The CLEAR toolkit pilot study: An educational intervention for helping health workers address the social causes of poor health

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THESIS ABSTRACT

Introduction

Social determinants of health are widely recognized as root causes of health disparities between and within countries. Health care workers can play a significant role to improve the health of individuals and populations if provided proper training on how to address the social causes of poor health in day-to-day clinical practice. The objectives of this study were: (1) To determine whether the CLEAR toolkit, a clinical decision-aid designed to help frontline health workers ask about and act upon the social determinants of health, is considered useful and applicable to health workers at a large university-affiliated family medicine teaching centre serving a highly ethnically diverse population in inner city Montreal, (2) To elicit what changes should be made to this toolkit to make it even more useful for frontline health workers, (3) To understand how the toolkit should be adapted to the local setting and how to train health workers to use it in practice, and (4) To better understand the kind of organizational support available to frontline health workers to address the social causes of poor health of their patients, and what more could be done to further support health workers in taking on a social determinants of health approach.

Methods

We conducted a multi-method study involving: (1) an online survey of frontline health workers to assess current practices and collect feedback on the feasibility of using the CLEAR toolkit in clinical practice, (2) in-depth interviews to understand why health workers consider certain patients to be more vulnerable and how to best help such patients, (3) focus groups to explore barriers to asking about social determinants of health during routine clinical practice, and (4) key informant interviews with high-level administrators to identify organizational levers for promoting widespread change in health workers' practices.

Results

Of the 100 health workers surveyed, fifty health workers responded to the questionnaire (Response Rate 50%). We continued the in-depth interviews until data saturation was reached (15 in-depth interviews). We conducted two focus groups of 6-8 health workers in each group, and three key informant interviews with senior health administrators. There was a high level of agreement that it is the role of frontline health workers to address the underlying social issues

that are the root causes of their patient's health problems (n=44/50, 88%,). The majority of health workers found the CLEAR toolkit easy to understand (n=36/37, 97.3%), relevant to their work (n=33/37, 89.2%), and can help them to address the social causes of poor health (n=32/37, 86.5%). Health workers who already had specific ways of asking their patients about social issues were twice as likely to report having helped their patients with social issues (n=15/16, 93.7%, vs. n=9/17, 52.9%; p=0.003). Organizational barriers to asking about the social determinants of health in clinical practice included lack of role modeling, training and time. Facilitators for adopting a social determinants of health approach included having access to clinical practice tools and a short list of local referral resources.

Conclusions

Frontline health workers appreciate the value of taking action to address the social determinants of health. However, there is a need to provide health workers more education, training and organizational support. The CLEAR toolkit has the potential to contribute to reducing health disparities by training the frontline health workers to ask about and act upon the social causes of poor health.

RÉSUMÉ

Introduction

Les déterminants sociaux de la santé sont largement reconnus comme une source de disparité en matière de santé entre les pays ainsi qu'au sein d'un même pays. Les travailleurs de la santé peuvent jouer un rôle important pour améliorer la santé des individus et des populations s'ils reçoivent une formation adéquate sur la façon d'aborder les déterminants sociaux de la santé dans leur pratique clinique courante. Les objectifs de cette étude étaient: (1) de déterminer si la boîte à outils CLEAR, un outil d'aide à la décision clinique sur les déterminants sociaux de la santé, est considéré comme utile et applicable par des travailleurs de la santé provenant d'un grand centre universitaire d'enseignement de la médecine familiale servant une population ethnique diversifiée dans la région de Montréal, (2) d'identifier les changements qui devraient être apportés à cette boîte à outils pour la rendre encore plus utile pour les travailleurs de la santé de première ligne, (3) de comprendre comment la boîte à outils doit être adaptée au contexte local et comment former les travailleurs de la santé pour l'utiliser dans leur pratique courante, et (4) de mieux comprendre le soutien organisationnel mis à la disposition des travailleurs de la santé de première ligne dans leur pratique courante pour mieux soutenir leurs patients à agir sur les déterminants sociaux.

