% decrease in hospital admission ([95% CI –10 to –4]; p=0·005) and days spent in the hospital ([95% CI 8 to 45]; p=0·01) and a 24% reduction in emergency department visit in permanent supportive housing participants versus usual care.(18,19)

Outcome 5: Employment and other income-related outcomes

In the At Home/Chez Soi study, there were no significant differences in stable employment (measured in number of consecutive days, weeks or months employed or monthly income) between participants receiving permanent supportive housing versus usual care.(17)

Four of the seven housing intervention studies outlined in Bassuk et al showed improvements in family (usually mother's) employment status. Although, most mothers needed other sources of income to support their families.(13)

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2B. Eviction prevention

The COVID-19 pandemic lead to job loss, unemployment and economic hardship for people who rent, and the risk of eviction increased particularly among low-income populations and people of colour.(20) Eviction can lead to poor health outcomes and economic costs that further threaten individual health and well-being, and hinder pandemic recovery.(20)

Outcome	Study	Plain Language Statements	Intervention	Usual Care	Relative effect	Absolute	Certainty of the evidence
Cost-effectiveness Residents vision on effectiveness of debt advice Level of rent arrears, Goals achieved (case	Interventions to prevent tenant evictions: a systematic review (Marieke Holl, Linda van den Dries and Judith R. L. M. Wolf, 2015)	Overall, debt advice seems to have been a cost-effective intervention to decrease rent arrears and therefore may help to prevent evictions Overall, the intensive case management intervention seems to have been effective in	Debt advice for social housing tenants with debt arrears Intensive case management intervention for Evicted families and families at imminent		--	Cost effectiveness: Debt advice-Net benefit of £239 per head in reduction in arrears and arrears action costs minus the cost of debt advice (from 1 study) Case management-Intervention was no more	low

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managemen t) professional s view- change in circumstanc e(case managemen t) family view- effects of intervention (case managemen t) Whether or not a warrant of eviction was ordered (legal assistance/a dvice/repres entation)		reducing antisocial behaviour and therefore decreasing the chance of being evicted. However, as there was no control group in this study, the actual effect of the intervention on the risk of eviction remains unclear. Overall, legal support seems to have improved tenants' chances of avoiding eviction in court, although the question remains as to whether full representation in court is more effective than assistance by a paralegal or advice from an attorney. Furthermore, the	risk of eviction due to antisocial behavior Legal assistance, advice or representati on by volunteer attorneys for low-income tenants who received court order for non payment of rent in New York City			expensive than usual care and is reported to generate long- term cost savings (from 1 study) -no results re cost effectiveness from legal advice study in Systematic review Resident visions on effectiveness of debt advice: 86 of 179 respondents stated that debt advice had helped them avoid being evicted (from 1 study) Level of rent arrears: In the intervention group, the	

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		long-term effects of this intervention were not studied. Therefore, it is not known whether the eviction warrants were carried out, nor whether the housing situation of the tenants in the treatment group remained stable after the court process.				arrears level decreased by 37% in the 12 months after referral to debt advice, while the arrears level in the control group increased by 14% (from 1 study) Goals achieved (case management): 59% 'successful' (all or main goals achieved), 18% 'unsuccessful' (major goals not achieved); 22% excluded (from 1 study) Professional views in (case management): In the majority of cases, housing problems were minor or absent	

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						after the intervention. Housing officers saw improvement in all but a few cases; social workers in half of the cases Family member views on effecitveness of case management intervention: 6 of the 10 families thought housing situation had improved; 75% of children believed that their housing situation had improved warrant of eviction ordered (legal assistance/advice/representation):	

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						Number of eviction warrants was significantly lower in the treatment group	

Summary

Overall, debt advice seems to have been a cost-effective intervention to decrease rent arrears and therefore may help to prevent evictions.(21) The intensive case management intervention seems to have been effective in reducing antisocial behaviour and therefore decreasing the chance of being evicted. However, there was no control group in the study, so the actual effect of the intervention on the risk of eviction remains unclear. No information is provided about the substantial number of families (N = 13; 23% of the total group) that had moved elsewhere or no longer met the project criteria and very little is reported about the impact of this 'drop-out' on the conclusions. Overall, legal support seems to have improved tenants' chances of avoiding eviction in court, although the question remains as to whether full representation in court is more effective than assistance by a paralegal or advice from an attorney.(21) Furthermore, the long-term effects of this intervention were not studied. It is not known whether the eviction warrants were carried out, nor whether the housing situation of the tenants in the treatment group remained stable after the court process.

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2C. Income assistance

Lack of employment and inadequate income are two of the main causes of homelessness. Income assistance, alone or in combination with other interventions such as case management and permanent supportive housing, has been shown to be an effective intervention for people experiencing homelessness. Income assistance could be direct, through cash transfers, tax benefits, housing subsidies and rental assistance, or indirect, through employment support and financial education. We found 1 systematic review(14) and 1 clinical guideline(15) which summarize the evidence of the benefits (or harms) of providing income assistance to homeless individuals.

Summary of findings table

Outcome	**Study**	**Plain Language Statements**	**Intervention**	**Control**	**Relative effect 95% CI)**	**Absolute (95% CI)**	**Certainty of the evidence**
Housing Stability	Housing Opportunities for People with AIDS Study (Wolitski, Kidder et al. 2010, Aubry, Bloch et al. 2020) Proportion of	Significant improvements in housing stability at 6 & 18 months compared to usual services	Immediate Rental assistance (people w AIDS) + case management n=315	Usual housing services + case management n=315	6 months: OR 6·20 [95% CI 4·18–9·20]; p<0·0001 18 months: OR 4·60 [3·10–6·83]; p<0·0001	-	moderate

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	pts living independently in stable housing at 6 &18months						
	HUD-VASH Supported Housing Program (Rosenheck, Kasprow et al. 2003) Long Term: Number of days stably housed at 3 years, % of pts independently housed at 24 months	Housing subsidy intervention significantly improved housing stability at 2 and 3 years compared to case management only	Housing subsidies with case management; n=182	Case management only; n=99	mean difference (stably housed) at 3 years: 8·58; p<0·004	57.5% pts with housing subsidies and case management independently housed at 24 months versus 30.5% with case management only (OR 3·09 [95% CI 2·00–4·76]; p<0·0001)	low

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	Family Options Study (Gubits, Shinn et al. 2018) Use of emergency shelter and number of places lived in 3 years	Long-term rent subsidies dramatically improved measures of housing stability	Permanent housing subsidy n=599 Community-based rapid rehousing n=569 Project-based temporary housing n=368	Usual care (emergency shelter); n=746	-	50% less use of emergency shelter at 18 months and 0.25 less places lived at year 3	moderate
	Forchuk et al (2008) (Forchuk, MacClure et al. 2008) Attainment of independent housing at 6 months	Significant improvements in attainment of independent housing with vs without assistance at 6 months	Assistance finding housing and rental supplements; n=7	Usual care (without the assistance) n=7	-	100% of people given assistance attained independent housing versus 14·2% of people without assistance; p<0·001	low
	The Compensated Work Therapy Program (Kashner, Rosenheck et al. 2002)	Compensated work therapy resulted in significantly less homeless episodes compared to usual care	Compensated work therapy n=127	Access to rehab, psychiatric and medical services; n=35	OR 0·1 [95% CI 0·1–0·3]; p=0·001	-	low

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	Number of homeless episodes						
Income	At Home/Chez Soi RCT(Poremski, Distasio et al. 2015) Likelihood of securing employment (during periods of high intervention fidelity)	With individual placement and support (and PSH), participants were twice as likely to secure employment	Permanent supportive housing (PSH) + individual placement and support: n= 469	Treatment as usual: n=481	OR 2·42 [95% CI 1·13–5·15]; p=0·02	-	low
Mental Health	-	most studies did not measure or found no impact of income assistance on mental health	-	-	-	-	Very low
Quality of life	HUD-VASH Supported Housing Program (Rosenheck,	Housing subsidies significantly improved participants' quality of life	Housing subsidies with case management; n=182	Case management only; n=99	mean difference 0·39; p=0·009	-	low

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	Kasprow et al. 2003) Quality of Life scores from Lehman's Quality of Life Interview (QOLI-20)						
	The Housing Assistance with Support Rent Assistance Study (Pankratz, Nelson et al. 2017) Measuring same as above		Housing assistance + rent assistance; n=28	Usual care and intensive support (No rental assistance); n=32	p=0.031		
Substance Abuse (Housing subsidies showed no impact on substance abuse)	The Compensated Work Therapy Program (Kashner, Rosenheck et al. 2002) Alcohol and drug consumption	Compensated work therapy significant reduced alcohol and drug consumption compared to usual care	Compensated work therapy n=127	Access to rehab, psychiatric and medical services; n=35	Alcohol consumption: MD –45·4% [SD 9·4]; p=0·001) drug consumption; MD: –44·7% [SD 12·8]; p=0·001)	-	low
Health Care Utilization	-	Most studies did not measure or found no impact of income assistance on	-	-	-	-	Very low

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		health care utilization					

CI: Confidence interval; OR: Odds ratio; MD: Mean difference; RR: Risk ratio, ASMD: Adjusted standard mean difference; SD: Standard Deviation

Summary

Housing Stability

In Aubry et al, one study showed that compared to usual care, housing subsidies (with case management) led to significant improvements in housing stability at 6 months (OR 6·20 [95% CI 4·18–9·20]; p<0·0001), 18 months (4·60 [3·10–6·83]; p<0·0001)(23) and in the long-term at 3 years (mean dif 8·58; p<0·004; low certainty evidence).(22)

The family options study highlighted in Bassuk et al, with 2,282 families, showed that long-term rent subsidies had dramatically improved all measures of housing stability (about 50% less use of emergency shelter at 18 months and 0.25 less places lived at year 3) compared to usual care. The short-term rent subsidies and transitional housing interventions used had less impact on housing stability.(25)

Other indirect income assistance from different studies included assistance with finding housing and rental supplements, financial education, compensated work therapy and individual placement and support. One study showed that assistance with finding housing and rental supplements led to 100% of participants stably housed within 6 months vs 14.2% for usual care participants.

Compensated work therapy, which provides work opportunities based on measures of participant work performance and health behavior, resulted in less homeless episodes compared to usual care (OR 0·1 [95% CI 0·1–0·3]; p=0·001; low certainty evidence). Individual placement and support also had positive effects on housing stability. Financial education had no impact on housing stability.

Employment and income-related outcomes

In the At Home/Chez Soi study, providing individual placement and support (with permanent supportive housing) resulted in participants being twice as likely to secure employment (OR 2·42 [95% CI 1·13–5·15]; p=0·02; low certainty evidence).(24)Although long-term housing subsidies had no impact on employment and household income, food security was significantly improved (p < 0.01).

Other outcomes

From all the related studies reviewed, housing subsidies had no impact on substance abuse (Gubits, Shinn et al. 2018) but compensated work therapy significant reduced alcohol consumption (mean difference –45·4% [SD 9·4]; p=0·001) and drug consumption (mean difference –44·7% [12·8]; p=0·001) compared to usual care.(26) Housing subsidies and financial education no significant impact on mental health. Housing subsidies

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significantly improved participants' quality of life (US study: mean difference 0·39; p=0·009; low certainty evidence, Canada study: p=0.031).(22,27)

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2D. Case management

Homeless or vulnerably housed people are often at risk of/have other complex problems including mental illness, substance abuse disorders and other morbidities. Case management, where individual case managers provide tailored, patient-centered services to homeless people, has been shown to be an effective intervention for people experiencing homelessness.(11,28,29) Some of these services include support with medical and psychiatric treatment, helping to develop independent living skills and crisis intervention.(28) Case management is usually classified as standard (SCM) or more intensive (in the case of intensive case management (ICM), assertive community treatment (ACT) and crisis time intervention (CTI).

We found 2 systematic reviews(28,29) and 1 clinical guideline(15) that summarize the evidence of the effectiveness of case management interventions on health outcomes of homeless individuals.

Summary of findings table

Outcome	Study	Plain Language Statements	Intervention	Control	Relative effect 95% CI)	Absolute (95% CI)	Certainty of the evidence
Housing Stability	Pooled Analysis of 3 case management trials (Toro, Rabideau et al. 1997, Cox, Walker et al. 1998, Grace and Gill 2014) Number of Days Spent Homeless	Intensive Case Management (ICM) significantly decreased the number of days spent homeless	Intensive case management n=358	Usual care n=308	SMD -0.22 95% CI -0.40 to -0.03 (p=0.02) (no effect on number of days spent in stable housing; p=0.87)	-	low

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	Lehman et al (Lehman, Dixon et al. 1997, Ponka, Agbata et al. 2020) Number of days in community housing, stably housed; number of days spent or homeless	Pts receiving assertive community treatment (ACT) spent significantly more days in community housing and significantly fewer days homeless compared to supportive services and usual care	Assertive community treatment n=77	Usual care; n=75	More days in community housing vs control group (p=0.006) Less days spent homeless (p<0.01) More days stably housed: p=0.032	MD 50.1 more days in community housing (46.15 more to 54.04 more) MD 14.2 fewer days spent homeless (28.75 fewer to 0.35 more)	low
Income	-	Most studies did not measure or found no impact of any case management interventions on employment and other income-related outcomes	-	-	-	-	Very low
Mental Health	(Upshur, Weinreb et al. 2015)	Standard Case Management (SCM) Intervention resulted in modest reduction in the odds of depression	SCM n=37 Number (%) with depressive	Usual care n=36 Number (%) with depressive	Odds of depression (OR 0.38 95% CI 0.14 to 0.99)	234 fewer per 1,000 (from 407 fewer to 2 fewer)	low

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	% of pts with depression symptoms	but not overall mental health	symptoms: 12/37 (32.4%)	symptoms: 20/36 (55.6%)	Overall mental health (Mean Diff 4.50; 95% CI -0.98 to 9.98).		
	(Lako, Beijersbergen et al. 2018) Number of pts with PTSD symptoms	Women (who have been abused) receiving crisis time intervention (CTI) showed fewer symptoms of PTSD compared to usual care	CTI; n = 70	Usual Care; n = 66	mean diff -7.27, 95% CI -14.31 to -0.22, p = 0.04	-	low
Quality of life	Choices Program (Shern, Tsemberis et al. 2000) Life Satisfaction areas in Lehman's Quality of Life Interview (QOLI)	Individuals receiving ICM reported consistently greater improvement in life satisfaction than the control group in 6 of the 7 life areas(Ponka, Agbata et al. 2020)	Intensive Case Mangement; n-91	Usual care; n=77	Improvement in life satisfaction in 6 out if 7 QOL areas: Overall, p=0.001; Leisure, p=0.027; Financial, p=0.001; Safety, p=0.005; Health, p=0.006; Family, p=0.005; Social, p=0.56	-	low
Substance Abuse	-	Most studies did not measure or found no impact of case	-	-	-	-	Very low

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		management on substance abuse					
Health Care Utilization Odds of hospitalization and total number of nights hospitalized	(Herman, Conover et al. 2011)	Pts receiving crisis time intervention had reduced odds of rehospitalization and had fewer total number of nights hospitalized compared to usual care	CTI; n = 77	Usual Care; n = 73	Odds of rehospitalization OR 0.11, 95% CI 0.01 to 0.96, p = 0.07 Fewer nights hospitalized compared to usual care (p<0.05)	-	low

CI: Confidence interval; OR: Odds ratio; MD: Mean difference; RR: Risk ratio, ASMD: Adjusted standard mean difference; SD: Standard Deviation; SMD: Standard Mean Difference

Summary

Housing Stability

In de Vet et al, majority of the studies found that standard case management (3 out 5 studies), intensive case management (3 out of 7) and assertive community treatment (9 out of 9) significantly improved housing stability compared to usual care. Also, crisis time intervention significantly decreased the number of homeless nights (over the course of 9 months and beyond in mentally ill homeless men)(30) and significantly increased the number of days housed (in homeless veterans).(31)

In Ponka et al., the positive effects of case management on housing stability were not as striking. Only 3 out of 10 trials shown significant decreases in homelessness with standard case management, 7 out of 14 studies show small improvements in housing stability with intensive case management. Intensive case management decreased the number of days homeless (Std Mean Diff -0.22 95% CI -0.40 to -0.03), but not the number of days stably housed compared to usual care.(29)

As with de Vet et al., results with assertive community treatment and crisis time intervention in Ponka et al were more promising. Assertive community treatment resulted in a significant increase in the number of days housed (in community housing; p=0.006), a significant decrease in the number of days homeless (p <0.01) and a marginal increase in the number of days stably housed compared to usual care (p=0.032) and other supportive services. Crisis time intervention significantly improved housing stability in 3 out of 4 trials.(29)

Mental Health

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de Vet et al. found no impact of standard case management on mental health in all 4 trials assessed.(28) One standard case management trial in Ponka et al. shows a reduction in the odds of depression (OR 0.38 95% CI 0.14 to 0.99) but not overall mental health (Mean Diff 4.50; 95% CI -0.98 to 9.98).(29) Another standard case management trial (nurse-led) showed higher levels of hostility ($p<0.001$) and depression ($p<0.05$) *(an important harm to note).(32)* For intensive case management, de Vet et al found no impact on mental health outcomes in all 4 trials assessed, and in Ponka et al, only 4 out 11 trial show a significant reduction in psychological symptoms.

Results for assertive community treatment were moderate. Two out of 6 studies in de Vet et al and 1 out of 7 trials in Ponka et al found a significant impact of assertive community treatment on mental health with participants reporting fewer psychological symptoms ($p<0.03$) and thought disorder ($p < 0.02$). Crisis time intervention resulted significant in a significant reduction in psychological symptoms in the two studies assessed in de Vet et al, in one study in Ponka et al (Adjusted mean diff -7.27, 95% CI -14.31 to -0.22, p = 0.04) and in one study in Pottie et al (mean difference –0.14, 95% CI –0.29 to 0.01).(15,28,29)

Other Outcomes

In both de Vet et al and Ponka et al, for all case management interventions (except intensive case management in Ponka et al), there were no significant reductions on substance abuse among participants compared to usual care. Intensive case management was significantly beneficial in reducing substance abuse in 6 out of 10 studies that measured this outcome.(28,29)

Three out of 4 trials in Ponka et al show that intensive case management was significantly associated with better overall quality of life and 1 out of 4 trials show this for assertive community treatment. Other case management interventions had no impact on overall quality of life.(29)

Assertive community treatment was effective in shortening the length of hospital stays and emergency room visits in de Vet et al and 3 out of 4 trials in Ponka et al show a positive impact of assertive community treatment on health care utilization. In one study, crisis time intervention reduced odds of rehospitalization (OR 0.11, 95% CI 0.01 to 0.96, p = 0.07) and total number of nights hospitalized ($p<0.05$).(33) Other case management interventions had no impact health care utilization.

In de Vet et al, no case management interventions had an impact on employment or income-related outcomes and in Ponka et al, only 1 out of 5 trials for both standard case management and intensive case management (number of days paid) showed a significant improvement in employment. There was no impact for assertive community treatment and crisis time intervention.

Undesirable effects

How substantial are the undesirable anticipated effects? *(Our Judgement: Small for all interventions)*

Permanent Supportive Housing

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The systematic reviews did not identify any negative outcomes associated with permanent supportive housing. Although, the Pottie et al guideline references a study in progress which points to social isolation as a potential harm associated with permanent supportive housing. They also mention that 15-20% of Housing First participant will experience eviction.

Eviction Prevention

While various programs and efforts to address eviction prevention exist, there is limited published evidence in the form of systematic reviews around eviction prevention interventions. The systematic review we found states that interventions like case management and debt advice may be cost-effective interventions and may decrease the number of renter arrears and improve housing situations.(21) Legal support may decrease the chance of eviction in court, though long term effects are not known.

Income Assistance

The systematic review did not identify any harms associated with income assistance.

Case Management

In one nurse-led standard case management trial, female participants showed higher levels of hostility ($p<0.001$) and depression ($p<0.05$) compared to usual care participants, although there was no significant difference in psychological well-being reported between these groups.(32)

Certainty of evidence

What is the overall certainty of the evidence of effects?