Méthode

Nous avons mené une étude multi-méthode incluant: (1) un sondage en ligne avec des travailleurs de la santé de première ligne afin d'évaluer les pratiques actuelles et de recueillir des commentaires sur la faisabilité de l'utilisation de la boîte à outils CLEAR dans la pratique clinique, (2) des entrevues en profondeur pour comprendre pourquoi les travailleurs de la santé considèrent certains patients comme plus vulnérables et comment les aider, (3) des groupes de discussion pour explorer les obstacles pour aborder les déterminants sociaux de la santé dans leur pratique clinique courante, et (4) des entretiens avec des informateurs-clés (cadres supérieurs) afin d'identifier les leviers organisationnels pour promouvoir un changement dans la pratique des travailleurs de la santé.

Résultats

Sur les 100 travailleurs de la santé interrogés, 50 ont répondu au questionnaire (taux de réponse : 50%). Les entretiens en profondeur ont été effectués jusqu'à saturation de données (n=15). Nous avons effectué deux groupes de discussion avec respectivement 6 et 8 travailleurs de la santé dans chaque groupe, et trois entretiens avec des cadres supérieurs de la santé. Il y avait un niveau d'accord élevé que les travailleurs de la santé de première ligne devraient assumer la tâche d'identifier les déterminants sociaux qui causent des problèmes de santé à leurs patients (n = 44/50, 88%). La majorité des travailleurs de la santé ont trouvé la boîte à outils CLEAR facile à comprendre (n = 36/37, 97,3%), pertinente à leur travail (n = 33/37, 89,2%), et utile pour aborder les déterminants sociaux de la santé (n = 32/37, 86,5%). Les travailleurs de la santé qui posaient des questions sur les déterminants sociaux étaient deux fois plus susceptibles d'indiquer avoir aidé leurs patients avec des problèmes sociaux (n = 15/16, 93,7%, par rapport à n = 9/17, 52,9%; valeur p = 0,003). Les obstacles organisationnels à poser des questions sur les déterminants sociaux de santé dans la pratique clinique incluent l'absence de modèles, la formation et le temps. Les facilitateurs de l'adoption de déterminants sociaux dans la démarche de santé incluent avoir accès à des outils de pratique clinique et à une courte liste de ressources locales.

Conclusion

Les travailleurs de la santé de première ligne reconnaissent l'importance d'aborder les déterminants sociaux de la santé. Cependant, il y a un besoin de fournir aux travailleurs de la santé plus d'éducation, de formation et de soutien organisationnel. La boîte à outils CLEAR peut contribuer à réduire les disparités en santé par la formation des travailleurs de la santé de première ligne pour agir sur les déterminants sociaux de la santé.

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I am using this opportunity to express my warm gratitude and respect to my supervisor Dr. Anne Andermann who provided her excellent guidance and encouragement throughout this study. You have been a tremendous mentor for me. I could not have accomplished the goal of submitting this thesis without your support.

Dr. Andermann also provided me with the opportunity to work on a project which has unmet needs in terms of incorporating a broader vision of health into the clinical practice of primary health care. She also assisted me in enhancing my knowledge and skills of how we can better address the social determinants of health to help improve the lives of people at both individual and population levels.

I would like to express my special appreciation and thanks to my thesis committee members Professor Neil Andersson, Professor Ronald Labonte and Dr. Ellen Rosenberg for having served on my thesis committee. Their expert comments and suggestions during the conception of this study and the writing of this thesis were extremely helpful and greatly appreciated.

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I am grateful to my graduate professors in the Department of Family Medicine at McGill University who helped me in understanding how to successfully design and implement different types of research studies, including mixed methods studies, through their teaching. I would like to thank Mr. Martin, a health librarian at McGill University, for helping me with my literature review. I would also like to thank all my colleagues in the Department of Family Medicine who supported me by providing their comments on earlier drafts of my thesis.