Our Judgement: Low to Moderate

Moderate: Permanent Supportive Housing (Housing First)

Low: Income Assistance, Eviction Prevention and Case Management

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Balance of effects

Does the balance between desirable and undesirable effects favor the intervention or the comparison? (*Our Judgement: Probably favors the option for all interventions)*

Overall, the desirable effects (described above) outweigh the undesirable effects (which are very minimal).

Values

Is there important uncertainty about, or variability in, how much people value the main outcomes? *(Our judgement: Probably no important uncertainty or variability)*

Permanent Supportive Housing

Study assessing eight European countries and the citizens' willingness to pay for programs such as Housing First found that 51% of all respondents were willing to pay more taxes for the HF program. Nations with higher social protection expenditures on family benefits were more likely to value HF, implying that greater social redistribution at the governmental level increases general willingness to contribute to such programs. Respondents in countries with higher rates of households overburdened by housing costs less likely to value HF, suggesting that exposure to greater housing strains increases caution about interventions that might limit the capacity of the housing market.(34)

Resources required & Cost-effectiveness

How large are the resource requirements (costs)? (*Our Judgement: Large Costs for all Interventions)*

What is the certainty of the evidence of resource requirements (costs)? *(Our Judgement: Low for all interventions)*

Does the cost-effectiveness of the option favour the option or the comparison? (*Our Judgement: Probably favors the option for all interventions)*

There is low certainty of the evidence of require resources mostly because of the wide variability between the cost estimates in the different studies reviewed.

Eviction Prevention

Eviction prevention programs and interventions may be cost-effective; the costs of eviction and providing shelter for an evicted household are estimated to be higher than the costs of the interventions. But as these publications do not clearly specify the costs and the estimates are

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outdated, no conclusions can be drawn about the current cost-effectiveness of these interventions.(21,35) Case management and debt advice may be cost-effective interventions and may decrease the number of renter arrears and improve housing situations.(21)

Permanent Supportive Housing

We found 2 systematic reviews(14,36) that provide cost estimates of Housing First and permanent supportive housing overall. Latimer et al found that although costs to shelters and emergency departments decreased with the Housing First intervention, impacts on hospitalization and justice costs were more ambiguous. The studies which employed a pre–post design reported a net decrease in overall costs with HF.

Aubry et al found that costs of the permanent supportive housing intervention were partially offset by savings in medical and social services costs. In the At Home/Chez Soi study, on average, the Housing First intervention cost $22,257 per person per year for assertive community treatment participants and $14,177 per person per year for intensive case management participants.(9) It is estimated that for the two year period of the study, very $10 invested in HF services resulted in an average savings of $9.60 for high needs/ assertive community treatment participants and $3.42 for moderate needs/intensive community participants.(37)

One study found that permanent supportive housing was associated with increased costs and increased quality-adjusted life-years, with an incremental cost-effectiveness ratio of US$62, 493 per quality-adjusted life years.(38) Another study found that although permanent supportive housing was more costly to society than usual care CAN$7868 [95% CI 4409–11 405), it increased the number of days spent stably housed (140 days [95% CI 128–153]). It was estimated stably housing cost CAD$56/day (which could be considered cost-effective).(39)

Income Assistance

We found 1 systematic review and 1 clinical guideline that summarize the cost-effectiveness of income assistance, particularly housing subsidies. Participants receiving rental assistance with case management interventions incurred greater annual costs compared with usual care or groups receiving only case management. For each additional day housed, income assistance clients incurred additional costs of US$58 (95% CI $4 to $111) from the perspective of the payer, US$50 (95% CI –$17 to $117) from the perspective of the health care system and US$45 (95% CI –$19 to $108) from the societal perspective. However, benefit gained from temporary financial assistance was found to outweigh costs with a net savings of US$20,548.(14,15)

Case management

Of all the case management interventions, assertive community treatment seemed to be the most cost effective compared to usual care. The incurred by standard case management was higher than usual care and assertive community treatment. Intensive case management is more likely to be cost effective when all costs and benefits to society are considered. One study showed a net savings of $132,726 when intensive case

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management is provided to high needs participants who frequent emergency departments. Another study found critical time interventions to be cost effective compared to usual care (US$52,574 with crisis time intervention versus US$51,749).(15) In the At Home/Chez Soi study, on average, the Housing First intervention cost $22,257 per person per year for assertive community treatment participants and $14,177 per person per year for intensive case management participants.(9)

Equity

What would be the impact on health equity? (*Our Judgement: Probably increases (equity) for all interventions)*

Permanent Supportive Housing

Enhancing Housing First interventions with anti-racist/anti-oppressive principles of practice, such as client empowerment and choice, for black and ethnic minority homeless adults with mental illness successfully improved housing stability and community functioning, compared to usual care, at the Toronto site of the At Home/Chez Soi trial.(40,41)

It is important to separate "housing" and "home" as distinct determinants of health in the context of Indigenous inhabitation and interventions. Indigenous therapeutic experience of home is achieved by a setting that re-establishes strong ties with community, family, and land in a culturally appropriate manner.(42)

Eviction Prevention

With Aboriginal and Torres Strait Islander families being three times more likely to experience homelessness, culturally appropriate and affordable approaches that are designed for and delivered by aboriginal peoples should be available.(43)

Acceptability

Is the option acceptable to key stakeholders? (*Our Judgement: Probably yes for all interventions)*

These interventions would probably be acceptable to people experiencing homelessness and people who are vulnerably housed. Studies show that although housing first participants were initially socially isolated, the support from peers and staff helped them build key community relationships (and relationships with support staff).(15,44) Another qualitative study found that homeless individuals receiving Housing First reported very positive life changes in terms of stability, safety and relationships.(45)

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Interventions that offer choice are likely preferred by clients. Choice was found to be an important contributor to wellbeing and mental health recovery among people with serious mental illness living in supportive housing.(46)

A study found that there were differences between high- and low-fidelity full service partnerships in terms of client choice in housing and the degree to which client-driven goals were considered in determining housing placement; clients of high-fidelity full service partnerships described being given choices among apartments and locations, while clients in low-fidelity programs reported that they were simply assigned to housing by the full service partnership and there was no choice or decision making on their part.(47) Clients of high-fidelity programs reported that full service partnerships helped them to find housing that met their individual needs or helped them work toward their personal goals. Participants in the focus groups at the low-fidelity programs did not tell any stories that reflected the role of self-determination and client-driven goals in housing placement.

A systematic review and meta-analysis of housing for people with mental health disorders(48) found that 84% of interviewed participants preferred to live in their own apartment, with their family or with persons of their own choice and approximately one in five preferred to live in a more supervised housing setting.

Some government stakeholders such as the mental health commission of Canada and the Canadian observatory on homelessness recognize Housing First (which combines permanent supportive housing and case management) as an important intervention in addressing homelessness and have created reports and toolkits with important recommendations for implementing Housing First in Canada.(37,49) The US and Canadian federal government recognize Housing First as an important intervention for homelessness.(49)

Eviction Prevention

Legal counsel as an intervention in housing court resulted in similar number of court appearances when compared to control but resulted in a higher likelihood of positive outcome and fewer post-judgement motions, these findings suggest that this intervention may be acceptable in housing court. (50)

Feasibility

Is the option feasible to implement? (*Our Judgement: Probably yes for all interventions)*

The report and toolkit on Housing First by the mental health commission of Canada both highlight that implementing the Housing First Intervention is very feasible, a sound investment and can be effectively implemented. Housing First has been implemented in Canada, the United States and several European countries.(37,49)

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Permanent Supportive Housing

Important factors identified to help facilitate housing interventions are: strategies of community engagement, harnessing the influence and training capacity of team leaders/supervisors and the teams, and rule-bending served to facilitate ongoing sustainment fidelity.(51)

Eviction Prevention

A trial done by Seron et al. (2001) shows that providing legal counsel to low-income tenants is not only feasible but resulted in a increased appearance in court and fewer post-judgement motions (12.8% in intervention vs 29% in control).(50)

Guidelines and other resources

In 2020, Pottie et al created a clinical guideline which summarized the evidence surrounding housing interventions for homeless and vulnerably housed people. Some recommendations for the permanent supportive housing intervention they provided are:

- Identify homelessness or housing vulnerability and willingness to consider housing interventions.
- Ensure access of homeless or vulnerably housed individuals to local housing coordinator or case manager (i.e., call 211 or via a social worker) for immediate link to permanent supportive housing and/or coordinated access system (moderate certainty, strong recommendation).

In 2016, the Canadian Observatory on Homelessness and the Canadian Alliance to End Homelessness provided policy recommendations on homelessness that could be adapted (The State of Homelessness, 2016). Some recommendations include:

- The Government of Canada should adopt a national goal of ending homelessness with clear and measurable outcomes, milestones and criteria (by Adopting a Housing First philosophy, Emphasizing prevention, Supporting local leadership, Prioritizing effectively, Using data in decision making and improving local system coordination)
- Set out a new framework agreement that defines local leadership on homelessness and housing investment
- Develop targeted strategies to address the needs of priority populations such as youth (focusing on Housing First for Youth), veterans, and indigenous people (housing initiatives led by indigenous communities)
- Review and expand investment in affordable housing for Indigenous Peoples
- Retain and expand existing affordable housing stock

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Recommendations

During the pandemic recovery period, we strongly recommend the expansion of permanent supportive housing programs with high fidelity to the Housing First approach that entails assertive engagement and case management, less than 30 % of income spent on housing, the choice of housing, the choice of supportive services without coercion to participate for individuals with serious mental health problems or who use substances experiencing homelessness (high certainty in estimates).

During the pandemic recovery period, we recommend expanding access to eviction prevention interventions including access to legal services and financial advice (very low certainty in estimates).

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3. Intimate Partner Violence

Project title: Intimate partner violence during Covid pandemic recovery period

Subtitle: Effectiveness of interventions for people experiencing intimate partner violence during the COVID pandemic recovery period

Problem: Intimate partner violence

Intervention: Screening, psychotherapies, advocacy intervention, interventions involving perpetrators of intimate partner violence

Comparison: No intervention, alternative intervention or usual supports

Main Outcomes: Violence (incidence, re-exposure), Mental health

Background

Intimate partner violence (IPV) is common worldwide and has serious consequences including death. Intimate IPV includes physical, emotional, or sexual aggression as well as stalking and economic aggression directed at a partner. Survivors and victims suffer from mental and physical health problems in the short and long term and many lose economic security. Family members and children who are exposed to violence also suffer from adverse health, social and developmental effects.

Problem

Is the problem a priority? *(Our Judgement: Yes)*

The WHO estimates that one in three women globally experiences physical or sexual violence, or both, by a partner, or non-partner sexual violence, in their lifetime. (1,2) According to a Statistics Canada survey, 44% of women who had ever been in an intimate partner relationship (15 years of age and older) reported experiencing some kind of psychological, physical, or sexual violence in the context of an intimate relationship in their lifetime (since age 15). (3) Given the negative effects of IPV on the wellness of families and society, there is an increasing need to understand what is effective in treating and preventing intimate partner violence based on good-quality evidence.

Desirable effects

How substantial are the desirable anticipated effects*? (Our Judgement: Overall: Low to Moderate).*

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Research Evidence

We found quality systematic reviews for different approaches to addressing IPV; psychotherapies, advocacy interventions, and interventions involving perpetrators of IPV. Screening increases identification of victims of IPV but may not increase referrals to programs and services, reduce re-exposure to violence, or positively impact health measures. (4) Short term interventions have been shown to positively impact other emotional outcomes including PTSD, self-esteem, general distress, and life functioning. (5) Advocacy interventions may reduce minor abuse in antenatal care settings and are also recommended in guidelines. (1,6,7) Interventions involving perpetrators of IPV are shown to be effective in decreasing violence in certain situations, and if used in appropriate contexts could produce substantial desirable effects. (8,9)

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3A. Advocacy

Advocacy is active support by trained people and may contribute to reducing abuse, empowering women to improve their situation by providing informal counselling and support for safety planning and increasing access to different services. Advocacy may be a stand-alone service, accepting referrals from healthcare providers, or part of a multi-component (and possibly multi-agency) intervention provided by service staff or others.

Summary of findings table

Outcomes	**Study**	**Plain Language Statements**	**Intervention(s)**	**Usual Care**	**Relative effect** 95% CI)	**Absolute** (95% CI)	**Certainty of the evidence**
Incidence of abuse -physical -sexual -emotional Psychosocial health -quality of life -depression	Advocacy interventions to reduce or eliminate violence and promote the physical and psychosocial well-being of women who experience intimate partner abuse (Rivas, Ramsay et al., 2015)	After one year, brief advocacy had no effect in two healthcare studies of moderate quality or in one community study at low risk of bias, but it reduced minor abuse in another antenatal care study (low risk of bias). Another antenatal study showed reduced abuse immediately after brief advocacy, but	Brief advocacy interventions Intensive advocacy interventions	No care or usual care	SMD 0.00, 95% confidence interval (CI) - 0.17 to 0.16 (brief advocacy-physical abuse) OR 0.39, 95% CI 0.20 to 0.77; NNT = 8), at 24 months but not at 12 or 36 months- low to very low quality evidence (intensive advocacy-physical abuse) SMD - 0.12, 95% CI - 0.37 to 0.14 (sexual abuse)		low

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		women were also treated for depression, which may have affected results. Two studies provided weak evidence that intensive advocacy reduces physical abuse up to two years after the intervention Four studies failed to show benefits from advocacy for sexual abuse. One antenatal care study (low risk of bias) reported reduced emotional abuse at 12 months after advocacy Three brief advocacy trials found no benefit on quality of life. Intensive			MD 4.24, 95% CI - 6.42 to - 2.06 (emotional abuse) MD 0.23, 95% CI 0.00 to 0.46 (intensive advocacy)(quality of life – recruited from shelters) OR 0.31, 95% CI 0.15 to 0.65 (brief advocacy)(depression) MD - 0.14, 95% CI - 0.33 to 0.05 (intensive advocacy)(depression 12 month f/u) SMD – 0.12, 95% CI – 0.36 to 0.1 (intensive advocacy)(depression after 2 years)		

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		advocacy showed a weak benefit in two studies in domestic violence shelters/refuges. A primary care study (high risk of bias) showed improved motivation to do daily tasks immediately after advocacy. Brief advocacy prevented depression in abused women attending healthcare services and pregnant women immediately after advocacy. Intensive advocacy did not reduce depression in shelter women followed up at 12 and 24 months					

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	A realist review of which advocacy interventions work for which abused women under what circumstances (Rivas, Vigurs et al., 2019)	Moderate and high confidence in evidence for the importance of considering both women's vulnerabilities and intersectionalities and the trade-offs of abuse related decisions in the contexts of individual women's lives. Decisions should consider the risks to the woman's safety from the abuse. Whether actions resulting from advocacy increase or decrease abuse depends on contextual factors (e.g., severity and type of abuse), and the outcomes the particular advocacy intervention is					

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		designed to address. Low confidence in evidence regarding the significance of physical dependencies, being pregnant or having children. There were links between setting (high confidence), and potentially also theoretical underpinnings of interventions, type, duration and intensity of advocacy, advocate discipline and outcomes (moderate and low confidence). A good therapeutic alliance was important (high confidence); this					

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		alliance might be improved when advocates are matched with abused women on ethnicity or abuse experience, exercise cultural humility, and remove structural barriers to resource access by marginalised women. We identified significant challenges for advocates in inter-organisational working, vicarious traumatisation, and lack of clarity on how much support to give a woman (moderate and high confidence). To work effectively,					

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		advocates need ongoing training, role clarity, access to resources, and peer and institutional support.					

Summary

Based on the evidence reviewed, intensive advocacy may improve short-term quality of life and reduce physical abuse one to two years after the intervention for women recruited from domestic violence shelters or refuges. Brief advocacy may provide small short-term mental health benefits and reduce abuse, particularly in pregnant women and for less severe abuse. Authors state there is insufficient evidence to draw conclusions about the benefits of advocacy, either within healthcare settings or within the community, for the reduction of severe physical abuse. The results suggest that the existing body of research evidence has not fully established the potential benefits of advocacy (either offered as a brief or more intensive intervention), including cessation or reduction of abuse, improved quality of life, and reductions in depression and anxiety. (6,7)The weak evidence for advocacy as an intervention for intimate partner abuse does not mean that existing services should be withdrawn.

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3B. Psychotherapy for intimate partner violence

IPV is strongly associated with mental health problems. Victims and survivors of IPV may develop psychological and somatic symptoms to the trauma, including anxiety, depression, and other mental health related disorders in addition to facing numerous safety, financial, and social challenges. Various psychotherapies including integrative therapies, humanistic therapies and cognitive behavioural therapies are often used in attempt to reestablish stability.

Summary of findings table

Outcome	**Study**	**Plain Language Statements**	**Intervention**	**Control**	**Relative effect** 95% CI)	**Absolute** (95% CI)	**Certainty of the evidence**
Primary: Depression Self-efficacy Indicator of harm (dropouts) all at six- to 12-months' follow-up Secondary: Anxiety (short term follow-up)	Psychological therapies for women who experience intimate partner violence (Hameed, O'Doherty et al, 2020)	Probable beneficial effect of psychological therapies in reducing depression For self-efficacy, there may be no evidence of a difference between groups There may be no difference between the number of	Psychological therapies		SMD −0.24, 95% CI −0.47 to −0.01 (depression) SMD −0.12, 95% CI −0.33 to 0.09 (self efficacy) OR 1.04, 95% CI 0.75 to 1.44 (indicator of harm)		moderate

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Safety planning PTSD		women who dropped out from the experimental or comparator intervention groups, an indicator of no harm Psychological therapies may reduce anxiety symptoms There may be no evidence between groups for the outcomes safety planning, post-traumatic stress disorder, or re-exposure to any form of IPV			SMD −0.96, 95% CI −1.29 to −0.63 (anxiety) SMD 0.04, 95% CI −0.18 to 0.25 (safety planning) SMD −0.24, 95% CI −0.54 to 0.06 (PTSD) SMD 0.03, 95% CI −0.14 to 0.2 (re-exposure to IPV)		
PTSD Self-esteem Depression General distress	Short-Term Interventions for Survivors of Intimate Partner Violence: A Systematic Review and Meta-Analysis	The overall effect, across all dependent variables and studies, shows an impressive outcome with an omnibus effect	Short term psychological therapies		1.26 CI 0.81, 1.70 z score 5.50 (PTSD) 1.16 CI 0.71,1.61 z score 5.06 (self-esteem)	34% advantage overall 40 percentile gain vs if no treatment was received (PTSD)	

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Life functioning Substance use/abuse Emotional well-being Safety Interpersonal violence	(Arroyo et al., 2015)	size in the large range			0.95 CI 0.64, 1.25 z score 6.14 (depression) 0.84 CI 0.56, 1.11 z score 5.90 (general distress) 0.73 CI 0.43,0.97 z score 5.26 (life functioning) 0.44 CI 0.08, 0.8 z score 2.36 (substance use/abuse) 0.40 CI 0.18, 0.61 z score 3.62 (emotional well-being) 0.40 CO 0.03,0.76 z score 2.12 (safety)	38 percentile gain vs if no treatment was received (self-esteem) 33 percentile gain vs if no treatment was received (depression) 30 percentile gain vs no tmt (general distress) 27 percentile gain vs no tmt (life functioning) 17 percentile gain vs no tmt (substance use/abuse) 16 percentile gain vs no tmt (emotional well-being) 16 percentile gain vs no tmt (safety) 14 percentile gain vs no tmt	

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					0.35 CI 0.09, 0.61 z score 2.63	(interpersonal violence)	

CI: Confidence interval; OR: Odds ratio; MD: Mean difference; SMD: Standardized mean difference, RR: Risk ratio, ASMD: Adjusted standard mean difference; SD: Standard Deviation

Summary

Hameed et al show evidence that for women who experience IPV, psychological therapies probably reduce depression and may reduce anxiety. However, it is uncertain whether psychological therapies improve other outcomes (self-efficacy, post-traumatic stress disorder, re-exposure to IPV, safety planning) and there are limited data on harm. Thus, while psychological therapies probably improve emotional health, it is unclear if women's ongoing needs for safety, support and holistic healing from complex trauma are addressed by this approach. (10) Arroyo et al showed that short term treatments are effective overall with a 34% advantage. Five of the targeted outcomes had large effect sizes, including PTSD, self-esteem, depression, general distress, and life functioning, and four of the targeted outcomes had effects in the moderate range, including substance use/abuse, emotional well-being, safety, and recurrence of interpersonal violence. (5) It is promising that in both reviews, some emotional symptoms expected to result from IPV, such as depression, show responses to treatment.

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3C. Interventions for individuals who perpetrate intimate partner violence

Some interventions target the perpetrator of IPV or both the perpetrator and the victim. CBT, SUI, SUB, SADV, MI and sex roles are examples of treatment that provided to perpetrators of IPV in hopes to reduce violence. Some studies indicate that couples suffering from situational violence may benefit from couples therapy, but professionals are cautious to risk the possibility of violent retaliation between partners.

Summary of findings table

Outcome	**Study**	**Plain Language Statements**	**Intervention**	**Control**	**Relative effect** 95% CI)	**Absolute** (95% CI)	**Certainty of the evidence**
IPV perpetration (violence)	Meta-analysis and systematic review for the treatment of perpetrators of intimate partner violence (Karakurt, Koc et al., 2019)	Findings for pre and post comparison of the intervention studies indicate that IPV can be significantly reduced through programs designed for male perpetrators comparing post-test results to pre-test baseline levels of IPV Treatment models augmented with substance abuse models yielded significantly more effective results in reducing violence for male perpetrators	Programs designed for male perpetrator Treatment models augmented with substance use models Trauma augmented treatment models Sex role or Duluth approaches		$\beta=-0.85$, 95% CI -1.02 to -.69, $p < .001$ (comparing post test to pre test baseline levels of IPV for programs) MD = -2.14, CI -3.20 to -1.08 (tmt with substance abuse models) MD = -1.47, CI -2.63 to -0.30 (tmt with trauma models)		moderate

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		Trauma augmented models yielded significantly more effective results at reducing violence for male perpetrators Sex role or Duluth approaches produced mixed results at reducing violence for male perpetrators when compared to other treatments Implementation of CBT, motivational or Standard Batterer Intervention (SBI) based approaches did not exhibit significant differences compared to each other					
IPV (violence)	Couples Therapy for Intimate Partner Violence: A Systematic Review and	IPV can be significantly reduced through the application of couples therapy when compared to an active	Couples therapy		MD 0.84; 95% CI -1.37 to -0.30		moderate

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	Meta-Analysis (Karakurt et al., 2016)	comparator or no-treatment control					

Summary

Karakurt et al 2019 indicated that intervention programs that are designed for male perpetrators are an effective way to reduce violence at post-test among study samples. When conducting exploratory subgroup analyses, it was observed that treatment approaches incorporating substance abuse and trauma yielded better results. (9) Karakurt et al 2016 indicates a positive impact of couples therapy. Results of the preliminary meta-analysis with pooled data from six studies with 470 participants indicate that couples therapy significantly reduces IPV.(8) Further research is needed to confirm these findings, but there is reason to reevaluate the role of couples therapy in IPV treatment and cautiously increase its application in select situations where violent retaliation between partners is not a likely consequence.

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Undesirable effects

How substantial are the undesirable anticipated effects? *(Our Judgement: Probably small for most interventions)*

Advocacy approaches

The systematic review did not identify any harms associated with advocacy approaches. There is a concern that interventions could precipitate violence.(11)

Psychotherapies

The systematic review notes that there are limited data on harm associated with psychotherapies.

Interventions for IPV perpetrators

The systematic review notes that couples therapy is appropriate in certain situations because there is risk of violent retaliation, though undesirable effects were not reported in the systematic review.

Certainty of evidence

What is the overall certainty of the evidence of effects?

Our Judgement: Low to Moderate

Balance of effects

Does the balance between desirable and undesirable effects favor the intervention or the comparison? (*Our Judgement: Probably favors the option for all interventions)*

Overall, the desirable effects outweigh the undesirable effects.

Values

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Is there important uncertainty about, or variability in, how much people value the main outcomes? *(Our Judgement: Probably no important uncertainty or variability)*

Resources required & Cost-effectiveness

How large are the resource requirements (costs)? (*Our Judgement: Probably moderate for all Interventions)*

What is the certainty of the evidence of resource requirements (costs)? *(Our Judgement: Low for all interventions)*

Does the cost-effectiveness of the option favour the option or the comparison? (*Our Judgement: Low)*

There is low certainty of the evidence of required resources as costs were not a focus of the studies included in the systematic reviews. Legal advocacy in general (not limited to intimate partner violence) costs around USD$200 per case in 2009 based on a study in rural America. (12) In Alberta, interventions to prevent intimate partner violence were estimated to cost $9.6 million and generate net benefits of $54 million. (13)Legal advocacy in general (not limited to intimate partner violence) seems to be cost-effective. (12) Legal advocacy for children is also cost-effective when considering the amount of social assistance gained for patients. (14) can be tailored for racialized women. (15)

Equity

What would be the impact on health equity? (*Our Judgement: Potentially increases (equity) for all interventions)*

We found no systematic reviews addressing health equity related to the interventions. The interventions should be made easily accessible to all who may benefit from them (for example, couples therapy) and to increase equity. Since women are more much more likely to be harmed by IPV, any interventions that prevent IPV will promote equity when the perpetrators are men. Some studies indicate that racialized women more likely to experience serious harms of IPV, (16) and thus interventions that prevent IPV should promote equity if they reach and benefit racialized women.

Acceptability

Is the option acceptable to key stakeholders? (*Our Judgement: Potentially yes for some interventions)*

These interventions would probably be acceptable to victims of IPV. Studies show that there are likely emotional benefits for victims receiving psychotherapies and advocacy interventions. Interventions involving perpetrators may or may not be acceptable to perpetrators or victims (couples therapy), depending on the individual context. Among a shelter population of victims of intimate partner violence, women felt that mental health services was the largest unmet healthcare need and healthcare providers were generally seen as allies. (17)

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In a study that explored preferences of veteran women in terms of counseling, IPV victims preferred counseling that focused on physical safety and emotional health, with learning about community resources being a lower priority. Participants preferred counseling to focus on enhancing coping skills and managing mental health symptoms, and for the counselling to be individualized. They preferred the option to meet with a counselor immediately following disclosure of IPV. Affordable services and attention to privacy concerns were important considerations in the context of IPV-related counseling.

These interventions would probably be acceptable to government stakeholders and the general public. Governments acknowledge the problem and have issued campaigns and tools to tackle IPV. (18) When asked about specific policies to target violence against women, a large proportion of a nationally representative sample believed it would be helpful to fund short-term safe houses and transition houses for women and children escaping violence (93%), to pursue the prosecution of violent men (92%), and to provide legal support for child custody/access disputes (82%). (19)

Feasibility

Is the option feasible to implement? (*Our Judgement: Probably yes for some interventions)*

Multiple studies implemented services or described implemented services. Services can be tailored for subpopulations. (15)

Guidelines/ other resources:

USPSTF (Screening) (20)

WHO (1) (2)

NICE quality standard (21)

Centre for Research & Education on Violence Against Women & Children- The Learning Network. 3 Considerations for Supporting Women Experiencing Intimate Partner Violence During the COVID-19 Pandemic (22)

Recommendations

During the pandemic period, we strongly recommend interventions including legal advocacy and supportive interventions for victims of intimate partner violence (moderate certainty in estimates).

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4. Childhood

Project title: Childhood during Covid pandemic recovery period

Subtitle: Effectiveness of interventions to address childhood health equity during Covid pandemic recovery

Problem: Health and well-being disadvantages

Intervention: Childcare (daycare), Food programs

Comparison: No intervention, alternative intervention or usual care

Main Outcomes: Cognitive development, behavioral issues, physical development, parental well-being and employment

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4A. Childcare (day care)

Background

There is a significant proportion of children that experience non-parental day care in both formal and informal settings. Studies suggest that high-quality centre-based childcare can be beneficial for children, specifically those with low socioeconomic status.(1) Good quality childcare participation may improve development in children whose home environments may be under-stimulating or stressful and help close the gap between children from low- and high-income families.(2) Centre-based day care services may also influence the economic situation of parents by freeing parents to participate in the work force.(3,4)

Centre-based care is different from care by parents/nannies/family members in that it provides group supervision of children in a publicly accessible location. This type of formal care may also provide education, feeding, play, materials, or toys to children who otherwise would have limited access to these things. Centre-based care can also be expanded to include a variety of family, health and nutrition services to accommodate the specific community. Typically, centre-based care is supervised by trained child development staff or lay caregivers. Studies examining the role of child-care services on cognitive development generally find positive effects(5,6) and studies that have examined the role of childcare services among working mothers found a positive effect for centre-based services when compared to care by a friend or relative.(7)

For many families school closures, partial online learning, and daycare closures during the Covid-19 pandemic have required at least one adult to remain at home to supervise the children. Many parents are limited to either shifting their work hours to evenings/weekends, taking unpaid leave, or quitting. According to research done by the U.S Census Bureau in August 2020, 1 in 5 working-age adults said they were not working because the Covid-19 pandemic derailed their childcare set up. (8) They also reported that women ages 25-44 are almost three times as likely as men to not be working due to childcare demands.(8)

Governments may choose to expand day care coverage as a means of enhancing child social and academic performance before formal education as a means of providing services targeted at improvement and maintenance of child health. This is particularly relevant for low-and middle-income countries where an estimated of 200 million children younger than five years of age do not reach their developmental potential.(9) In high-income countries day care coverage could both enable parental, specifically maternal, employment and also impact the long-term cognitive and socioemotional development of children, particularly children from deprived homes.(10,11)

We found 5 articles (systematic reviews and longitudinal studies) investigating formal centre-based childcare compared to non-formal care and the effects on child development as well as on parents, specifically mothers, and their ability to re-enter the labour force.

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Problem

Is the problem a priority? *(Our Judgement: Yes)*

Desirable effects

How substantial are the desirable anticipated effects? *(Our Judgement: Moderate)*

Summary of findings table

Study	Outcomes	Plain Language Statements	Intervention	Control	Relative effect 95% CI)	Absolute (95 % CI)	Certainty of the evidence
Centre-based day care for children younger than five years of age in low- and middle-income countries (Review) (2014)	Child Intellectual Development Child Psychosocial Development Maternal and Family Outcomes Incidence of infectious disease	The one included study reported positive effects of centre-based day care on the cognitive development of children. It did not report the effects of centre-based day care on children's psychosocial development, the incidence or prevalence of infectious diseases, parental	Centre-based day care (preschool)	No interventio n (care at home)	Child Intellectual Development SMD 0.74 (0.48 to 1.00) ** No data found for any other outcome**		Very Low

		employment or household income.					
Centre-based day care for children younger than five years of age in high-income countries (Review) (2014)	Child cognitive ability Child psychosocial development Paid maternal employment (full or part-time) Paid maternal employment (house per week)	Currently very limited evidence is available on the effects of centre-based day care on the cognitive and psychosocial development of children, parental employment or household income, or on long-term outcomes for children.	Centre-based daycare	No interventio n (alternative child care)	Child cognitive ability SMD 0.34 (-0.01 to 0.69) Child psychosocial development RR 1.21 (0.25 to 5.78)		Very Low (For all outcomes)

	Household income				Paid maternal employment (full or part-time) RR 1.12 (0.85 to 1.48) Paid maternal employment (house per week) SMD 0.20 (-0.15 to 0.55) Household income RR 0.86 (0.57 to 1.29)		

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Social inequalities in childcare quality and their effects on children's development at school entry: findings from the Longitudinal Study of Australian Children (2015)	Childcare quality Socioeconomic position Developmental outcomes	The effects of higher quality childcare on children's cognitive and behavioural development at school entry were stronger among children from lower income families. This suggests that higher quality relationships in childcare may be especially important in helping reduce developmental gaps for children from lower income families.	"high-quality" formal Childcare	"lower quality" formal childcare	-Children with higher quality relationships and lower income had a negligible risk of a receptive vocabulary score < median RR=1.05 (95% CI 0.86 to 1.27) -Children experiencing higher quality relationships and lower income had no increased risk of teacher-reported behavioural difficulties RR=0.99 (0.61 to 1.5)		-

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Child Care Arrangement and Preschool Development (Longitudinal Study) (2000)	Poor Developmental Attainment	All types of childcare external to parents improved the odds of normal developmental attainment, provided that the child was not disadvantaged by maternal depression	Care by someone in the child's own home, in another home (family childcare), at a child care centre, or none (child care exclusive to parents)		Overall, children with centre childcare had lower odds of PDA (Poor Developmental Attainment) OR=0.41 (99% CI=0.18 to 0.93)		-
Child Care in Infancy and Cognitive Performance Until Middle Childhood in the Millennium Cohort Study (2013)	Children's Cognitive Skills at 3, 5 and 7		Child Care	No intervention (care at home)	3Years -Association between childcare and BSR Test was larger among children of less educated mothers, d = 0.34, 95% CI [0.26, 0.43] -Association between child care and the BAS test at		-

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					was also larger among children of less educated mothers d = 0.27, 95% CI [0.19, 0.36] 5 and 7 years No association between childcare and BAS test among children with less educated mothers		

Summary

The evidence shows that centre-based care may improve child health and/or development especially to more disadvantaged populations. In Middle- to Low-Income countries, centre-based childcare has been shown to have positive effects on cognitive development in children.(5) There was some evidence that higher quality relationships in childcare may act as a protective factor for lower income children. There was also data suggesting that the association between childcare and poor developmental attainment involves an interaction between social factors influencing the child's home environment-specifically maternal depression.(12) High-quality evidence on the benefits or harms of centre-based day care, especially in high-income countries, is lacking.

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4B. Food distribution

Background

Malnutrition commonly affects all groups in a community, but infants and young children are the most vulnerable because of their high nutritional requirements for growth and development.(13) Human growth consists of a progression of events that is marked by: increasing physical size and vital physiologic and intellectual development. This biological process requires a balance of energy and nutrients, adequate care, and absence of illness. If a child does not have access to the proper nutrients or if a child has environmental stressors that interfere with nutrient intake, growth is impaired.(14)

In early childhood the most common causes of undernutrition are 1) inappropriate feeding practices 2) receiving inadequate diets in terms of quantity or quality or both. These causes can be closely linked to poverty.(15) In high-income countries, household food insecurity is strongly associated with low-income.(16) Supplementary food programs/feeding can be useful in tackling undernutrition in children, especially low-income individuals. Supplementary feeding is a strategy that includes provision of extra food to children beyond the normal ration of their home diets and is aimed at improving the nutritional status or preventing the undernutrition of the target population.

Summary of findings table

Study	Outcomes	Plain Language Statements	Intervention	Control	Relative effect 95% CI)	Absolute (95 % CI)	Certainty of the evidence
Community-based supplementary feeding for promoting the growth of children under five years of age	Weight (kg) Length/heigh (cm)	Although the impact of supplementary feeding on child growth appeared to be negligible, it is not possible to draw any conclusions until we	Supplementary Feeding	No food supplementation or low protein/kcalories supplementation	-	The mean weight (kg) at the end of the intervention in the intervention groups was	Low

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in low and middle income countries (Review) (2012)		have studies that involve larger numbers and do not allow assessors to know who is receiving the intervention.				0.03 lower (0.21 lower to 0.15 higher) The mean length/height (cm) at the end of the intervention in the intervention groups was 0.16 higher (0.31 lower to 0.63 higher)	
Food supplementation for improving the physical and psychosocial health of socio-economically disadvantaged	Weight gain (kg) Height gain (cm) Weight-for-age: z-scores (WAZ)	Study found that, in low- and middle-income countries, providing additional food to children aged three months to five years led to small gains in weight and height	Feeding	Control		The mean weight gain in the intervention group was	Moderate

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children aged three months to five years (Review) (2015)	Height-for-age: z-scores (HAZ) Weight-for-height: z-scores (WHZ)	and moderate increases in hemoglobin. We also found positive impacts on psychomotor development. We found mixed evidence on effects on mental development. In high-income countries, two studies found no benefits for growth. The one effective study involved Aboriginal children.				0.12 higher (0.05 to 0.18 higher) The mean height gain in the intervention group was 0.27 cm higher (0.07 to 0.48 higher) The mean change in WAZ in the intervention group was 0.15 higher (0.05 to 0.24 higher) The mean change in	

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						HAZ in the intervention group was 0.15 higher (0.06 to 0.24 higher) The mean change in WHZ in the intervention group was 0.10 higher (0.02 lower to 0.22 higher)	
Preventive lipid-based nutrient supplements given with complementary foods to infants and young	Moderate stunting Severe stunting	Findings of this review suggest that LNS plus complementary feeding is probably an effective intervention for	LNS plus complement ary feeding	No interventio n	Moderate stunting RR 0.93 (0.88 to 0.98) Severe stunting RR 0.85		All moderate except for anemia

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children 6 to 23 months of age for health, nutrition, and developmental outcomes (Review) (2019)	Moderate wasting Severe wasting Moderate underweight Severe underweight Anaemia Adverse effects	improving growth outcomes			(0.74 to 0.98) Moderate wasting RR 0.82 (0.74 to 0.91) Severe wasting RR 1.27 (0.66 to 2.46) Moderate underweight RR 0.85 (0.80 to 0.91) Severe underweight RR 0.78 (0.54 to 1.13) Anemia		

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					RR 0.79 (0.69 to 0.90) Adverse effects RR 0.86 (0.74 to 1.01)		

Summary

The findings of these reviews vary slightly in terms of significance and applicability of evidence. Sguassero et al. (2012) found that supplementary feeding appeared to have a negligible impact on child growth.(14) Based on the evidence reviewed in that article, they advised that clinicians and policy makers should not place undue expectations on the effectiveness of supplementary feeding for promoting the growth of children under 5 years old living in low- and middle-income countries.(14) In low- and middle-income countries, the problems supplementary feeding aims to address are entwined with poverty and deprivation. Drinking of unsafe water and lack of access to effective sanitation contribute greatly to the slow progress being made in undernutrition therefore these findings cannot always be generalised or extrapolated to other settings (i.e., high income/developed countries).(14)

Kristjansson et al. (2015) found that child-feeding interventions are underperforming. This review provides some evidence that poor and more undernourished children may be more responsive to supplementary feeding. This is important when considering cost-effectiveness and where to target these types of programs. This review also suggests that feeding programs may be more beneficial in a supervised environment (preschool, daycare, etc.) In addition to supplementary feeding this review suggests that education is essential for parents on the importance of feeding all children according to their needs.(17)

Findings from the Dal et al. (2019) review suggest that lipid-based nutrient supplements plus complementary feeding may prevent undernutrition and improve growth in children aged six to 23 months in low- and middle-income countries. These findings are applicable to other Asian and African countries with similar prevalence for undernutrition and food insecurity. (18)

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Undesirable Effects

How substantial are the undesirable anticipated effects? *(Our Judgement]: Could be moderate for some interventions)*

Childcare

The quality of different centre-based care can vary significantly and be differentially related to child outcomes. It would be important to ensure good quality care for children.

Certainty of evidence

What is the overall certainty of the evidence of effects? (*Our Judgement: Low)*

Balance of effects

Does the balance between desirable and undesirable effects favor the intervention or the comparison? *(Our Judgement: Probably favors the option for most interventions)*

Overall, the desirable effects were more widely reported than any possible undesirable effects.