Many thanks to the CLEAR Collaboration at McGill University, Grand Challenges Canada, St. Mary's Research Centre and Fonds de recherche santé Québec (FRQ-S) for providing the funding to conduct this research. As well, I would also like to thank the Department of Experimental Medicine for offering me a travel award to present my work at the Third Global Forum on Human Resources for Health in Recife, Brazil in November 2013; the Leacross Foundation for providing me with a travel award to give a platform presentation at the 21st Canadian Conference on Global Health in Ottawa in November 2014; and the Department of Family Medicine for the Family Medicine Academic Excellence Research Travel Award to attend the Family Medicine Forum to present a poster in Quebec City, Quebec in November 2014.

A very special thanks to my parents, my sister and brothers who always supported me to excel in the field of education and continue working for humanity. I do not have words to express my thanks how grateful I am to my husband for his enormous support in helping me endeavour towards my goal.

PREFACE TO THE THESIS

Fonds de recherche du Québec – Santé (FRQ-S) and St. Mary's Research Centre, Montreal Canada were the main sources of funding used to complete this study.

The findings of this thesis have been presented at two conferences: one oral presentation at the 21st Canadian Conference on Global Health held in Ottawa, Ontario in November 2014 (Appendix 1) and one poster presentation at the Family Medicine Forum held in Quebec City, Quebec in November 2014 (Appendix 2).

NOTES ON MANUSCRIPT-BASED THESES

The following paragraphs are quoted from the Faculty of Graduate and Postdoctoral Studies at McGill University Manuscript-Based (Article-Based) Theses (updated 2015-01-13).

"As an alternative to the traditional thesis format, the thesis research may be presented as a collection of scholarly papers of which the student is the author or co-author; that is, it can include the text of one or more manuscripts, submitted or to be submitted for publication, and/or published articles reformatted according to thesis requirements as described below. Manuscripts for publication are frequently very concise documents. The thesis is expected to be a more detailed, scholarly work than manuscripts for publication in journals, and must conform to general thesis requirements. These papers cannot alone constitute the thesis.

The structure for the manuscript-based thesis must conform to the following: Just as in the traditional format, the thesis must be presented as a unified whole with respect to font size, line spacing and margin sizes.

The thesis must be more than a collection of manuscripts. All components must be integrated into a cohesive unit with a logical progression from one chapter to the next, providing a cohesive, unitary focus, documenting a single program of research. Connecting text must be provided so that the completed thesis functions as an integrated whole.

There is no specified number of manuscripts or articles required for a Master's or a Doctoral thesis, nor is prior publication or acceptance for publication of the manuscripts a requirement. In the case of multiple-authored articles, the student must be the primary author. Multiple-authored articles cannot be used in more than one thesis. In the case of students who have worked collaboratively on projects, it may be preferable for both students to write a standard format thesis, identifying individual contributions."

For this thesis I have followed the McGill requirements for thesis preparation.

CONTRIBUTION OF AUTHORS

As an MSc candidate and first author on the manuscript, I was responsible for all of the data collection, the initial analysis, synthesis and interpretation of the data, as well as writing the outline and first draft of both the thesis and the article. The overall concept of the research was developed with my supervisor Dr. Anne Andermann and the members of the thesis committee Professor Neil Andersson, Professor Ronald Labonte and Dr. Ellen Rosenberg. The original protocol for the online survey and in-depth interviews was designed by my supervisor, and at subsequent thesis committee meetings, it was decided to add additional components to the mixed methods study including the focus groups to determine the barriers to adopting a social determinants of health approach in clinical practice and the key informant interviews to identify organizational levers to support health workers in taking on such an approach. Dr. Anne Andermann, Professor Neil Andersson, Professor Ronald Labonte and Dr. Ellen Rosenberg provided their guidance to plan the thesis (i.e. thesis by manuscript, approval of the outline), as well as providing feedback on draft versions of both the thesis and the article for submission to a peer-review journal. All authors have approved the final version of the thesis and article. None of the authors have any conflicts of interests to report.