Values

Is there important uncertainty about, or variability in, how much people value the main outcomes? *(Our judgement: Probably some uncertainty or variability)*

Childcare

In low- and middle- income countries a majority of caregivers report wishing to use centre-based childcare.(19)

It is important to note that decisions around childcare occur in a complex, dynamic, cultural, and ecological context making it hard to predict.(20)

Food for Children

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Families highly interested in resources to address food insecurity, however there is often a gap between referral acceptance and actual connection with resource agency. It might also be important to provide caregivers with anonymity to reduce the stigma tied to food insecurity.(21,22)

Resources required and cost-effectiveness

How large are the resource requirements (costs)? *(Our Judgement: Large costs required for most interventions)*

What is the certainty of the evidence of resource requirements (costs)? *(Our Judgement: Low for all interventions)*

Does the cost-effectiveness of the option favour the option or the comparison? (*Our Judgement: Probably favors the option for some interventions)*

Childcare

Models that estimate the costs of absenteeism and childcare show that 76.3 to 96.8% of counties would find it less expensive to provide childcare to all healthcare workers with children than to bear the costs of healthcare worker absenteeism during school closures.(23)

Food for Children

The provision of food in schools in the form of cooked meals, snacks, or take-home rations is considered to be a cost-effective way of supporting the nutrition of school-aged children.(24,25)

Explicit evidence of required resources and costs is not stated in most of the studies reviewed. Cost would depend on the population and type of intervention used. A study on the provision of food in schools found that the average yearly expenditure per child, standardized over a 200-day on-site feeding period and an average ration, excluding school-level costs, was US$21.59. The costs varied according to choice of food, with fortified biscuits providing the least costly option of about US$11 per year and take-home rations providing the most expensive option at approximately US$52 per year.(24)

Equity

What would be the impact on health equity? (*Our Judgement: Probably increases equity for all interventions)*

Childcare

Free daycare may promote equity for children from disadvantaged backgrounds.(26) It is important to hire local indigenous workers to ensure that early childhood programming is culturally safe.(27)

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Food for Children

Access to healthy food for vulnerable populations during public health emergencies can prevent exacerbation of existing health disparities. Providing culturally inclusive food options and information in multiple languages would be important to ensure equitable meal access.(28) Further consideration should also be given to food access data vs demographic characteristics.(28)

Acceptability

Is the option acceptable to key stakeholders? (*Our Judgement: Probably yes for most interventions)*

Childcare

These interventions would most likely be accepted among low-income individuals who are having trouble accessing childcare for financial reasons. Childcare for young children is usually a necessity for parents to remain employed outside of the home. Parents' choices are constrained by the family's financial resources, including access to childcare subsidies or other assistance.(29)

Survey from Angus Reid found that 33% of parents state that cost is their main problem when considering childcare and that the majority of Canadians (71%) support moving towards a national childcare system.(30)

A 2016 survey conducted by NANOS found that 25% of Canadians with children feel that the government should provide cash payments directly to parents who could choose any form of childcare, while 16% feel the government should change the tax system to provide all parents with a child tax deduction. Fifteen percent feel that the government should provide subsidies to childcare centres to improve quality and that the government should expand the public school system to include younger children so eventually childcare for children of all ages is included.(31)

Food for Children

Canada is currently the only G8 country that does not have a national feeding program in schools and there is a continued push to adopt some sort of food supplementation program to increase food security.(32,33)

Feasibility

Is the option feasible to implement? (*Our Judgement: Probably for some interventions)*

Both interventions would require large amounts of resources. Feasibility would depend on the specific communities, the infrastructure within these communities to either 1) provide daycare or 2) organize and dispense food supplements.

Childcare

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Sustainable provision of centre-based care requires significant subsidy that can be hard to obtain and careful design sensitive to the working lives of poor families, particularly women, the local physical and social environment and community norms and values.(19) These factors would be important to consider when implementing any sort of program.

Food for Children

Cost is the most prevalent barrier reported to serving healthy food to children in a childcare setting. Participation or collaboration with food assistance programs such as the Child and Adult Care Food Program could be valuable in implementation.(34,35)

Recommendations

During the pandemic recovery period, we recommend the expansion of publicly funded childcare (low certainty in estimates).

During the pandemic recovery period, we recommend healthy food distribution to children (moderate certainty in estimates).

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5. Health care access

Project title: Access to healthcare during Covid pandemic recovery period

Subtitle: Effectiveness of interventions to improve access to healthcare during Covid pandemic recovery period

Problem: Inequitable or poor access to healthcare

Intervention: interventions to reduce opioid related mortality and harms associated with substance use, interventions to screen for HIV and hepatitis C in high risk populations, interventions to provide healthcare to incarcerated people, interventions to improve access to medicines, and drug law reform

Comparison: No intervention, alternative intervention or usual supports

Main Outcomes: Hepatitis C acquisition or transmission, HIV transmission, Mortality, treatment retention, healthcare use, uptake of HIV testing, HIV incidence, risk of reincarceration, risk of reincarceration, psychiatric symptoms, medication use and adherence

Background/Problem

Access to quality health care services is important for promoting and maintaining health, preventing and managing disease, reducing unnecessary disability and premature death, and achieving health equity for all. Barriers to accessing healthcare include high cost of care, inadequate or no insurance coverage and lack of availability of services among others. (1) We focus on: interventions to reduce opioid related mortality and harms associated with substance use, access to medicines, decriminalization or legalization of drugs, healthcare for incarcerated people and screening for HIV and hepatitis c in high risk populations.

Interventions to reduce opioid related mortality and harms associated with substance use:

The age- adjusted rate of opioid- related overdose deaths in the United States increased from 2.9 per 100 000 population in 1999 to 14.9 per 100,000 population in 2017. (2) The opioid epidemic and associated increases in injection drug use have increased hepatitis C virus (HCV) incidence and contributed to HIV outbreaks among persons who inject drugs. (2)The provision of sterile injecting equipment through needle and syringe programmes (NSP) and enrolment in opioid substitution treatment (OST) are among the primary interventions for reducing HCV and HIV transmission among people who inject drugs.

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Screening for HIV and hepatitis c in high risk populations in chronically infected patients, the onset of HCV infection:

HIV and hepatitis C (HCV) remain diseases of public health importance. Delays in HIV diagnosis result in lost opportunity for prevention and treatment, resulting in poorer health outcomes, and early diagnosis and treatment has been shown to improve clinical outcomes, quality of life and economic productivity. (8) Onset of HCV and the development of cirrhosis are usually asymptomatic and many infections remain undetected or are diagnosed at a late stage. High risk populations include people who inject drugs, men who have sex with men, people from HIV epidemic countries (prevalence >1%), street youth, pregnant women, sex workers, low-income and socially disadvantaged people, Aboriginal people, and other minorities. Screening of high risk populations could diagnose HIV and HCV sooner, allowing for treatment and better health outcomes.

Interventions to provide healthcare to incarcerated people:

Incarcerated people tend to have poor health profiles including elevated rates of mental disorder, substance dependence, both communicable and noncommunicable diseases, and intellectual disability. These co-occurring health problems often interact and exacerbate one another and typically occur in the context of social disadvantage. In many settings, incarceration provides low-threshold access to health services for people who often face substantial barriers to accessing health care in the community. Because the global prison population is greater than 11 million people and continues to grow, improving the health of this population is important to global health and to reducing health inequalities. (7)

Interventions to increase access to medicines:

The United Nations and the World Health Organization have stated that access to medicines is a human right as part of the right to health, but lifesaving medicines are often not accessible, sometimes due to cost. An estimated 2 billion people do not have access to basic medicines globally. People should have access to the potentially life-saving and health-promoting medicines they are prescribed. (3,4)

Drug law reform:

An estimated 271 million people used an illicit drug in 2017, corresponding to 5.5% of the global population aged 15 to 64. Prohibitive and punitive drug policies have had counterproductive effects by contributing to HIV and hepatitis C transmission, fatal overdose, mass incarceration and other human rights violations and drug market violence. As a result, there have been growing calls for drug law reform and in 2019, the United Nations Chief Executives Board endorsed decriminalisation of drug use and possession. (5,6)

Research Evidence

We found quality systematic reviews for different subcategories of access to healthcare.

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Interventions to reduce opioid related mortality and harms associated with substance use:

A recent systematic review of systematic reviews (9) synthesizes the evidence for interventions for opioid use with a focus on homeless and vulnerably housed people, though many of the included studies did not solely include this population. Therapies for opioid use disorder among general populations were associated with reductions in non-prescribed opioid use. Supervised consumption facilities reduce overdose and improve access to care, while pharmacological interventions may play a role in reducing harms and addressing other morbidity. Results suggest that buprenorphine and methadone are the most effective pharmaceutical agents to address mortality and morbidity among people who use substances. Opioid substitution treatment (OST) is associated with a reduction in the risk of new HCV infections among people who inject drugs. The combined use of high-coverage needle syringe programs with OST is associated with a reduction in risk of HCV infection. There was a lack of high-quality evidence in the peer reviewed literature for managed alcohol program interventions. (9–13)The Canadian Medical Association and the Canadian Research Initiative for Substance Misuse recommend OST as buprenorphine–naloxone as the preferred first-line treatment for opioid use disorder and if response is poor, consider methadone. (14)

Interventions to screen for HIV and hepatitis C in high risk populations:

High-risk populations can benefit from rapid voluntary counselling and testing (VCT) compared with conventional testing, particularly in terms of uptake and receipt of results. Rapid testing approaches could improve health equity through earlier HIV diagnosis with possible retention in viral suppression programs, reduced transmission and longer lifespans.(8,21) A systematic review performed by CADTH to inform the Canadian Task Force on Preventive Health Care guideline for screening for HIV in the general population found no studies on clinical effectiveness that met inclusion criteria. They state there is a lack of clinical trial data regarding the clinical effectiveness and harms of screening compared with no screening. (22)Guidelines vary slightly but overall recommend screening for high risk populations and not the general populations.

Interventions to provide healthcare to incarcerated people:

Most facilities provide some form of health care to inmates. The health of incarcerated populations distinguishes them from the general population. The prevalence of mental health problems is disproportionately represented among inmates in prisons and jails. People with opioid use disorder are overrepresented in the criminal justice system and at higher risk for opioid-related mortality. For within-prison outcomes, the evidence is consistent and supports the conclusion that opioid maintenance treatment reduces opioid use. Reductions in heroin use and associated risk behaviours are consistent with evidence of opioid maintenance therapy (OMT) effectiveness in community settings. (23,24)Evidence is lacking regarding the impact of OMT on HIV/HCV incidence in prison. The evidence presented by Malta et al emphasizes the positive impact of providing opioid-related interventions to incarcerated people with opioid use disorder, particularly during a continuum of treatment prior to, during, and after incarceration. (23) Pharmacological interventions including have positive impacts on post-release mortality, substance use, treatment adherence, and criminogenic outcomes if treatment is administered during incarceration and continued upon release.

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Participants who received both methadone maintenance treatment (MMT) and counseling while in prison displayed higher adherence and retention to opioid-related community-based treatment, lower rates of illicit opioid use, and lower re-incarceration rates, compared to those who received counseling only during incarceration, independent of whether they were referred or not to MMT upon prison release. (23,24)For mental health problems, low strength evidence favored antipsychotics other than clozapine over clozapine for improving psychiatric symptoms in an incarceration setting. Evidence was insufficient to draw conclusions about the comparative effectiveness of some other medications and doses, as well as cognitive behavioural therapy versus treatment as usual or individual supportive therapy, and for comparative effectiveness of modified therapeutic community treatment with more standard in-prison mental health and substance abuse services. (25)

Interventions to increase access to medicines:

The literature shows that broader prescription drug insurance – that is more coverage- reduces use of other health care services and has a positive impact on patient outcomes. Coverage gaps or caps on drug insurance generally lead to worse outcomes.

There has been national dialogue around pharmacare and its implementation, suggesting that improving access to medicines by increasing drug coverage may be an acceptable intervention to stakeholders. A review of 182 studies reports a lack of convincing evidence for interventions aimed at improving medication adherence-interventions included things like individualized care plans, education, motivational interviewing, informational pamphlets, adherence counselling, alarms, support groups, reinforcement and text messages.(15–17) None of the interventions in this systematic review addressed cost barriers.

Drug law reform:

The literature demonstrates that decriminalizing or legalizing drugs (with most focus on cannabis) does not increase use of the drug among the population. Scheim et al. report that drug law reform was most often not associated with prevalence of use, frequency of use and use of other alcohol or drugs. They conclude that peer-reviewed longitudinal evaluations of drug decriminalization and legal regulation are overwhelmingly and focussed on cannabis legalization and prevalence of use was the main outcome used to assess the impact of drug law reform, despite its limited clinical significance. (5,18,19) There was a lack of alignment between the stated policy objectives of drug law reform and the metrics used to assess its impact in the systematic reviews. The United Nations Chief Executives Board, chaired by the UN Secretary General and representing 31 UN agencies, recently expressed support for the decriminalization of possession and use of drugs. The statement calls on member states to "promote alternatives to conviction and punishment in appropriate cases, including the decriminalization of drug possession for personal use". (6) The Public Prosecution Service of Canada released new guidelines for prosecuting the illegal possession of controlled substances under the Controlled Drugs and Substances Act in which federal prosecutors pursuing charges for illegal drug use are now encouraged to only criminally prosecute individuals with the most serious drug possession offences. (20)

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5A. Access to health care for people who use opioids

Access to opioid-related healthcare includes harm reduction approaches such as needle provision, supervised consumption and pharmacological therapies like methadone and buprenorphine. Needle syringe programs (NSPs) provide sterile needles and syringes and other injecting equipment to people who inject drugs via fixed-sites, outreach, peer networks, vending machines and pharmacies. Opioid substitution treatment (OST) is prescribed to dependent opioid users to diminish the use and effects of illicitly acquired opioids and reduce the frequency of injection and exposure to unsafe injecting practices. The most commonly prescribed forms of OST are opiate agonist treatments—methadone maintenance therapy and buprenorphine maintenance treatment. (11)

Outcome	**Study**	**Plain Language Statements**	**Intervention**	**Control**	**Relative effect (**95% CI)	**Absolute** (95% CI)	**Certainty of the evidence**
Hepatitis C acquisition	Needle syringe programs and opioid substitution therapy for preventing hepatitis C transmission in people who inject drugs (Review) Platt et al 2017 / Needle and syringe programs and opioid substitution therapy for preventing HCV	Random-effects meta-analysis showed weak evidence that high coverage needle syringe program (NSP) was not associated with reduced risk of HCV infection	needle syringe programs	no NSP	RR 0.79 (0.39 to 1.61)		low
		current use of opioid substitution therapy (OST) reduced the risk of HCV acquisition by 50% compared to no current OST use	opioid substitution therapy	no OST	RR 0.50 (0.40 to 0.63)		low

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	transmission among people who inject drugs: findings from a Cochrane Review and meta-analysis. Platt et al 2018	combined high coverage of NSP and OST reduced risk of HCV acquisition by 74% compared to no OST and low/no coverage with NSP	high NSP coverage & OST	no OST and low/no NSP	RR 0.74 (95% CI 11% to 93%)		low
All cause mortality rate	The effectiveness of substance use interventions for homeless and vulnerably housed persons: A systematic review of systematic reviews on supervised consumption facilities, managed alcohol programs, and pharmacological	pooled all-cause mortality rates of 36.1 and 11.3 per 1000 person-years for participants out of and in methadone maintenance therapy respectively	methadone	out of treatment	RR 3.20 (2.65 to 3.86)		very low

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	agents for opioid use disorder. Magwood et al 2020	mortality rates of 9.5 per 1000 person years for those not receiving buprenorphine maintenance therapy compared to 4.3 per 1000 person years among those receiving the therapy	buprenorphine	out of treatment	RR 2.20 (1.34 to 3.61)		very low
Ovemortality rate		overdose mortality rates of 12.7 and 2.6 per 1000 person years for participants out of and in methadone maintenance therapy	methadone	out of treatment	rate/1000 person years 2.6 (2.1 to 3.3)		very low
		Overdose mortality rates of 4.6 and 1.4 per 1000 person years out of and in buprenorphine maintenance therapy	buprenorphine	out of treatment	rate/1000 person years 4.6 (3.9 to 5.4) out of treatment vs 1.4 in treatment (1.0 to 2.0)		low

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Non-fatal opioid overdose Opioid overdose emergency department presentation Referrals to an addiction treatment centre and initiation of methadone maintenance therapy		Frequent SCF use in Sydney was positively associated with experiencing a non-fatal opioid overdose within the SCF significant decrease in opioid overdose emergency department presentations SCF attendance was associated with an increase in referrals to an addiction treatment center and initiation of methadone maintenance therapy	supervised consumption facility use	--	AOR 6.1 (4.3–8.6) 35% reduction in overdose emergency presentations p<0.001 aHR 1.57 (1.02–2.40)		low

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Retention at end of treatment (3-12 months follow up) Abstinence at end of treatment (self reported drug use) Diversion of medication	Supervised dosing with a long-acting opioid medication in the management of opioid dependence. Saulle, Vechhi, Gowing 2017	no difference in retention at any duration with supervised compared to unsupervised dosing unable to make any conclusion about the effectiveness of supervised dosing compared to dispensing of medication as take-home doses, in the context of OST.	supervised dosing with a long-acting medication	unsupervised consumption (dispensed as take-home)	retention- RR 0.9 (0.88 to 1.12) abstinence-67% vs 60% p=0.333 (one trial, very low quality) diversion of medication-5% vs 2% (one trial, very low quality)		low
HIV transmission	Are needle and syringe programs associated with a reduction in HIV transmission among people who inject drugs: a systematic review and	Exposure to NSP was associated with a 34% "risk" reduction in HIV transmission across all studies in individuals exposed to NSP, compared with	NSP exposure	no NSP or less frequent NSP exposure	0.66 (0.43 to 1.01) across all studies 0.42 (0.22 to 0.81) across six higher		low

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	meta-analysis. Aspinall et al 2014	those who were not, or were less frequently, exposed to NSP.			quality studies		

CI: Confidence interval; OR: Odds ratio; MD: Mean difference; SMD: Standardized mean difference, RR: Risk ratio, ASMD: Adjusted standard mean difference; SD: Standard Deviation

Summary

Overall, the evidence shows that opioid substitution treatment is associated with a reduction in the risk of new hepatitis c virus infections among people who inject drugs, and OST combined with high coverage needle syringe program with further reduction in risk. Supervised consumption facilities are shown to be effective in reducing overdose and improving access to care by Magwood et al, (9) while Saulle et al were unable to make a conclusion about the effectiveness of supervised dosing compared to dispensing of medication as take-home doses in opioid substitution therapy treatment retention. (13) Magwood et al also conclude that pharmacological interventions may play a role in reducing harms and addressing other morbidity. Results suggest that buprenorphine and methadone are the most effective pharmaceutical agents to address mortality and morbidity among people who use substances. Aspinall report that needle syringe programs are associated with reduced risk of HIV transmission. (12)

Platt et al report that the development of improved and consistent measures of NSP coverage, along with more consistent reporting of the conduct of studies to measure exposure to NSPs and the assessment of confounders, are needed to strengthen the evidence on the impact of NSP. (10,11) While Magwood et al's systematic review of systematic reviews aimed to focus on homeless or vulnerably housed people, it included studies of the general population as well. In addition to the quantitative results, the authors descriptively report that therapies for opioid use disorder among general populations were associated with statistically significant reductions in non-prescribed opioid use, injection drug use and sharing of injection equipment. Other descriptively presented findings include: an association between prescribed use of diacetylmorphine or methadone and reductions in non-prescribed drug use or more general illegal activity; reduced risk behaviours such as having multiple sexual partners, unprotected sex or participation in drug-related crime; that buprenorphine and methadone showed improvements in social functioning, physical health, and psychological morbidity; buprenorphine was associated with expanded access to treatment for patients who may not enroll in methadone clinics and facilitated earlier access to treatment for patients who have more recently initiated opioid use. Findings on access to care and retention in treatment were mixed. A systematic review highlighted that methadone

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maintenance therapy was more effective than non-pharmacological approaches in retaining heroin dependent patients in treatment (risk ratio 4.44, 95% CI:3.26–6.04).

Undesirable effects

How substantial are the undesirable anticipated effects? *(Our Judgement: Probably small for most interventions)*

Research Evidence

Opioid Substitution therapy
The systematic reviews did not discuss undesirable anticipated effects.

Needle syringe programs
The systematic reviews did not discuss undesirable anticipated effects.

Supervised consumption facilities
The systematic reviews did not discuss undesirable anticipated effects.

Certainty of evidence

What is the overall certainty of the evidence of effects? (*Our Judgement: Low)*

Balance of effects

Does the balance between desirable and undesirable effects favor the intervention or the comparison? (*Our Judgement: Probably favors the option for all interventions)*

Undesirable effects were not discussed.

Values

Is there important uncertainty about, or variability in, how much people value the main outcomes? *(Our Judgement: Probably no important uncertainty or variability)*

Values/preferences of patients:

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A study of patient perspectives on pharmacotherapy for opioid use disorder found that decisions to initiate treatment and select among medication options are influenced by six key attributes in the following order: (1) the benefits of treatment (2) side effects (3) medication delivery system (4) convenience (5) managing expectations for treatment and (6) the extent to which treatment is trading one addiction for another. (26)

A cross-sectional survey of patients enrolled in buprenorphine maintenance therapy examined patient perspectives regarding intended duration of buprenorphine maintenance therapy and found that a at first drug use, time in treatment, concern about pain, and concern about relapse were all positively associated with intended duration of buprenorphine maintenance therapy. The following were negatively associated with intended duration of buprenorphine maintenance therapy: recent discussion with a treatment provider about BMT discontinuation, prior attempt to discontinue buprenorphine maintenance therapy, concern about withdrawal symptoms, experiencing pleasurable effects from taking buprenorphine, and perceived conflicts of BMT with life, work, or school obligations. The most common reasons for wanting to continue buprenorphine maintenance therapy included concerns about withdrawal symptoms, relapse, and pain. (27)

There is low certainty of the evidence of required resources as costs were not a focus of the reviews included. A systematic review of cost effectiveness reports that medication for opioid misuse disorder were found to be cost-effective. (28)

Resources required & Cost-effectiveness

How large are the resource requirements (costs)? (*Our Judgement: Probably moderate for all Interventions)*

What is the certainty of the evidence of resource requirements (costs)? *(Our Judgement: Low for all interventions)*

Does the cost-effectiveness of the option favour the option or the comparison? (*Our Judgement: the option)*

There is low certainty of the evidence of required resources as costs were not a focus of the reviews included. A systematic review of cost effectiveness reports that medication for opioid misuse disorder were found to be cost-effective. (28)

A systematic review of studies that used simulation modeling to support the economic evaluation of interventions targeting prevention, treatment, or management of opioid misuse or its direct consequences reports that in general, studies evaluating medication for opioid misuse disorder found it to be cost-effective, with methadone being more cost-effective than buprenorphine and less cost-effective than hydromorphone and diacetylmorphine. (28)

A US study found that when criminal justice costs were included, all forms of medication-assisted treatment (with buprenorphine, methadone, and naltrexone) were associated with cost savings compared with no treatment, yielding savings of $25 000 to $105 000 USD in lifetime costs

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per person. The largest cost savings were associated with methadone plus contingency management. They conclude that a lack of widespread medically-assisted treatment availability limits access to a cost-saving medical intervention that reduces morbidity and mortality from opioid use disorder. (29)

There is evidence to show NSPs and OST are generally cost-effective in the short-term and cost-effective to cost-saving when long-term and societal benefits are considered. Cost-effectiveness ratios in terms of costs per HIV infection averted among people who inject drugs are favorable, ranging from $100 to $1000. (30)

Equity

What would be the impact on health equity? (*Our Judgement: increases equity for all interventions)*

Improving access to the interventions could improve health outcomes and increase equity and should be equitably implemented. A US study showed that buprenorphine treatment was concentrated among white people and those with private insurance or use self-pay even though an analysis of the National Survey on Drug Use and Health suggests that the prevalence of opioid misuse is similar for black and white adults. (31)

Indigenous Peoples have inadequate access to medications for opioid misuse disorder and there are implementation barriers such as being geographically remote, having difficulty retaining clinicians, and having limited healthcare access. It is important to integrate medication for opioid use disorder within services that are culturally safe, meaning that providers critically contextualize social and historical power differentials and determinants of health. (32)

A study fund that management of stigma and perception of social needs varied significantly by ethnicity, race and socioeconomic status, with white educated patients best able to capitalize on the medical focus and confidentiality of office-based buprenorphine, given that they have other sources of support outside of the clinic, and Black or Latino/a low income patients experiencing office-based buprenorphine treatment as isolating. The study makes the case that without attention to the oppressions and survival needs of addiction patients who are further stigmatized by race and class, buprenorphine treatment can become a form of clinical abandonment. (33)

Acceptability

Is the option acceptable to key stakeholders? (*Our Judgement: Potentially yes for some interventions)*

These interventions would probably be acceptable to people with opioid use disorder. There may be stigma associated with receiving the interventions but studies show that there are benefits associated with the interventions.

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A systematic review found that shared decision making is preferred over standard care by people with problematic drug or alcohol use and co-occurring mental health conditions. (34) One study found that the majority of people who used opioids regularly felt extended release buprenorphine injections for opioid use disorder was a good treatment plan. (35)

These interventions may be acceptable to government stakeholders and the general public. Governments acknowledge the opioid problem. A systematic review of stakeholder perceptions of supervised injection sites found that perceptions vary and identified things like the benefits of safe injection facilities, such as the increased safety of people who use drugs and the education that is provided at these facilities, are associated with support, while concerns such as the location of these facilities and existing rules and regulations exist. Perceptions often fluctuated between stakeholders with first-hand experience of safe injection facilities (e.g. staff and people who use drugs) and stakeholders not involved in the operation of safe injection facilities (e.g. the general public). (36) A nationally representative survey of the public in Canada found that 12% of respondents said they have close friends or family members who had become dependent on opioids in the last 5 years. (37)26% saw the issue as a "crisis", and 42% said it was "a serious problem" for Canada. Relatively few respondents thought the government was responding appropriately to the situation and most offered strong majority support for safe-consumption sites for drug users (67% supported them) and mandatory treatment programs for those who overdose (85%). (37) In 2021, seven-in-ten surveyed Canadians say that they feel the problem of opioid addiction has worsened over the past year in Canada. For half (48%), it is a worsening in their own community. Two-thirds support increasing access to supervised injection sites. Opponents suggest that liberalizing Canada's drug laws is not the answer and support a tougher approach. Nearly half (45%) say it would be better to "get tough" on users by increasing arrests and charges for possession of illicit substances. (38)

Feasibility

Is the option feasible to implement? (*Our Judgement: Probably yes for all interventions)*

Guidelines and other resources:

The Canadian Medical Association and the Canadian Research Initiative for Substance Misuse recommend opioid agonist treatment/therapy (also known as opioid substitution treatment/ therapy) with buprenorphine–naloxone as the preferred first-line treatment for opioid use disorder (strong recommendation based on high quality evidence) and if response is poor, consider methadone (strong recommendation based on high quality evidence). (14,39)

Recommendation

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During the pandemic recovery period, we recommend expanding access to opioid substitution therapy and supervised injection sites (moderate certainty in estimates).

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5B. Screening for HIV and Hepatitis C (HCV) in high risk populations

While HIV awareness is improving, many communities and individuals still face barriers to HIV testing and viral load suppression.

Summary of findings table

Outcome	**Study**	**Plain Language Statements**	**Intervention**	**Control**	**Relative effect** 95% CI)	**Absolute** (95% CI)	**Certainty of the evidence**
Uptake of testing Follow-up: 12-36 months	Effect of rapid HIV testing on HIV incidence and services in populations at high risk for HIV exposure: an equity-focused systematic review (Pottie et al 2014)	Uptake of testing was significantly better among participants randomized to the rapid testing approaches	Rapid testing approaches	Conventional testing	RR 2.95 (1.69 to 5.16)	Anticipated with control: 145 more per 1000	moderate
Receipt of results Follow-up: 12-24 months		Rapid approaches resulted in higher receipt of HIV test results, however due to heterogeneity- variations in population characteristics, pooled estimates were not significant			RR 2.14 (1.04 to 4.24)	Anticipated with control:213 more per 1000	moderate
Combined effect of repeat testing Follow-up: 36 months		Large effect- participants randomized to rapid testing approaches were twice as likely to have repeat HIV tests			RR 2.28 90.35 to 15.07)	Anticipated with control: 97 more per 1000	moderate

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HIV incidence		HIV incidence decreased in intervention clusters compared with control clusters, but the effect was not statistically significant			RR 0.89 (0.63 to 1.24)	Anticipated with control:81 more per 1000	moderate
Risk of mortality AIDS-defining events Serious non-AIDS events	Screening for HIV Infection in Asymptomatic, Nonpregnant Adolescents and Adults. Updated Evidence Report and Systematic Review for the US Preventive Services Task Force. Chou, Dana, Grusing 2019.	No study directly evaluated effects of HIV screening vs no screening on clinical outcomes or harms, or the yield of alternative screening strategies Antiretroviral therapy initiation at CD4 cell counts greater than 500/mm^3 associated with lower risk of a composite outcome of mortality, AIDS-defining events, or serious non-AIDS events Early ART initiation was associated with sustained reduction	Early ART	Initiation at CD4 cell counts less than 350/mm	1.8% vs 4.1% risk of mortality RR 0.44 (0.31-0.63) (AIDS defining events) RR 0.57 (0.35-0.95) (serious non-AIDS events)		

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		in risk of HIV transmission at 5.5 years for linked transmission			RR, 0.07 (0.02-0.22)		
New diagnoses HCV related deaths	Screening for Hepatitis C Virus: A Systematic Review. CADTH 2017.	The screening systematic review found no studies (RCTs, nonrandomized studies with a control group, or disease progression modelling studies) of the effectiveness of HCV screening in the general population or in any other higher-risk or higher-prevalence subgroup	screening	--	A model predicted that one-time screening of 100 000 individuals not at elevated risk of HCV (0.2% prevalence) could result in 199 new diagnoses of chronic HCV infection, compared with 91 persons identified through case finding (testing for HCV in individuals who show signs or symptoms or who are suspected of exposure), over a lifetime horizon. The expected benefit from screening would not be realized for 20–30 years from time of initial infection, with only 3 HCV-related		low

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					deaths prevented at 5 years and 6 deaths at 10 years after screening 100 000 individuals not at elevated risk.		

Summary

The findings presented by Pottie et al clearly suggest high-risk populations benefit from rapid VCT compared with conventional testing, especially in terms of uptake and receipt of results. No harms were identified despite hypothetical concerns of test inaccuracy, lack of privacy and abuse to healthcare workers in non-hospital environments. (8) The intervention could improve health equity through earlier HIV diagnosis with possible retention in viral suppression programs, reduced transmission and longer lifespans. In high-income countries, our results have particular importance for Aboriginal population, persons who inject drugs, prison populations and certain migrant and minority populations

In nonpregnant adolescents and adults there was no direct evidence on the clinical benefits and harms of screening for HIV infections vs no screening, or the yield of repeat or alternative screening strategies. New evidence extends effectiveness of ART to asymptomatic individuals with CD4 cell counts greater than 500/mm^3 and shows sustained reduction in risk of HIV transmission at longer-term follow-up, although certain ART regimens may be associated with increased risk of long-term harms.(21)

A systematic review performed by CADTH (2017) to inform the Canadian Task Force on Preventive Health Care guideline for screening for HIV in the general population found no studies on clinical effectiveness that met inclusion criteria. They state there is a lack of clinical trial data regarding the clinical effectiveness and harms of screening compared with no screening but that does not necessarily suggest that screening would not be effective in clinical practice.(22)

Undesirable effects

How substantial are the undesirable anticipated effects? *(Our Judgement: Probably small for all interventions)*

Research Evidence

Rapid testing approaches

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No harms were identified despite hypothetical concerns of test inaccuracy, lack of privacy and abuse to healthcare workers in non-hospital environments

Screening HCV
Anticipated undesirable effects were not discussed.

Screening HIV
There was no direct evidence on the clinical benefits and harms of screening for HIV infections vs no screening

Certainty of evidence

What is the overall certainty of the evidence of effects?

Our Judgement: Low

Balance of effects

Does the balance between desirable and undesirable effects favor the intervention or the comparison? (*Our Judgement: Unclear)*

Values

Is there important uncertainty about, or variability in, how much people value the main outcomes? *(Our Judgement: Probably some important uncertainty or variability)*

Values/preferences of patients:
A systematic review of screening for HCV stated that people make decisions about HCV screening while considering their immediate context and the perceived consequences and implications of a positive test result, including the availability and effectiveness of HCV treatment and concerns about passing on an HCV infection. (22) People generally expressed a desire for confidential and convenient testing in a comfortable environment, and preferred screening situations in which they could receive sufficient information about HCV and the test and obtain results quickly. Some issues differed among subsets of the general population, such as concerns about stigma and access to health care among people who inject drugs and inmates. Another study found that anti-HCV rapid test was widely accepted among young PWID and chosen over standard testing by 82.9% of participants. (52)

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A study exploring attitudes and preferences about HIV self testing among HIV-negative men who have sex with men and HIV-negative transgender women found that most preferred gum swab (96%) over fingerprick tests (69%), but would prefer a blood test if it gave results for other sexually transmitted infections (86%). Five percent reported difficulties performing the test, four percent with storage, and 26% with portability. Ninety-three percent reported likelihood of using HIV self test to test partners in future. Authors concluded that efforts to improve HIV self testing uptake should focus on incorporating testing for other sexually transmitted infections, reducing test kit size, and reducing cost. (53)

Resources required and Cost-effectiveness

How large are the resource requirements (costs)? (*Our Judgement: Probably moderate for most Interventions)*

What is the certainty of the evidence of resource requirements (costs)? *(Our Judgement: Low for most interventions)*

Does the cost-effectiveness of the option favour the option or the comparison? (*Our Judgement the option)*

Administering each test would cost less than $40 including costs associated with counselling. (54)

Screening high risk populations (not the general population) for HIV was found to be cost effective in a systematic review. (55) Considering a threshold of $100,000/Quality adjusted life year, all the screening programs (one time, every five years, every three years, annually) were cost-effective in high-risk communities.

Summary of evidence for cost effectiveness of all interventions

Equity

What would be the impact on health equity? (*Our Judgement: increases equity for some interventions)*

Screening high risk populations and subsequently connecting people to care would increase equity.

A scoping review states that articles called for greater consideration of equity and justice and the duty to provide care in making evidence-based recommendations for screening, diagnosis and treatment for different populations and in different settings that also account for individual and community interests. (56)

Acceptability

Is the option acceptable to key stakeholders? (*Our Judgement: Probably yes for some interventions)*

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Screening is likely acceptable to high risk populations. A scoping review found that patients preferred HIV self-testing over traditional ways of testing, and self-testing appears to meet the needs of high risk populations, reduce stigma, and potentially increase regular testing among people currently missed in prevention messaging. (57) Rapid HIV-HCV-HBV screening showed a very high level of acceptability among men who have sex with men. (58)

Feasibility

Is the option feasible to implement? (*Our Judgement: Probably for some interventions)*

Several studies show that HIV point-of-care testing is feasible in Canada. (54)

Guidelines/ other resources:

The Canadian Task Force on Preventive Health Care recommends against screening for HCV in asymptomatic Canadian adults who are not at elevated risk of HCV infection (strong recommendation, very low-quality evidence). They state a strong recommendation against screening is warranted given its uncertain benefits but the certainty that it would lead to high levels of resource consumption. Referring individuals with screen-detected HCV for assessment would reduce access to assessment and treatment for people with clinically evident HCV. (59)

The College of Family Physicians of Canada and Public Health Agency of Canada guideline recommends screening anyone with risk behaviours or potential exposures. (60)

The US Preventive Services Task Force recommends screening for HCV infection in adults aged 18 to 79 years. (61)

The National Institute for Health and Care Excellence recommends one-time testing of those at high risk. (62)

The Canadian Collaboration for Immigrant and Refugee Health recommends screening all immigrants and refugees from regions with prevalence of disease ≥ 3% (this excludes South Asia, Western Europe, North America, Central America and South America). (63)

The Centers for Disease Control and Prevention augmented its 1998 guideline by recommending one-time testing without prior ascertainment of HCV risk for adults born between 1945 and 1965. (64)

Immigration, Refugees and Citizenship Canada recommends one-time screening of those with risk factor. (65)

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In low- and middle-income countries, the World Health Organization recommends one-time screening of individuals who are at high risk of HCV. (66)

Recommendation

During the pandemic recovery period, we recommend expanding screening for HIV and HCV among individuals at high-risk (moderate certainty in estimates).

5C. Improving health care for people who are incarcerated

Most facilities provide some form of health care to inmates. The health of incarcerated populations distinguishes them from the general population. The prevalence of mental health problems—including serious mental illness such as schizophrenia—is disproportionately represented among inmates in prisons and jails. People with opioid use disorder (OUD) are overrepresented in the criminal justice system and at higher risk for opioid-related mortality. People with OUD are overrepresented in the criminal justice system and at higher risk for opioid-related mortality. However, correctional facilities frequently adopt an abstinence-only approach, seldom offering the gold standard opioid agonist treatment (OAT) to incarcerated persons with OUD (23). The need for quality health and health care services in correctional facilities is evident.

Summary of findings table

Outcome	**Study**	**Plain Language Statements**	**Intervention**	**Control**	**Relative effect** 95% CI)	**Absolute** (95 % CI)	**Certainty of the evidence**
Re-incarceration risk	Opioid-related treatment, interventions, and outcomes among incarcerated persons: A systematic review.	Among 375 incarcerated, heroin-using men from New South Wales, those who received Opioid agonist treatment while in prison and continued OAT post-release reduced their risk of re-incarceration by	OAT while in prison and continued post prison release	OAT while in prison but discontinued post prison release No OAT	HR 0.8 (0.71 to 0.90)		moderate

Hazard of all-cause mortality Post-release mortality rate Drug-related death rate within 12 weeks post-release	Malta et al. 2019	20% compared to those who discontinued OAT post-release. Receipt of OAT while incarcerated associated with a reduced hazard of all-cause and unnatural death by 74% compared to those out of OAT Post-release mortality rates were lowest among those continuously engaged in OAT at 4 weeks post-release and highest among those not receiving OAT 4 weeks post-release Drug-related death rate within 12 weeks after prison release fell	OAT No OAT 4 weeks post-release	No OAT 4 weeks post-release No universal OAT policy (prior to its implementation)	AHR 0.26 (0.13 to 0.50) (from one study) AHR 0.13 (0.05 to 0.35) (from another study) 8.8 per 1000 person years (95% CI 5.0 to 14.3) among those engaged in OAT at 4 weeks 36.7 per 1000 person years (95% CI 28.8 to 45.9) among those not engaged in OAT 4 weeks post-release 3.8 per 1000 person releases (95% CI 3.4 to 4.2) Prior to universal policy	Decrease in mortality rate of 1.6 per 1000 person releases	

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		following the implementation of a universal prison-based OAT policy for incarcerated individuals with OUD. Higher adherence and retention to opioid-related community-based treatment, lower rates of illicit opioid use, and lower re-incarceration rates, compared to those who received counseling only during incarceration, independent of whether they were referred or not to MMT upon prison release	Universal prison-based OAT policy for incarcerated individuals with OUD Only counseling while incarcerated Receiving counseling and referral to MMT upon release Receiving both counseling and MMT while incarcerated and MMT referral post-release.		2.2 per 1000 person releases (95% CI 1.8 to 2.5) with universal OAT policy implemented	(95% CI 1.0 to 2.2) p<0.001) More likely to engage in community-based treatment within 90 days post-release (*p* < 0.01), remained in	

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Likelihood of initiating		Participants who received MMT while in prison were more likely to initiate		No MMT while incarcerated	86% initiated MMT within 30 days post-release	addiction treatment for a greater number of days at 6 and 12 months post-release ($p < 0.001$), and were less likely to test positive for opioid use at 3, 6, and 12 months post-release ($p = 0.014$, $p = 0.009$, and $p = 0.001$, respectively). Less likely to report engagement in criminal activities at 3 months ($p = 0.005$) and 6 months ($p = 0.025$) post-	

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methadone maintenance treatment within 30 days post-release Report of heroin use post-release		MMT within 30 days post-prison release Those who received MMT pre-release reported, for the last 30 days,	Arm 1- Receipt of MMT while in prison and a financial subsidy to continue treatment upon release Arm 2- referral to MMT after prison release and provided with a 12-week financial subsidy Arm 3- MMT with no provision of a financial subsidy upon release Arm 1 (as above)		41% initiated MMT within 30 days post-release 22% initiated MMT within 30 days post-release Used heroin 3/30 days p=0.008, crack/cocaine 4/30 days p = 0.05	release, compared to the other groups	

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		less heroin use, crack/cocaine use	Arm 2		Used heroin 18/30 days p=0.008, crack/cocaine 13/30 days *p* = 0.05		
			Arm 3		Used heroin 4/30 days p=0.008, crack/cocaine 6/30 days *p* = 0.05		
Risk of returning to custody		Among incarcerated women with OUD at a Canadian federal facility, those who received MMT while incarcerated and continued MMT post-release had a 65% lower risk of returning to custody during the 6-year follow-up period compared to the women who did not participate in MMT while incarcerated.	Initiated MMT while incarcerated and continued MMT post-release		HR 0.35 (0.13 to 0.90)	65% lower risk of returning to custody during 6-year follow up period	
			Initiated MMT while incarcerated but terminated treatment post-release .				