ABBREVIATIONS

CLEAR	Community Links Evidence to Action Research
CMA	Canadian Medical Association
CMAJ	Canadian Medical Association Journal
eCHAT	electronic Case-finding and Help Assessment Tool
HEPP	Health Equity Prevention Primer (HEPP)
MDGs	Millennium Development Goals
SDH	Social Determinants of Health
WHO	World Health Organization

1. CONTEXT

1.1 Introduction

1.1.1 Social determinants of health and the social gradient

Social determinants of health (SDH) are the social, economic and political factors which play a significant role in determining the health of individuals and populations.¹ The inequities in a population's health status are proportionately related to inequities in social status. It is now widely recognized that there exists a social gradient whereby people in richer and more educated socioeconomic groups enjoy a better quality of life and longer life expectancies than people in poorer and less educated socioeconomic groups.^{2, 3} According to the World Health Organization (WHO), life expectancy varies greatly worldwide with a gap in life expectancy between the most developed and least developed countries spanning almost 40 years. For instance, a child born in Japan or Sweden may live more than 80 years, and in Brazil 72 years, whereas a child born in some African countries can expect to live less than 50 years.⁴ Research based on international comparisons between countries, as well as comparing different socioeconomic groups within countries, consistently demonstrates a strong association between inequities in socioeconomic status and inequities in health.^{5, 6, 7, 8, 9, 10, 11}

This association between health and wealth is not only true for life expectancy, but also for the prevalence of disease and disability where there exists an inverse correlation (i.e. the higher the socioeconomic status the lower the rates of disease and disability). For instance, it was reported that among European men over 80 years of age the prevalence of long term disabilities was lower in the higher educated group than in the lower educated group (40.2% vs 58.8%).¹² Similarly in the United States, people with the lowest income and the least level of education were found to have a higher burden of health problems.¹³ A recent study in Bangladesh also indicated that middle class or people from wealthier economic backgrounds are less likely to report disabilities compared to families with poor socioeconomic status.¹⁴ Thus, people from poorer backgrounds are at greater risk of illness and mortality at an early age.

1.1.2 Social determinants of health in Canada

One might assume that SDH only play an important role in poorer countries where there are dire living conditions and large proportions of the population live from subsistence farming or in

sprawling urban slums. However, this is not the case. The literature has shown that wide disparities in health also exist among Canadians.¹⁵ These health inequities have a profound impact on the health of Canadians and also on the provision of health services.¹⁶ SDH such as income, education, gender, Aboriginal status, ethnicity, culture and immigrant status are key factors in determining the health of Canadians.^{17, 18} The *Second Report on the Health of Canadians* reported that 73% of Canadians in the higher income group rated their health as 'very good' or 'excellent' versus 47% of Canadians in the lower income group.^{19, 20} Similarly, higher income Canadians experienced greater levels of control and social support,²¹ and better levels of self-assessed health.²²

Research on health inequities in Canada has shown that most of the common chronic diseases including heart disease and mental illness follow a social gradient.^{23, 24, 25} People with lower socioeconomic status are 1.4 times more likely to have a chronic disease, and 1.9 times more likely to be hospitalized for care of that disease.²⁶ It was also reported that the number of visits to general practitioners, mental health care providers and health services in general, was higher for Canadians with low incomes.²⁷ In 1996, poverty accounted for 24% of potential years of life lost (PYLL) in Canada, second only to neoplasms which accounted for 30% of PYLL, but greater than all injuries and circulatory diseases combined.¹⁵ In addition, chronic diseases have major economic implications and account for 67% of all direct health care costs and 60% of total indirect related costs.²⁸ It is estimated that in 2015, a chronic disease like diabetes will cost Canadians approximately \$14 billion each year, and this cost will increase by an additional \$2 billion over the next five years.²⁹

Therefore, it is no longer a question as to whether inequities in health exist, since it has been well demonstrated that such inequities certainly do exist, rather the key questions are to better understand why such inequities exist and what can be done to improve health, particularly for those who are most vulnerable.