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Illicit opioid use	The effectiveness of opioid maintenance treatment in prison settings: a systematic review. Hedrich et al 2011.	All six studies reporting on illicit drug use during imprisonment show significant reductions in illicit opioid use, primarily heroin, associated with prison-based OMT, based on biological marker and/or self-report In the three studies comparing OMT to no OMT, differences between groups at follow-up were large for last-month illicit opioid use. Two studies comparing high- and low-dose OMT report significantly fewer opiate-positive urines when doses were more than 50 mg. The sixth study	OMT High dose OMT	No OMT low dose OMT		21% (OMT) vs 94% (No OMT) 25% (OMT) vs 67% (no OMT) 6% (OMT) vs 65% (no OMT)	very low

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Risk behaviour-Injecting		found that establishing and expanding an OMT program in prison over 3 years was associated with substantial reductions in self-reported heroin use All five studies reporting on drug injecting found that prison-based OMT was associated with reduced heroin injecting in prison All five studies reporting on syringe sharing found significant reductions in sharing in prison In the three studies that compared OMT and no OMT, differences between groups at follow-up are	OMT	No OMT		11% (OMT) vs 42% (no OMT 34% (OMT) vs 70% (No OMT) 15% (OMT) vs 38% (no OMT)	

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		considerable: in the case of injecting Comparable differences are reported regarding syringe sharing. Compared to baseline, risk behaviours in OMT groups diminished substantially while they remained unchanged or increased among no OMT groups. One study observed lower levels of risk behaviours among high-dose, continuous OMT (more than 60 mg) compared to low-dose, time-limited OMT and another reports that significant reductions in sharing were only observed after 6 months' treatment					

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Post-release treatment and treatment retention		Studies comparing OMT to no OMT in terms of treatment entry and retention after release found that prison OMT was associated strongly with significantly higher levels of post-release treatment entry and retention.	OMT	No OMT		Approx. 85% of OMT subjects continued treatment after release (range 69–100%), while approximately 15% of no OMT subjects entered community treatment in the month following	

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Opioid/cocaine use after release from prison		4 studies report reductions in heroin use among OMT subjects compared to controls or no OMT comparison groups during follow-up periods ranging from 1 to 12 months Two studies found some reductions in cocaine use among OMT subjects, although differences were less marked than for heroin				release (range 0–37%). Six months after release, more than 50% of OMT subjects were in treatment (range 27–75%) compared to fewer than 5% in the no OMT groups (range 0–9%).	
Social problem solving (SPSI) -impulsivity/ carelessness -avoidant	Interventions for Adult Offenders With Serious Mental Illness.	At posttreatment, the R&R group demonstrated significant improvement compared with improvement in the	R&R program	Treatment as usual	- impulsive/carelessness, SMD 0.612; 95% CI, 0.140 to 1.085; p=0.011 - avoidant, SMD 0.557; 95% CI, 0.086 to 1.028; p=0.02		

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-impulsivity 12 month follow up -avoidant 12 month follow up	Fontanarosa, J et al., 2013.	treatment-as-usual group on the impulsive/carelessness and avoidant problem-solving style subscales of the SPSI. The R&R group continued to demonstrate significant improvement on these subscales at 12-month follow up.			- 12-month follow up (impulsivity/carelessness, SMD 0.524; 95% CI, 0.054 to 0.994; p=0.029); - 12-month follow up (avoidant, SMD 0.834; 95% CI, 0.352 to 1.315; p=0.001		
Psychiatric symptoms -BPRS -NOSIE subscale social interest -Psychotic depression -Manifest psychosis -irritability			High dose chlorpromazine	Standard dose chlorpromazine	- BPRS (SMD 0.744; 95% CI, 0.171 to 1.317; p=0.011); - NOSIE subscale social interest (SMD 0.631; 95% CI, 0.129 to 1.133; p=0.014), - psychotic depression (SMD 0.750; 95% CI, 0.243 to 1.257; p=0.004), - manifest psychosis (SMD 0.883; 95% CI, 0.370 to 1.397; p=0.001), and - irritability (SMD 0.587; 95% CI, 0.087 to 1.088; p=0.021)		

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- Substance use - Illegal substance use - Arrests for crime - Mean number of crisis visits - Psychiatric hospitalizations - medication adherence - service use - use of outpatient medication service			Modified therapeutic community (MTC) High-fidelity integrated dual diagnosis treatment (IDDT)	Intensive outpatient program (IOP) (comparator) Treatment as usual	- MTC (SMD 0.344; 95% CI, 0.171 to 0.690; p=0.003) - (SMD 0.436; 95% CI, 0.213 to 0.894; p=0.023) - MTC (SMD 0.377; 95% CI, 0.195 to 0.729; p=0.004) - (2.10 [4.59] vs. 3.32 [6.95], p=0.004) - (20.77 percent vs. 43.00 percent, p=0.000) - (58 percent vs. 34 percent, p=0.005) - Seventy-seven percent of clients in IDDT received services within 60 days of release versus 18 percent of clients given treatment as usual (p=0.000) - 83 percent (intervention) vs 62 percent (control)		
Mental health service use		Discharge planning including application	Benefits application assistance	No assistance/ treatment as usual	- 16% increase for intervention		

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- Medicaid mental health service - Outpatient Medicaid mental health service - Medicaid prescription drug mental health services		assistance led to more mental health service use than no application assistance			- 14% increase for intervention - 10% increase for intervention		

Summary

For within-prison outcomes, the evidence is consistent and supports the conclusion that opioid maintenance treatment reduces opioid use. Reductions in heroin use and associated risk behaviours are consistent with evidence of OMT effectiveness in community settings. Evidence is lacking regarding the impact of OMT on HIV/HCV incidence in prison. The evidence presented by Malta et al emphasizes the positive impact of providing opioid-related interventions to incarcerated people with opioid use disorder, particularly during a continuum of treatment prior to, during, and after incarceration. Pharmacological interventions including have positive impacts on post-release mortality, substance use, treatment adherence, and criminogenic outcomes if treatment is administered during incarceration and continued upon release. (23,24)

Evidence of low strength favored antipsychotics other than clozapine over clozapine for improving psychiatric symptoms in an incarceration setting. Evidence was insufficient to draw conclusions about the comparative effectiveness of risperidone with other antipsychotics or of chlorpromazine at a high dosage versus chlorpromazine at a standard dosage in these populations and settings. Evidence was insufficient to draw conclusions about the comparative effectiveness of cognitive behavior therapy (CBT) versus treatment as usual or individual supportive therapy. Evidence was insufficient to draw conclusions about the comparative effectiveness of modified therapeutic community (MTC) treatment with more standard in-prison mental health and substance abuse services for men and women with dual diagnoses. (25)

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Participants who received both MMT and counseling while in prison displayed higher adherence and retention to opioid-related community-based treatment, lower rates of illicit opioid use, and lower re-incarceration rates, compared to those who received counseling only during incarceration, independent of whether they were referred or not to MMT upon prison release. (24)

Undesirable effects

How substantial are the undesirable anticipated effects? *(Our Judgement: Probably small for most interventions)*

The systematic reviews did not discuss anticipated undesirable effects of the interventions.

Certainty of evidence

What is the overall certainty of the evidence of effects? (*Our Judgement: Low to moderate)*

Balance of effects

Does the balance between desirable and undesirable effects favor the intervention or the comparison? (*Our Judgement: Probably favors the option for all interventions)*

Values

Is there important uncertainty about, or variability in, how much people value the main outcomes? *(Our Judgement: Probably no important uncertainty or variability)*

A study on patient perspectives of opioid substitution therapy in correctional facilities revealed that according to participants, there are benefits of OST in prison in terms of managing withdrawal and cravings and it allowed them to avoid the risks of injecting in prison. Reasons for ceasing or not seeking OST in prison included a preference to be “clean” and experiencing side effects. (67) A majority of participants who were already in OST in prison wished to remain in treatment after release from prison because they felt it would provide stability and help them avoid illicit drug use while facing stressors associated with returning to the community. Some participants did not wish to continue in OST post-release as they felt exposure to other drug users while attending community OST could lead to drug use and criminal behaviour, or because friends and family did not see OST as an acceptable treatment option. Some participants preferred to withdraw from OST prior to release because they felt that the process of withdrawal would be easier to endure in prison. (67)

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Some prisoners may be less likely to trust the healthcare system compared to the general public, posing a potential barrier to receiving adequate care while incarcerated. (68)

Resources required & Cost-effectiveness

How large are the resource requirements (costs)? (*Our Judgement: Probably moderate for all Interventions)*

What is the certainty of the evidence of resource requirements (costs)? *(Our Judgement: Low for all interventions)*

Does the cost-effectiveness of the option favour the option or the comparison? (*Our Judgement unclear)*

There is low certainty of the evidence of required resources as costs were not a focus of the studies.

Jail-based methadone combined with patient navigation is a low-cost intervention. Estimated navigation costs were $283 USD per patient for 3 months. Methadone combined with patient navigation appears to be cost-effective. (69)

2018 study in the USA states the average (per patient) weekly cost of MMT is $115 and the total treatment cost for an average treatment episode is $689. These costs are generally in-line with non-jail-based MMT programs of similar size. Weekly cost estimates range from $86 to $185 depending on the size of the treatment facility, with larger programs exhibiting lower per-patient costs. (70)

Equity

What would be the impact on health equity? (*Our Judgement: Potentially increases (equity) for all interventions)*

The interventions are aimed at promoting equity. Interventions should be made easily accessible to all who may benefit from them to increase equity.

Acceptability

Is the option acceptable to key stakeholders? (*Our Judgement: Potentially yes for some interventions)*

These interventions would probably be acceptable to incarcerated people. There was widespread support for naloxone training at release among people recently released from prison and key stakeholders in health-care provision and prisons administration. Proactively accessing naloxone is a low priority for patients, so authors propose that naloxone supply at release may be more effective than programs that refer releasees to local pharmacies. (71)

Feasibility

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Is the option feasible to implement? (*Our Judgement: Probably yes for some interventions)*
Prison and jail-based programs that provide treatment with medications for OUD have the potential to reduce opioid-related overdose deaths in a high-risk population; however, retention on treatment post-release is a key driver of population level impact and an important consideration for sustainability. (72)

Guidelines/ other resources:

Health in Prison – WHO guideline

Managed alcohol programs: Cochrane systematic review examining the effects of managed alcohol programs (MAPs) for homeless populations found no studies to include. There was a lack of high-quality evidence in the peer reviewed literature for this intervention. (73)

Recommendation

During the pandemic recovery period, we recommend improving the health care of incarcerated people (low certainty in estimates).

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5D. Access to medicines

Access to medication is part of the right to health, (4) yet many barriers exist. The effects of drug insurance and other interventions like care plans, reminder prompts, and support groups on accessibility and adherence have been studied.

Summary of findings table

Outcome	Study	Plain Language Statements	Intervention	Control	Relative effect 95% CI)	Absolute (95% CI)	Certainty of the evidence
Cost-related medication underuse	Prescription Drug Insurance Coverage and Patient Health Outcomes: A Systematic Review. Kesselheim et al 2015	Uninsured patients had greater odds of cost-related medication underuse which was in turn linked to worse diabetes control and patient-reported health.	Drug insurance	No drug insurance	OR 5.6 (2.7 to 11.8) (from one study in SR)		
Emergency department use		Among patients who had recently obtained insurance through Medicare Part D, reaching the coverage limitation was associated with increases in emergency department use	Not reaching insurance cap	Reaching insurance cap	RR 1.60 (1.40 to 1.83) (from one study in SR)- ER use		
Hospitalizations					RR 1.85 (1.64 to 2.09) (from one		

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Hospitalizations for beneficiaries with schizophrenia Hospitalizations for beneficiaries with bipolar disorder Nursing home admissions		and hospitalizations There was a positive association between reaching the Part D coverage gap and worse outcomes among patients in psychiatric institutions with schizophrenia and bipolar disorder, including hospitalizations The cap of 3 drugs led to a more than doubling of the relative risk of nursing home admissions	Not reaching insurance cap No cap (elderly patients)	Reaching insurance cap 3 drug insurance cap (elderly patients)	study in SR)- hospitalizations HR 1.32 (1.06 to 1.65)- schizophrenia (from one study in SR) HR 1.45 (1.16 to 1.82)- bipolar disorder (from one study in SR) RR 2.2 (1.2 to 4.1) (from one study in SR)		

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Drug utilization and cost	Medicare Part D's Effects on Drug Utilization and Out-of-Pocket Costs: A Systematic Review. Park & Martin, 2017.	Medicare Part D enrollees have increased drug utilization and decreased out-of-pocket (OOP) costs, but coverage gaps limit the program's impact. Beneficiaries whose insurance becomes more generous after enrollment had disproportionately increased drug utilization and decreased OOP costs.	Medicare Part D	Non-Medicare Part D	- One study found 17.5–20 percent increase in prescriptions - Another study found annual prescription fills per person increased from 1.8 to 3.4 - Another study found a 30 percent increase in annual prescriptions - Overall, smaller effects for cost-related nonadherence - One study found fewer participants stopped taking prescriptions due to cost (from 8.9 to 7.6 percent), applied for		

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					pharmaceutical manufacturer assistance (from 6.4 to 2.7 percent), or had limited prescription access (from 23.0 to 18.6 percent) - Medicare Part D coverage gaps negatively impacted drug utilization. One study found that beneficiaries without financial assistance in the gap were more likely to discontinue (hazard ratio = 2.0). Compared to those with gap coverage, beneficiaries on plans without gap coverage had higher cost-related		

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					nonadherence regardless of whether they experienced the gap (OR = 5.75) or not (OR = 2.78).		

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Medication Adherence Clinical Outcome	Interventions for enhancing medication adherence. Nieuwlaat et al., 2014.	Characteristics and effects of interventions to improve medicine adherence varied among studies. It is uncertain how medicine adherence can consistently be improved so that the full health benefits of medicines can be realized.	Individualized care plans, education, motivational interviewing, informational pamphlets, adherence counselling, alarms, support groups, reinforcement and text messages	TAS	The wide variety of settings, participants, intervention types, medications, adherence measures, and clinical outcomes precluded summarizing findings to reach reliable general conclusions. Methods of improving medication adherence for chronic health problems tested to date are mostly complex and not very effective, so that the full benefits of treatment cannot be realized.		

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Summary

Studies demonstrate that broader prescription drug insurance reduces use of other health care services and has a positive impact on patient outcomes. Coverage gaps or caps on drug insurance generally led to worse outcomes. (16) Overall, Medicare Part D enrollees have increased drug utilization and decreased out of pocket costs, but coverage gaps limit the program's impact. Beneficiaries whose insurance becomes more generous after enrollment had disproportionately increased drug utilization and decreased out of pocket costs. (17) In their systematic review of 182 studies, Nieuwlaat et al report a lack of convincing evidence of interventions for enhancing medication adherence, also specifically among the studies with the lowest risk of bias. (15)The studied methods of improving medication adherence for chronic health problems seem not to be very effective. None of these interventions targeted cost.

Undesirable effects

How substantial are the undesirable anticipated effects? *(Our Judgement: Probably small for all interventions)*

Research Evidence

Drug Insurance

The systematic reviews did not discuss undesirable effects and none are anticipated.

Interventions not related to cost

The systematic reviews did not discuss undesirable anticipated effects.

Certainty of evidence

What is the overall certainty of the evidence of effects? (*Our Judgement: Low)*

Balance of effects

Does the balance between desirable and undesirable effects favor the intervention or the comparison? (*Our Judgement: Probably favors the option for most interventions)*

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The desirable effects of drug insurance outweigh the little to no anticipated undesirable effects for the patient. While there may be no desirable effects of other interventions, there are not significant anticipated undesirable effects either.

Values

Is there important uncertainty about, or variability in, how much people value the main outcomes? *(Our Judgement: Probably no important uncertainty or variability)*

Values/preferences of patients:
A study of the experiences reported by the participants in a randomized controlled trial of free medicine distribution found that access to medicines impacts people's finances and well-being as well as their adherence to prescribed medicines. The study indicates that effects on personal finances and general well-being should be measured for interventions and policy changes aimed at improving medicine access. (40)

A study compared the relative importance of medicine attributes and decision-making preferences of patients with higher or lower levels of insurance coverage in a publicly funded health care system and found that the explanation of treatment options, establishing the need for the medicine, and medicine efficacy and safety were the most important considerations in patients' assessment of the importance of medicine attributes, regardless of insurance coverage level. Medicine costs, the treatment burden and medicine familiarity were less important when assessing importance of medicine attributes. (41)

Resources required & Cost-effectiveness

How large are the resource requirements (costs)? (*Our Judgement: Probably high)*

What is the certainty of the evidence of resource requirements (costs)? *(Our Judgement: high)*

Does the cost-effectiveness of the option favour the option or the comparison? (*Our Judgement- the option)*

The Parliamentary Budget Office estimates that implementing national pharmacare cost the federal government $19.3 billion annually. (42)

Considering only direct pharmaceutical expenditures, the Parliamentary Budget Office estimated that publicly funding medicines would save $4.2 billion annually. (42)Studies have shown that expenses related to broader insurance coverage of essential prescription drugs result in lower or the same level of overall health care spending. Pharmacare simulation models have shown reductions in annual prescription drug expenditure. (43)

Equity

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What would be the impact on health equity? (*Our Judgement: increases equity for some interventions)*

Improving access to medicines via drug insurance would increase health equity. Prescription drugs are inconsistently covered under patchworks of public insurance coverage, and this inconsistency is a source of inequity of healthcare financing. Residents of certain provinces, rural households and Canadians from poorer households are more likely to be affected by this inequity and suffer disproportionately higher proportions of catastrophic out-of-pocket expenses on drugs and pharmaceutical products. Universal pharmacare would reduce these expenses and promote a more equitable healthcare system in Canada. (44)

Acceptability

Is the option acceptable to key stakeholders? (*Our Judgement: Potentially yes for some interventions)*

Expanding drug coverage would probably be acceptable to the general public, though some may be opposed depending on the details (eg increased taxes). 86% of respondents to a recent survey of the general public in Canada support the idea of a national pharmacare program and 77% said increasing coverage for Canadians should be a high priority for the government.(45) 23% of respondents had decided not to fill a prescription or not renew one due to cost or had done things to extend a prescription because they could not afford to keep the recommended dosage schedule. (45)The majority of respondents in a qualitative study felt that evidence on patient preferences and should be considered in some way in pharmaceutical coverage decisions. (46) A concept mapping study (40) among participants in a trial of free medicine distribution showed that medication access effected personal finances and well-being, in addition to medication adherence. (47)

There has been national dialogue around pharmacare and how to implement a plan. (48) Some governments may not find interventions to expand drug coverage acceptable. A qualitative study of decision makers and policy stakeholders found that there was consensus among participants that prescription drug coverage was an important problem to address. (49)

A narrative review shows that a single-payer, 'first-dollar' coverage model, using a minimum national formulary, is the model most frequently advocated by the academic community, healthcare professions and many public and patient groups. A multi-payer, 'last-dollar' coverage model, more similar to the current "patchwork" state of public and private coverage, is preferred by industry drug manufacturers and private health insurance companies. (43)

The other types of interventions (individualized care plans, education, motivational interviewing, informational pamphlets, adherence counselling, alarms, support groups, reinforcement and text messages) would probably be acceptable to the recipients but may not be acceptable to other stakeholders given the lacking evidence of their effectiveness.