1.1.3 Taking action to promote health equity

Following on from the Commission on Macroeconomics and Health, in 2005, the World Health Organization (WHO) set up a Commission on the Social Determinants of Health which published a final report entitled *Closing the Gap in a Generation* in 2008.⁴ Since that time, there have been a growing number of reports published encouraging primary health care providers to play a greater role in addressing the social causes of poor health. The report of the Consortium for the European Review of Social Determinants of Health and the Health Divide also recommended the need for action to address the social determinants of health, in wider social and economic spheres.³⁰ This will promote health equity and protect future generations.

A health system is considered a key determinant of a population's health and can play a significant role in reducing health disparities by addressing the social determinants of health of disadvantaged individuals and groups.³¹ However, the health sector focuses more on traditional strategies of diagnosis and treatment of diseases. Thus, health care workers are more inclined to treat the physical symptoms of patients,³² rather than addressing the underlying root causes of the health problems. This practice leads to repeat visits to health facilities since patients remain in the same social situations and living conditions as before which continue to threaten their health and well-being.

One of the four principles of family medicine in Canada is service to the community.³³ Family physicians have the opportunity to identify and address the social determinants of health at patient and population levels.^{34, 35, 36} While many family physicians understand the impact of social determinants of health on their patients' lives, they need more guidance and training on how to address these issues in a systematic way.³⁷

A number of published tools and approaches have been proposed to reduce health inequities by the public health and health sectors in Canada.^{38, 39, 40, 41} Most of these are aimed at the level of health organizations, public health programs and larger community action. In terms of support for frontline health workers in clinical practice, there is a growing literature for this audience in particular with publications that tend to fall into one of two categories. First there are documents and position statements that encourage a social determinants of health approach, but the content

is rather broad and general without providing specific tools or decision aids that can be used in day-to-day clinical practice.^{42, 43}, Then, there are more specific clinical tools and decision-aids, which mostly focus on a single aspect of vulnerability, such as low income,^{44, 45} food insecurity⁴⁶ and ethnicity,^{47, 48} or on specific populations such as homeless persons⁴⁹ or immigrants and refugees.⁵⁰ Moreover, all of these documents tend to focus on supporting disadvantaged patients in high income country settings. To our knowledge, there are no clinical decision aids or practice guidelines that incorporate a wide range of overlapping vulnerabilities to address the clinical reality found in practice. Nor are there tools that include a way of mapping resources specific to the local context, which is also a key ingredient in ensuring that frontline health workers know how and where to find the right support networks for their patients within their local setting.

1.2 Background

1.2.1 The CLEAR Collaboration

The CLEAR Collaboration was established in 2010 with the goal of strengthening the capacity of community-based primary health care workers to help tackle the social determinants of health, particularly in low and middle income countries.⁵¹ The first phase of this work involved conducting research in Brazil, Bangladesh, Pakistan and Niger to better understand what are the needs of vulnerable groups, how frontline health workers view their role in terms of helping their patients to address the social causes of poor health, and what strategies do health workers already use in practice or should use more often to support vulnerable patients.

1.2.2 Supporting vulnerable groups

Initially, the focus of this work was on child labourers who are a particularly vulnerable group at the core of the intergenerational transfer of health inequities. Children who have fragile family situations and therefore work in hazardous labour to support themselves often do not complete their education and then have fewer employment opportunities as adults leading to even less ability to support their own children in having a good start in life.⁵² However, following on from the preliminary results of the research, the scope of the work was broadened to include a much wider range of vulnerable groups, since even children who do not work can still suffer abuse and harm, and there are many overlapping vulnerabilities within the population such that everyone may need support in some area or other, even those who are wealthy (e.g. a woman who suffers

from intimate partner violence). Thus, it was considered that there needed to be a way of helping frontline health workers deal with multiple kinds of vulnerabilities in a wide variety of patient groups, to better reflect the reality they face in the clinical setting and to ensure that this becomes a part of their routine practice.