Feasibility

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Is the option feasible to implement? (*Our Judgement: Maybe for all interventions)*

Guidelines/ other resources:

The Advisory Council on the Implementation of National Pharmacare recommends a national pharmacare plan be implemented. They conclude that the best plan for Canada is to organize prescription drug coverage the way universal health care is set up.(48)

The WHO and the UN state that access to medicines is part of the right to health. (3,4)

Recommendation

During the pandemic recovery period, we strongly recommend including prescription medicines in Canada's publicly funded healthcare system (moderate certainty in estimates).

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5E. Drug law reform

There have been growing calls for drug law reform. Substance use is considered a health issue, and so alternatives to prosecution could be considered more appropriate and effective.

Summary of findings table

Outcome	**Study**	**Plain Language Statements**	**Intervention**	**Control**	**Relative effect** 95% CI)	**Absolute** (95% CI)	**Certainty of the evidence**
Prevalence of use Frequency of use Use of other alcohol or drugs Perceived harmfulness of decriminalized or regulated drug Emergency department visits and/or hospitalizations attributed to decriminalization or legalization Changes in acute care use	Impact evaluations of drug decriminalisation and legal regulation on drug use, health and social harms: a systematic review. Scheim et al 2020	Across all substance use metrics, legal reform was most often not associated with changes in use. (224 study outcome measures were categorized into 32 metrics, most commonly prevalence (39.5% of studies), frequency (14.0%) or perceived harmfulness	drug law reform	prior to drug law reform	Across all three substance use metrics (prevalence of use, frequency of use and use of other alcohol or drugs), drug law reform was most often not associated with use (with null findings for 48.0% to 52.4% of outcome measures falling under these metrics). Mixed results were found in half of cases with respect to change in perceived		low

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Prescription drug use associations Perceived availability of decriminalized or regulated drug Overdose or poisoning by the decriminalized or regulated drug (cannabis) Overdose or poisoning by drugs other than cannabis Driving with detectable concentrations of THC Lifetime use after decriminalization of cannabis		(10.5%) of use of the decriminalized or regulated drug; or use of tobacco, alcohol or other drugs (12.3%)).			harmfulness of the decriminalized or regulated drug, with heterogeneity detected on the basis of age, gender and state. Harmful effects were reported for 6 of 12 outcome measures related to healthcare use, with increases in emergency department visits and/or hospitalisations attributed to decriminalization or legal regulation. However, all but one of those studies assessed change over time in one jurisdiction,		

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Past-month use after decriminalization of cannabis Self-reported use after decriminalization of peyote for ceremonial purposes Drug-related criminal justice involvement after decriminalization					without a control group. Reductions in acute care visits or admissions for non-cannabis drugs following cannabis decriminalization or legal regulation. Six of nine prescription drug use associations were beneficial, with reductions observed in rates of opioid and other drug prescribing attributed to legal regulation of cannabis for medical use; outcomes in this category came from studies of higher average quality (*X*=16.3).		

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					Perceived availability of the decriminalized or regulated drug appeared largely unaffected by decriminalization (null associations for five of nine outcome measures) but two studies indicated increased perceived availability of cannabis among Colorado, US, adolescents following legal regulation for adult use and among adults in US states with legal regulation for medical use. Across the subset of seven outcome measures for		

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					overdose or poisoning by the decriminalized or regulated drug (cannabis), in all cases an increase in calls to poison control centres or unintentional paediatric exposures was reported. However, studies assessing the impacts of cannabis regulation on overdose or poisoning by drugs other than cannabis concluded that the effects were either beneficial (four outcome measures) or mixed/null (three outcome measures).		

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					Driving with detectable concentrations of THC was most often found to increase following decriminalization or legal regulation (five of eight outcome measures), but these studies were of lower average quality (*X*=12.0) No association was detected for all but three outcomes; following cannabis decriminalization lifetime use increased among adults in South Australia, while past-month use increased among 12th graders but not younger students in		

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					California, relative to the rest of the country in both cases. self-reported use of peyote increased among American Indians after decriminalization for ceremonious purposes One high-quality study found that decriminalization positively influenced criminal justice involvement: in five US states, arrests for cannabis possession decreased among youth and adults. When		

					possession of small amounts of cannabis was decriminalized in the 1970s in Nebraska, however, the mean monthly number of arrests did not change, while cannabis-related prosecutions increased among youth. In Tijuana, Mexico, decriminalization of all drugs had no apparent impact on the number of drug possession arrests. Two historical and one recent study measured healthcare utilisation. US states that decriminalized cannabis in the		

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					1970s saw greater emergency department visits related to cannabis, but decreased visits related to other drugs. In Colorado, US, decriminalization was associated with increased emergency department visits for cyclic vomiting.		
Adolescent marijuana use	Medical marijuana laws and adolescent marijuana use in the United States: a systematic review and meta-analysis. Sarvet et al. 2018	Synthesis of the current evidence does not support the hypothesis that US medical marijuana laws (MMLs) passed up to 2014 have led to increases in adolescent marijuana use	Law passing	Pre- law passing	−0.003 (−0.013, +0.007)		low

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		prevalence. Of the 11 studies included in the meta-analysis, none found significant changes in past-month marijuana use following MML passage within MML states (compared to comparable changes in non-MML states).					
Cannabis use among adolescents and young adults following legalization of cannabis for recreational purposes Use among adolescents and young adults	Does liberalisation of cannabis policy influence levels of use in adolescents and young adults? A systematic review and meta-analysis. Melchior et al. 2019	Overall, policies regarding cannabis use and possession seem to have little effect on actual patterns of use among young people, with the possible	Legalization for recreational purposes Decriminalization	Prior to legalization for recreational purpose Prior to decriminalization	Use after legalization for recreational purposes: SMD 0.03, (−0.01 to –0.07) With the exception of one study, high-quality reports examining the impact of cannabis		low

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following decriminalization Use following legalization of cannabis for medical purposes		exception of the legalization of recreational use Results suggest a small increase in cannabis use among adolescents and young adults following legalization of cannabis for recreational purposes, but studies characterized by a very low/low risk of bias showed no evidence of changes in cannabis use following policy modifications.	Legalization for medical purposes	Prior to legalization for medical purpose	decriminalization (n=4) show no statistically significant change in youths' patterns of use. The legalization of cannabis use for medical purposes, extensively evaluated in the USA, does not appear to have an effect: six studies suggest no change in cannabis use among youths, three studies observe a decrease and four studies report an increase.		

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Summary

The systematic reviews report similar findings; that decriminalizing or legalizing drugs (with most focus on cannabis) does not increase use of the drug among the population. Scheim et al. report that drug law reform was most often not associated with prevalence of use, frequency of use and use of other alcohol or drugs. They conclude that peer-reviewed longitudinal evaluations of drug decriminalization and legal regulation are overwhelmingly geographically concentrated in the US and focussed on cannabis legalization. (5) Prevalence of use was the predominant metric used to assess the impact of drug law reform, despite its limited clinical significance (e.g., much cannabis use is non-problematic) and limited responsiveness to drug policy. They state there was a lack of alignment between the stated policy objectives of drug law reform and the metrics used to assess its impact in the scientific literature. For instance, removal of criminal sanctions to prevent their negative sequelae is a key rationale for decriminalization and legal regulation, but only four studies (3.5%) evaluated changes in drug-related criminal justice involvement following drug law reform. Similarly, improving the physical and mental health of people who already use drugs is a motivation for drug policy reform but no included studies examined mental or physical health outcomes (aside from substance use disorders) in this population. As a result, there is a risk that decisions on drug policy may be informed by inappropriate metrics.(18,19)

Undesirable effects

How substantial are the undesirable anticipated effects? *(Our Judgement: Probably small for all interventions)*

Research Evidence

Drug law reform (legalization or decriminalization)

Overall, the systematic reviews show that the interventions are not associated with the anticipated undesirable effects.

Certainty of evidence

What is the overall certainty of the evidence of effects? (*Our Judgement: Low)*

Balance of effects

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Does the balance between desirable and undesirable effects favor the intervention or the comparison? (*Our Judgement: Probably favors the option for most interventions)*

The desirable effects of drug law reform- decriminalization or legalization- seem to outweigh the potential undesirable effects, since the anticipated undesirable effects like increase in drug use not to be associated with the interventions.

Values

Is there important uncertainty about, or variability in, how much people value the main outcomes? *(Our Judgement: Probably some important uncertainty or variability)*

Scheim et al note that the most common outcomes reported are not necessarily the most relevant when thinking about the intended benefits of drug law reform. (5) Others would likely agree.

Certainty of evidence of required resources

What is the certainty of the evidence of resource requirements (costs)? *(Our Judgement: Low for most interventions)*

Resources required & Cost-effectiveness

How large are the resource requirements (costs)? (*Our Judgement: Probably moderate for most Interventions)*

Does the cost-effectiveness of the option favour the option or the comparison? (*Our Judgement: the option)*

Equity

What would be the impact on health equity? (*Our Judgement: increases equity for some interventions)*

Improving access to medicines via drug insurance would increase health equity.

Acceptability

Is the option acceptable to key stakeholders? (*Our Judgement: Probably yes for all interventions)*

Drug law reform would likely be acceptable to people who use drugs. In their study on drug legalization and decriminalization beliefs among substance using and non-using people, Hammond et al (2021) found that people who used marijuana strongly supported the legalization or

decriminalization of recreational and medical marijuana while people who primarily used opioids and stimulants rated their support for legalization and decriminalization of heroin and cocaine relatively low. (50)

The Canadian government has already legalized marijuana, suggesting that further drug law reform may be acceptable. In August 2020, the Public Prosecution Service of Canada released new guidelines for prosecuting the illegal possession of controlled substances under the Controlled Drugs and Substances Act. As part of the new guidelines, federal prosecutors pursuing charges for illegal drug use are now urged to only criminally prosecute individuals with the most serious drug possession offences. (20) While this is not decriminalizing, it is a move in that direction, suggesting that further drug reform may be acceptable to government stakeholders. Decriminalization of drugs other than marijuana may or may not be acceptable to the general public.

Feasibility

Is the option feasible to implement? (*Our Judgement: Maybe for all interventions)*

Guidelines/ other resources:

The United Nations Chief Executives Board, chaired by the UN Secretary General and representing 31 UN agencies, has expressed strong support for the decriminalization of possession and use of drugs. The statement calls on member states to "promote alternatives to conviction and punishment in appropriate cases, including the decriminalization of drug possession for personal use.

Prosecution of possession of controlled substances contrary to s. 4(1) Controlled Drugs and Substances Act. 2020. (20)

Canadian Centre on substance use and addiction present a case for decriminalizing drugs in a policy brief. (51)

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6. Racism

Project title: Racism during Covid pandemic recovery

Subtitle: Racism and health during Covid pandemic recovery

Problem: Racism in healthcare, racism and health outcomes

Intervention: Various

Comparison: Various

Main Outcomes: Various

Background

Racism can manifest through beliefs, stereotypes, prejudices or discrimination, from overt threats and insults to phenomena deeply embedded in social systems and structures. Racism can occur at multiple levels, including: internalized (the incorporation of racist attitudes, beliefs or ideologies into one's worldview), interpersonal (interactions between individuals) and systemic (for example, the racist control of and access to labor, material and symbolic resources within a society). Racism persists as a cause of exclusion, conflict and disadvantage on a global scale. (1)

Problem & Research Evidence

Is the problem a priority? *(Our Judgement: Yes)*

The unequal distributions of a broad range of health-promoting resources and opportunities, neighborhood and social conditions, and generational accumulation of wealth by race results in racialized people being at a disadvantage by most measures of population health, and decades of medical and public health research have documented this (2–5) Race-associated differences in health outcomes are widely documented, and these differences can be explained by the effects of racism. Racism is associated with poorer mental health including depression, anxiety, psychological stress and various other outcomes. Racism is also associated with poorer general health and poorer physical health. (1)A systematic review found that age, sex, birthplace and education level did not moderate the effects of racism on health. (6)Racism can impact health via: reduced access to employment, housing and education and/or increased exposure to risk factors (e.g., avoidable contact with police); adverse cognitive/emotional processes and associated psychopathology; allostatic load and concomitant patho-physiological processes; diminished participation in healthy behaviors (e.g., sleep and exercise) and/or increased engagement in unhealthy behaviors (e.g., alcohol consumption) either directly as stress coping, or indirectly, via reduced self regulation; and physical injury as a result of racially-motivated violence. (1,7)

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Prior to the Covid-19 pandemic, multiple reports documented the harmful effects of racism, including anti-Black and anti-Indigenous racism, and provided recommendations for addressing systemic racism. Despite past recommendations, systemic racism led to disproportionate effects of the pandemic on racialized people and racialized people are more vulnerable to the consequences of covid-19 (eg., a study carried out in Detroit, USA, where only 14% of its population is Black, showed that 40% of mortality by COVID-19 were of Black people at the time of the study).(8,9)Rather than systematically searching the literature for evidence and making new recommendations, the Task Force decided to instead refocus attention on existing recommendations that are still relevant today. There is a need to implement socioeconomic policies that will improve access to quality health care, education, housing, and income conditions, not only during the pandemic but also after, during pandemic recovery.

We have seen examples in the past of policy change positively impacting health outcomes among racialized people; for example, the studies on the impact of the abolition of Jim Crow laws have shown improvements in mortality in the Black community and in the 15 years after the passage of the 1964 Civil Rights Act, there was a converging mortality between Black and white communities. (10–14)

Desirable effects

How substantial are the desirable anticipated effects*? (Our Judgment: Overall: High).*

Recommendations that have been made to address racism that are relevant to health and healthcare

Racism is recognized as a social determinant of health.(1,15) Approaches to racism outside of healthcare settings are therefore relevant to efforts to promote health.

The Report of the Special Rapporteur on the rights of Indigenous peoples (2014) examined the human rights situation of Indigenous peoples in Canada based on research and information gathered from various sources and observed that the many initiatives that have been taken at the federal and provincial/territorial levels to address the problems faced by Indigenous peoples have been insufficient. It was noted that the disparities between aboriginal and non-aboriginal people in Canada had not narrowed over the last several years, treaty and aboriginals claims remained persistently unresolved, Indigenous women and girls remained vulnerable to abuse, and overall there were high levels of distrust among Indigenous peoples toward government at both the federal and provincial levels. The report presented recommendations in the following categories: social and economic conditions; truth and reconciliation; missing women and girls; self-government, participation and partnership; treaty negotiation and claims processes; and resource development. (16)

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The Truth and Reconciliation Commission (2015) detailed the history of harmful policy and the treatment of aboriginal peoples in Canada including the legacy of residential schools. The purpose of the commission was to inform, establish and maintain a mutually respectful relationship between Aboriginal and non-Aboriginal peoples in Canada. To repair the legacy of residential schools and move forward with reconciliation, the commission made 94 calls to action in the areas of child welfare, education, language and culture, health, justice, the United Nations Declaration on the Rights of Indigenous Peoples, proclamation and covenant of reconciliation, settlement agreements, equity in the legal system, national council for reconciliation, professional development and training, church apologies, youth programs, museums and archives, missing children and burial information, commemoration, media, sports, business and newcomers to Canada. (17) The final report revealed that human and Indigenous rights violations and abuse explain the high rates of violence against Indigenous women, girls and 2SLGBTQQIA. The report makes 231 calls for justice directed at governments, institutions, social service providers, industries and all Canadians to transformative legal and social changes to resolve the national crisis. Four pathways that ought to be addressed are presented: historical, multigenerational, and intergenerational trauma; social and economic marginalization; maintaining the status quo and institutional lack of will; and ignoring the agency and expertise of Indigenous women, girls, and 2SLGBTQQIA people.(18)

The United Nations Human Rights Council created a draft report on Canada's third review which included 275 recommendations. The Ontario Human Rights Commission made a submission to inform Canada's response to the recommendations and recommended that Canada prioritize recommendations in 5 areas: Indigenous reconciliation; criminal justice; poverty; education; and human rights accountability. The OHRC encouraged Canada to "ensure meaningful consultations with First Nations, Métis and Inuit (Indigenous) peoples consistent with their commitment to implement the UN Declaration on the Rights of Indigenous Peoples". (19)

A report on systemic anti-Indigenous racism in the Canadian healthcare system makes the following recommendations to address Indigenous peoples' health disparities resulting from racism: healthcare leaders, policy makers and staff must acknowledge the existence of racism and develop strategies for counteracting the harmful effects of racism in healthcare; all existing policies and practices must be reviewed to ensure that racism is not being perpetuated; development of anti-racism policies and strategies, as well as anti-racism training for all who work in the health care system, as well as students in health care professions (eg. the Indigenous Cultural Competency (ICC) Training Program, developed by the Provincial Health Services Authority in BC); in addition to access to the Canadian health care system, better access to Indigenous health systems including traditional medicines and traditional foods; include Indigenous knowledge and worldviews such as measures that target all levels of the well-being – including spiritual, emotional, physical and social; address other social determinants of health that contribute to Indigenous peoples' lower health outcomes. (20)

The Report of the Royal Commission on Aboriginal Peoples from the government of Canada in 2010 contains hundreds of recommendations in order to restructure the relationship between aboriginal people and the Canadian government. The commission proposed a 20 year agenda for

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change starting with recognizing aboriginal nationhood and also encompassing things like: models of self government; economic and business development; employment; education and training (and aboriginal control of aboriginal education); treaties as a mechanism of change; holistic approaches and whole health; traditional healing approaches; infrastructure development including housing and living conditions; preservation of cultural heritage; communications (e.g,. better media representation); hearing voices of elders, women and youth; and environmental stewardship.(21) Now, 11 years since the commission, we have seen little, if any, progress made with respect to restructuring or restoring the relationship between aboriginal people and the Canadian government.

The 24 recommendations presented in the report "In Plain Sight: Addressing Indigenous-specific Racism and Discrimination in B.C. Health Care" aim to advance an integrated and comprehensive change approach where actions in relation to systems, behaviours and beliefs are purposefully designed in relation to, and to reinforce, one another. (22)The recommendations are as follows

Systems

That the government apologize for Indigenous-specific racism in health care and affirm its responsibility to direct and implement system-wide approach to addressing the problem.

That the government, in collaboration and cooperation with Indigenous people, develop policy foundations and implement changes to require anti-racism including an Anti-Racism Act.

That a B.C Indigenous health officer position is established

That an Office of the Indigenous Health Representative and Advocate is established which would provide assistance to Indigenous people who require it in terms of navigating and benefiting from the health care system and resolving problems within the system.

That a strategy is developed to improve the patient complaint processes to address individual and systemic Indigenous-specific racism.

That the parties to the bilateral and tripartite First Nations health plans and agreements work in co-operation with B.C. First Nations to establish expectations for addressing commitments in those agreements that have not been honoured.

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That the Ministry of Health establish a structured senior level health relationship table with MNBC, and direct health authorities to enter into Letters of Understanding with MNBC and Métis Chartered Communities that establish a collaborative relationship with clear and measurable outcomes.

That all health policymakers, health authorities, health regulatory bodies, health organizations, health facilities, patient care quality review boards and health education programs in B.C. adopt an accreditation standard for achieving Indigenous cultural safety through cultural humility and eliminating Indigenous-specific racism that has been developed in collaboration and cooperation with Indigenous peoples.

That the B.C. government establish a system-wide measurement framework on Indigenous cultural safety, Indigenous rights to health and Indigenous-specific racism, and work collaboratively to ensure appropriate processes of Indigenous data governance are followed throughout required data acquisition, access, analysis and reporting.

That design of hospital facilities in B.C. include partnership with local Indigenous peoples and the Nations on whose territories these facilities are located, so that health authorities create culturally appropriate, dedicated physical spaces in health facilities for ceremony and cultural protocol, and visibly include Indigenous artwork, signage and territorial acknowledgement throughout these facilities.

Behaviours

That the government continue efforts to strengthen employee “speak-up” culture throughout the entire health care system so employees can identify and disclose information relating to Indigenous-specific racism or any other matter.

That the Ombudsperson consider including a focus on Indigenous-specific racism in the health care system as a key priority and seek input from appropriate partners on current plans to strengthen this priority through engagement, special activities to promote greater fairness in public services to Indigenous peoples, and reporting to the public on progress.

That the government establish the new position of Associate Deputy Minister for Indigenous Health within the Ministry of Health, with clear authorities including supporting the Deputy Minister of Health in leading the Ministry’s role in implementing these Recommendations.

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That the government, PHSA, the five regional health authorities, B.C. colleges and universities with health programs, health regulators, and all health service organizations, providers and facilities recruit Indigenous individuals to senior positions to oversee and promote needed system change.

That the government, First Nations governing bodies and representative organizations, MNBC, the Provincial Health Officer and the Indigenous Health Officer develop a robust Indigenous pandemic response planning structure that addresses jurisdictional issues that have arisen in the context of COVID-19, and which upholds the standards of the *UN Declaration.*

That the government implement immediate measures to respond to the MMIWG Calls for Justice and the specific experiences and needs of Indigenous women as outlined in this Review.

That the government and FNHA demonstrate progress on commitments to increase access to culturally safe mental health and wellness and substance use services.

That the government require all university and college degree and diploma programs for health professionals in B.C. to implement mandatory strategies and targets to identify, recruit and

encourage Indigenous enrolment and graduation, including increasing the safety of the learning environment for Indigenous students.

That a Centre for anti-racism, cultural safety and trauma-informed standards, policy, tools and leading practices be established and provide open access to health care organizations, practitioners, educational institutions and others to evidence-based instruments and expertise and to expand the capacity in the system to work collaboratively in this regard.

Beliefs

That a refreshed approach to anti-racism, cultural humility and trauma-informed training for health workers be developed and implemented, including standardized learning expectations for health workers at all levels, and mandatory, low-barrier components. This approach, co-

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developed with First Nations governing bodies and representative organizations, MNBC, health authorities and appropriate educational institutions, to absorb existing San'yas Indigenous Cultural Safety training.

That all B.C. university and college degree and diploma programs for health practitioners include mandatory components to ensure all students receive accurate and detailed knowledge of Indigenous-specific racism, colonialism, trauma-informed practice, Indigenous health and wellness, and the requirement to provide service to meet the minimum standards in the UN Declaration.

That the government, in consultation and cooperation with Indigenous peoples, consider further truth-telling and public education opportunities that build understanding and support for action to address Indigenous-specific racism in the health care system; supplemented by a series of educational resources, including for use in classrooms of all ages and for the public, on the history of Indigenous health and wellness prior to the arrival of Europeans, and since that time.

That the government, in partnership with First Nations governing bodies and representative organizations, MNBC, Indigenous physicians, experts, and the University of British Columbia or other institutions as appropriate, establish a Joint Degree in Medicine and Indigenous Medicine. That the B.C. government, in partnership with First Nations governing bodies and representative organizations, MNBC, Indigenous nurses, experts, and appropriate educational institutions, establish a similar joint degree program for nursing professions.

Implementation of Recommendations

That the government establish a task team to be in place for at least 24 months after the date of this report to propel an ensure the implementation of all Recommendations, reporting to the Minister of Health and working with the Deputy Minister and the Associate Deputy Minister for Indigenous Health, and at all times ensuring the standards of consultation and co-operation with Indigenous peoples are upheld consistent with the *UN Declaration.*

Anti-Black racism and systemic discrimination drive health inequalities experienced by Black Canadian communities including in education, employment and housing, food security among other determinants of health. (23)

Following public outrage over anti-Black policy brutality in 1992, a report on race relations was commissioned for the premier of Ontario. The report made various recommendations that were considered time sensitive and included the following: changes to the policing and the criminal justice system (e.g., creation of a community-based monitoring and audit board to work in collaboration with police forces to conduct an audit

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of police race relations policies, change the way complaints of racially discriminatory conduct of police were dealt with, completion of a public consultation process about use of force and amend the police services act regulations regarding use of force, and race-related training implementation); introduction of employment equity legislation; education (e.g., changes to curricula including the addition of anti-racism and multicultural curricula, elimination of streaming in the school system); changes to access to trades and professions (e.g., allow foreign trained professionals and tradespersons to work in their fields); ensure that the Ontario Training and Adjustment Board reflects equity representation; convert the Ontario Anti-Racism Secretariat into an enhanced Ontario Anti-Racism Directorate; give visible minority communities direct access to government via a Cabinet Committee on Race Relations; and to introduce unprecedented community development plans. (24)

Bailey et al., (2017) make the case that a focus on structural racism offers a concrete, feasible, and promising approach towards advancing health equity and improving population health, and make the following key points/ recommendations: place-based partnerships focusing on equity can be an effective means of placing pressure on the systems of structural racism operating in a specific geographical region; with the recognition that mass incarceration is a system used to subordinate Black people, efforts to reduce discriminatory criminal sanctions on drug use are recommended; medical and public health schools should incorporate essential pedagogy about racism and health into standard coursework, as one step towards divorcing medical and public health institutions from their supportive roles in the system of structural racism; and professional education about structural racism after graduate school also matters, especially for clinical and public health practitioners whose decisions affect peoples' health daily. (14)

Cerdeña, Plaisime & Tsai (2020) make recommendations that seek to reform race-based medicine across clinical practice, education, leadership, and research. The first recommendation is that racially tailored practices that propagate inequity should be avoided-race should not be used to make inferences about physiological function in clinical practice and race-adjusted tools (e.g., race-based assumptions in eGFR) should be abandoned or replaced with more precise analytics. Race should be used to assess for experiences of discrimination and refer to affinity-based support services. The second recommendation is that it should be taught that racial health disparities are a consequence of structural racism. Third, resolutions denouncing race-based medicine across clinical leadership should be adopted. Societies for health-care practitioners should consider resolutions denouncing the use of race-based medicine in their trainings, guidelines, and other publications, and require that race be explicitly characterised as a social and power construct when describing disease risk factors. The fourth and final recommendation is that clinical research should be used to examine structural barriers, rather than using race as a proxy for biology. Clinical journals should include in their publication guidelines instructions to avoid the use of race as a proxy for biological variables. (25)

Priest et al., (2015) highlight that ethnic minority NHS staff experience discrimination in training and recruitment and are three times less likely to secure a hospital job than white doctors. To increase diversity and reduce discrimination among health care staff, the authors recommend: core leadership support that articulates diversity as a high institutional priority and organizational investment in supportive communication to all relevant stakeholders; multiple strategies at organizational, workplace, interpersonal, and intrapersonal levels used simultaneously over a long

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period; mandated targets or actions, such as mandated policy interventions to promote diversity that have legal or funding consequences. They state that ultimately, programs that move beyond awareness raising to focus on development of practical personal skills, ownership, and commitment should be part of a comprehensive diversity strategy alongside organizational processes and policies. (26)

A report from the Perception Institute (2014) recommends interventions that may be of value to institutions and individuals seeking to align their behavior with their ideals and move institutions and individuals toward eliminating race as an obstacle to educational success and the provision of health care. They recommend: implicit bias training including debiasing and preventing biased decision making; reducing racial anxiety by intergroup contact, which refers to direct interaction between members of different racial groups, and by indirect contact, which facilitates positive intergroup dynamics even among racially homogenous groups to enhance attitudes toward other racial and ethnic groups and to diminish anxiety about potential interactions with members of those groups; stereotype threat interventions; interventions in context, meaning institutions should work with experts to evaluate and determine where in the institution's operations race may be coming into play. The report goes into detail for reach intervention, and also notes that the broader culture and opportunity structures need to change in order to maximize the effectiveness and potential success of these interventions. (27)

Undesirable effects

Not clear.

Certainty of evidence

What is the overall certainty of the evidence of effects? (*Our Judgement: High)*

Balance of effects

Does the balance between desirable and undesirable effects favor the intervention or the comparison?

Likely large.

Values

Is there important uncertainty about, or variability in, how much people value the main outcomes? *(Our Judgement: Probably no important uncertainty or variability)*

Resources required and Cost-effectiveness

How large are the resource requirements (costs)?

Not applicable for our recommendation.

What is the certainty of the evidence of resource requirements (costs)?

Not applicable for our recommendation.

Does the cost-effectiveness of the option favour the option or the comparison?

Not applicable for our recommendation.

Equity

What would be the impact on health equity? (*Our Judgement: Increase (equity) for all interventions)*

The recommendations seek to increase equity by addressing racism and the widespread detrimental effects.

Acceptability

Is the option acceptable to key stakeholders? (*Our Judgement: Potentially yes for all interventions)*

Given the breadth of evidence which clearly demonstrates that racism persists and has various negative consequences, overall, the recommendations are expected to be acceptable to key stakeholders. The Canadian government has an anti-racism strategy in place and has recognized that there is much work to be done to eliminate racism and discrimination.(28)

A survey of the Canadian public revealed that there is widespread recognition that racism is a reality in Canada, and that it is something that is directly experienced by a significant proportion of the population. (29) As a whole, Canadians believe that race relations are generally good, though racialized people (particularly Indigenous Peoples and Black people) are less positive about the state of relations in comparison with white people. Racialized Canadians expect less racism for the next generation of people with their own background, although many do not believe there will be much change from the status quo. (29)

Feasibility

Is the option feasible to implement? (*Our Judgement: Probably yes for most interventions)*

Recommendation

During the pandemic recovery period, we strongly recommend reflection and action on multiple prior reports that outlined approaches to addressing anti-Indigenous racism, anti-Black racism and other manifestations of racism (ungraded statement).

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7. Supplemental information

7A. Glossary

Food distribution at school – Organized programs that involve distributing food to children attending school, usually in order to promote health and improve school attendance or performance.

Person with a low income – Individual who likely must use a large share (20 % or more) of income on necessities such as food, shelter and clothing based on location (urban versus rural), household income and typical expenses. Please see https://www.canada.ca/en/employment-social-development/programs/poverty-reduction/backgrounder.html

Racialized person – A person who experiences racialization, the process by which societies construct races as real, different and unequal in ways that matter to economic, political and social life. Please see http://www.ohrc.on.ca/en/racial-discrimination-race-and-racism-fact-sheet

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7B. Search methods

Eligibility Criteria

1. Published in 2000 and later
2. English language
3. Addresses clear questions (can identify PICO elements)
4. Has important outcomes highlighted
5. For general population and not for specific groups (e.g women, HIV+, LGBTQ+)
6. Allows for updating (e.g. present full systematic reviews, accessible search strategy, analysis method)
7. Has existing and accessible evidence tables/summaries (or easily reproducible)

Income

Identify sources of existing guidelines and systematic reviews using Medline

P: General Population who have been laid off/had decrease in income, low socio-economic status
I: Income assistance, Cash transfers, Sickness benefits, Access to food
C: No intervention, alternative intervention or usual care
O: Income stability, Mental health, Food Security, Quality of life, Employment, Housing Stability

Search String

1 personnel downsizing/ or unemployment/

2 Poverty/

3 1 or 2

4 exp Public Assistance/

5 Insurance Benefits/

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6 4 or 5

7 3 or 6

8 limit 7 to (english language and yr="2000 -Current" and (guideline or "systematic review" or systematic reviews as topic))

1 article found outside of search:

Ludbrook A, Porter K. Do interventions to increase income improve the health of the poor in developed economies and are such policies cost effective? Appl Health Econ Health Policy. 2004;3(2):115-20. doi: 10.2165/00148365-200403020-00008. PMID: 15702949.

Children

Identify sources of existing guidelines and systematic reviews using Medline

P: Children
I: Childcare, Access to food (snack service or meal provision)
C: No intervention, alternative intervention or usual care
O: Child development, Child behaviour, Child well-being, Child Health

Search String (daycare):

1. Child/
2. Infant/
3. infant$.tw.
4. baby.tw.
5. babies.tw.
6. toddler$.tw.
7. child$.tw.
8. boy$.tw.
9. girl$.tw.
10. kid$.tw.

11. pre?kindergarten$.tw.
12. pre?school$.tw.
13. 1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10 or 11 or 12
14. Child Day Care Centers/
15. Day Care/
16. play?group$.tw.
17. (child$ adj3 centre$).mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]
18. (child$ adj3 center$).mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]
19. day?care$.tw.
20. (daycentre$ or daycenter$).mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]
21. Cognition/
22. Child Development/
23. well?being.tw.
24. 21 or 22 or 23
25. 14 or 15 or 16 or 17 or 18 or 19 or 20
26. 13 and 24 and 25
27. limit 26 to (yr="2000 -Current" and (guideline or journal article or observational study or randomized controlled trial or "systematic review") and (children or children - focussed))

Search String (food):

1. Child/
2. Infant/
3. infant$.tw.
4. baby.tw.
5. babies.tw.
6. toddler$.tw.

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7. child$.tw.
8. boy$.tw.
9. girl$.tw.
10. kid$.tw.
11. pre?kindergarten$.tw.
12. pre?school$.tw.
13. 1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10 or 11 or 12
14. Diet Therapy/
15. diet supplementation/
16. Dietary Supplements/
17. exp dietary fats/
18. nutrition therapy/
19. exp Food, Fortified/
20. diet therapy.fs.
21. (therapeutic$ adj3 (food$ or feeding)).tw.
22. (therapeutic$ adj3 diet$).tw.
23. food secur$ or food insecur$ or food in-secur$).tw.
24. ((nutrient$ or nutrition$) adj3 (intervention$ or program$)).tw.
25. 14 or 15 or 16 or 17 or 18 or 19 or 20 or 21 or 22 or 23 or 24
26. 13 and 25
27. limit 26 to (yr="2000 -Current" and (guideline or journal article or observational study or randomized controlled trial or "systematic review") and (children or children - focussed))

Access to medicines (pharmacare)

Database: Ovid MEDLINE: Epub Ahead of Print, In-Process & Other Non-Indexed Citations, Ovid MEDLINE Daily and Ovid MEDLINE

P: people who have difficulty affording medication
I: insurance, pharamacare, free medicines
C: no intervention, alternative intervention, usual care
O: medication adherence, health outcomes

Search String:

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1 Universal Health Insurance/ or exp National Health Programs/
2 exp Insurance, Pharmaceutical Services/
3 exp Drug Prescriptions/ or exp Prescription Drugs/ or Drug Costs/
4 ("essential medicine" or "essential medicines" or "national formulary" or "national formularies").tw,kf.
5 ((prescription* or medication* or drug or drugs) adj2 (coverage or reimbur* or insurance)).tw,kf.
6 2 or 3 or 4 or 5
7 1 and 6
8 pharmacare.tw,kf.
9 (drug insurance plan or medication insurance plan).tw,kf.
10 8 or 9

Access to healthcare for people who use opioids

Database: Ovid MEDLINE: Epub Ahead of Print, In-Process & Other Non-Indexed Citations, Ovid MEDLINE Daily and Ovid MEDLINE

P: people who inject drugs, people with substance use disorder
I: needle and syringe programs, opioid substitution therapy
C: no intervention, alternative intervention, usual care
O: drug use, mortality, HCV/HIV

Search String (NSP):
1 Needle-Exchange Programs/ (1810)
2 (needle exchange or syringe exchange).tw,kf. (1633)
3 supervised injection.tw,kf. (185)
4 exp Substance-Related Disorders/ and exp Harm Reduction/ (1715)
5 (harm reduction and opioid*).tw,kf. (802)
6 (harm reduction and inject*).tw,kf. (1642)

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Database: Ovid MEDLINE: Epub Ahead of Print, In-Process & Other Non-Indexed Citations, Ovid MEDLINE Daily and Ovid MEDLINE

Search String:

1 exp Methadone/
2 methadone.tw,kf.
3 Buprenorphine, Naloxone Drug Combination/
4 Suboxone.tw,kf.
5 (Buprenorphine and Naloxone).tw,kf.
6 opioid substitution.tw,kf.
7 opioid replacement.tw,kf.
8 (opioid agonist* and (substitution or replacement)).tw,kf.
9 Drug Overdose/pc [Prevention & Control]

Drug law reform

P: people who use drugs
I: policy interventions
C: no intervention, alternative intervention, usual care
O: drug use, criminal charges

Search strategy

((drug or drugs or opioid* or Marijuana or marihuana or cannabis or cannabinoid* or psychoactive product* or psychoactive substance* or narcotic*) adj5 (Legaliz* or legalis* or decriminal* or depenaliz* or depenalis* or deregulat* or liberaliz* or liberalis*)).tw,kf.

HIV/HCV screening

Database: All Ovid Medline

P: people at risk for HCV/HIV
I: HIV screening, HCV screening

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C: no intervention, alternative intervention, usual care
O: HIV screening, HCV screening, HIV/HCV detection

Search String:
1 AIDS Serodiagnosis/
2 hiv infections/ or acquired immunodeficiency syndrome/ or hiv seropositivity/ or (hiv or aids or human immunodeficiency).ti.
3 exp Hepatitis B/ or exp Hepatitis C/ or (hep* b or Hep* c).ti.
4 (Screen* or test*).ti.

Incarceration

P: people who are incarcerated
I: healthcare
C: no intervention, alternative intervention, usual care
O: mortality, reentry, substance use, mental health, HIV infection

Search string:
1 AIDS Serodiagnosis/
2 hiv infections/ or acquired immunodeficiency syndrome/ or hiv seropositivity/ or (hiv or aids or human immunodeficiency).ti.
3 exp Hepatitis B/ or exp Hepatitis C/ or (hep* b or Hep* c).ti.
4 (Screen* or test*).ti.
6 exp Prisoners/
7 Prisons/
8 Criminals/
9 (after prison or parole* or probation or community reentry or community re-entry or ex-convict* or ex-inmate* or ex-offender* or ex-prisoner* or former convict* or former inmate* or former offender* or former prisoner* or formerly incarcerated or offender* reenter* or offender* re-enter* or offender* reentry or offender* re-entry or offender* reintegrat* or offender* re-integrat* or offender* release or out of jail or postincarceration or post-incarceration or postprison or post-prison or postrelease or post-release or prison to community or prison to society or prisoner* reenter* or prisoner* reentry or prisoner* reintegrat* or prisoner* re-enter* or prisoner* re-entry or prisoner* re-integrat* or prisoner* release* or release* from prison or release* from correction* or return to communit*).tw,kw. (4261)

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10 (correctional system or felon* or imprison* or incarcerat* or jail* or offender* or prison* or convict* or inmate* or parole* or correctional facilit* or criminal justice system* or criminal justice or sentencing or corrections or correctional setting*).ti,ab,kw.
11 6 or 7 or 8 or 9 or 10

Intimate Partner Violence

P: people who have experienced intimate partner violence
I: policy interventions, psychotherapy
C: no intervention, alternative intervention, usual care
O: mortality, intimate partner violence, psychological

Search string:

1 exp Domestic Violence/ or exp Intimate Partner Violence/
2 interventions.mp.
3 1 and 2
4 exp Psychotherapy/or psychotherapy.mp.
5 policy.mp or exp Policy/
6 2 or 4 or 5
7 1 and 6
8 systematic review.mp.
9 7 and 8

Search terms used for values, preferences, acceptability, feasability
a. values, preferences
b. cost, cost-effectiveness
c. race, racism, indigenous, gender, sexism
d. acceptability [Also search web (Google) for intervention and "Angus Reid" and "Nanos" for national surveys)
e. feasibility, implementation, sustainability, practical

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7C. Organizations contacted

Black Physicians of Canada

Canadian Alliance to End Homelessness

Canadian Doctors for Medicare

College of Family Physicians Canada

Canadian Federation of Nurses

Canadian Medical Association

Canadian Nursing Association

Canadian Pediatric Society

Canadian Psychological Association

Canadian Psychiatric Association

Canadian Public Health Association

Canadian Public Health Association

Indigenous Physicians Association of Canada

Mental Health Commission of Canada

Public Health Agency of Canada

Public Health Physicians of Canada

Royal College of Physicians and Surgeons of Canada

Urban Public Health Network

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Well Living House

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7D. Decision maker and recommendation matrix

Key decision maker levels for each of the 13 recommendations

	Federal	Provincial	Municipal
1. Permanent supportive housing	●	●	●
2. Eviction prevention		●	●
3. Living income	●	●	
4. Unemployment insurance, parental leave, paid sick leave	●	●	
5. Affordable credit and loans	●	●	
6. Intimate partner violence		●	●
7. Childcare	●	●	●
8. Food for children		●	●
9. Opioid substitution therapy	●	●	
10. HIV and HepC screening		●	
11. Incarcerated	●	●	
12. Pharmacare	●	●	
13. Racism	●	●	●

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