1.2.3 The CLEAR toolkit

The CLEAR toolkit (Appendix 1.1) is an evidence-informed clinical decision-aid developed by an international collaboration of researchers and policy makers to provide primary health care workers with practical skills on how to take a broader view when treating patients. The toolkit was developed through a combination of literature reviews, primary research with vulnerable groups and their health providers, and multiple rounds of expert feedback. The toolkit guides frontline health workers in: a) Treating the immediate health problem, b) Asking about underlying social problems, c) Referring to local social support services, and d) Advocating for more supportive environments.

1.2.4 Pre-piloting the CLEAR toolkit as part of a larger research programme

As part of a larger global health research programme, the aim of this study was to determine whether a clinical decision aid designed to help frontline health workers ask about and act upon the social determinants of health could be used locally in Montreal, Canada in a large family medicine practice serving a highly ethnically diverse inner-city population.

1.3 Literature review

1.3.1 Social determinants of health

The World Health Organization defines the social determinants of health (SDH) as the circumstances in which people are born, develop, live and age.⁵³ The social determinants of health are also considered as a concept that can shape the health of individuals and populations and have been described as "causes of the causes" of health (or ill health).^{8, 32, 54} It is widely recognized that the social determinants of health are associated with the development of multiple communicable^{55, 56, 57} and non-communicable diseases.^{6, 58, 59}

Researchers suggest that factors such as income and income distribution, early childhood development, education, housing, food security, employment and social support are associated with health outcomes and can interact with one another.^{43, 60} The distribution of these factors can therefore help to explain the differences in health distribution between different socioeconomic groups.^{60, 61}

Inequities in health are also studied and documented across different groups of people including: income groups,^{5, 62} social classes,^{63, 64} racial or ethnic groups,⁶⁵ and educational attainment or occupation.^{66, 67, 68, 69, 70} People who are socially disadvantaged are reported to have worse health, reduced access to healthcare and shorter life spans.⁷¹

The major heath disparities that exist in Canada are differentially distributed among specific populations (e.g. Aboriginal people) and by gender, ethnicity,⁷² educational attainment and income.³¹ Research has shown that income is an important social determinant of health. Low socioeconomic status is associated with increased adult morbidity and morbidity from causes including diabetes, mental illness, stroke, cardiovascular disease, injuries and homicide.¹⁵ In 2010, chronic diseases accounted for 88% of all deaths in Canada.^{73, 74} Socioeconomic disparities in mortality for both all-cause mortality and for most specific causes of death are still of major concern in Canada.¹⁵ A recent study also indicated the existence of health disparities between Canadian health regions along income and education dimensions.⁷⁵ The authors reported that regions with higher average income have lower mortality rates and better health.

1.3.2 Improving health through action on the social determinants of health

Literature suggests that approximately 15% of population health is determined by biology and genetics, 10% by physical environments, 25% by the actions of the health care system and 50% by our social and economic environments.^{43, 76} It is evident from the literature that improvements in the conditions in which people are born, grow, live, and work can result in significant health gains of the population,^{7, 30, 77} particularly for disadvantaged groups.⁷⁸ Good health is widely acknowledged as both a driver and beneficiary of economic growth and development.⁷⁹ Available evidence also suggest that improved access to adequate medical coverage is not enough to improve the overall health of patients, as most health problems have

already developed for a long time before people seek medical care, and this care generally does not intervene on the root causes.^{80, 81}

In 1974, the Canadian Minister of National Health and Welfare, Marc Lalonde, presented a biopsychosocial model of health and suggested that health care services were not the most important determinants of health.⁸² Similarly the Alma-Ata Declaration of 1978 and the Ottawa Charter for Health Promotion in 1986 emphasized that addressing health inequities required an approach that extended beyond the health sector.^{83, 84}

It has been documented that the reasons underlying the slow progress in achieving global health and development goals, including the Millennium Development Goals (MDGs), is related to the failure to adequately address the social determinants of health.⁸⁵ Looking to the future, there is a great deal of thought going into the next steps in the post-MDG world, and a framework for the sustainable development of health beyond the MDGs has been proposed which places a much greater emphasis on addressing the social determinants of health in the post-2015 agenda. In October of 2011, the World Conference on Social Determinants of Health focused the attention of government ministers, policy makers and health leaders on the importance of taking action on social determinants of health to reduce health inequities between and within countries.⁸⁶ Furthermore, tackling social determinants of health is recognized as priority area of work in the WHO general programme of work 2014-2019.⁸⁷

To promote health equity at the global level, the final report of the Commission on the Social Determinants of Health presented three overarching recommendations: (1) improve the conditions of daily life, (2) tackle the inequitable distribution of power, money and resources, and (3) measure and understand the problem and assess the impact of action.⁴ These recommendations are intended to guide governments, policy makers, global health institutions and civil society to develop an integrated and comprehensive mechanism to address the social determinants of health and promote health. However, in order to measure and understand the problem and to assess the impact of action; the Commission recommended three areas of action: a) Ensure that routine monitoring systems for health equity and social determinants of health are in place, locally, nationally, and internationally, b) invest in generating and sharing new evidence

on the ways in which social determinants influence population health and health equity and on the effectiveness of measures to reduce health inequities through action on the social determinants, and c) Provide training on the social determinants of health to policy actors, stakeholders, and practitioners, and invest in raising public awareness.⁴ One of these actions is the promotion of education and training of health workers to enable them to play a key role in promoting health by addressing social determinants of health.^{88, 89}

1.3.3 The role of health workers in taking action on the social determinants of health

In the *World Health Report* of 2000, health systems are described as comprising all the organizations, institutions and resources that are devoted to producing health actions.⁹⁰ Health systems have the important responsibility of taking care of people throughout their life span, and play a vital role for the healthy development of individuals, families and societies everywhere. The role of health workers is central for the effective functioning of any health system. The *World Health Report* of 2006 defines health workers as "all people engaged in actions whose primary intent is to enhance health."⁹¹ Frontline health care workers are the first point of contact for patients within the health care system. Frontline health workers include nurses, doctors, community health workers, midwives and local pharmacists who provide outreach or serve in local community clinics or health centres close to people in need.⁹² These frontline health workers can not only act as providers of medical care to patients, but can also support them in dealing with underlying social issues and can advocate for social justice to ensure the well-being of these vulnerable groups.^{93, 94} Published studies in different regions indicate that health care workers are important resources for their communities and can connect medically underserved populations with the health and social services system.^{95, 96}

Currently frontline health care workers are trained to focus mainly on providing medical treatment to patients and counseling patients to make life style changes. However, good health cannot be attained only through the treatment of disease after it has already occurred or making patients solely responsible for preventing any further occurrences of illness.⁹⁷ Indeed, many of the underlying factors that are responsible for recurrent health problems are structurally embedded in the local environments where people live and are beyond the control of individual patients (e.g. violence in the community, prohibitive cost of healthy foods, lack of safe spaces for

physical activity).⁹⁸ Thus many frontline health care workers feel powerless in the face of the social and economic challenges that their patients encounter,⁹⁹ and are unsure of what actions are required to improve the health of their patients.

1.3.3.1 Physician perceptions on the social determinants of health

A review of an online survey conducted in 2011 with 1,000 American physicians revealed that four out of five physicians (87%) said that unmet social needs are directly related to health but only one in five physicians surveyed (20%) feel confident in addressing the social causes of poor health of their patients.¹⁰⁰ This study reported that physicians consider that they do not have sufficient time and staff support to adequately address social needs of patients.

Another pilot study conducted by the Canadian Medical Association interviewed 32 physicians to explore the practical actions that physicians can take to help address the health inequities within their practice and communities. Among the most common barriers to taking action identified by physicians interviewed include: time constraints to address the social issues, lack of knowledge and skills to undertake this type of work, and lack of evidence and research on effective interventions for physicians.¹⁰¹ This indicates that health care providers need appropriate training and tools to improve their skills in this area.

In a recent cross-sectional multicenter survey conducted in Western Switzerland by Chatelard *et al*,¹⁰² patient social status as perceived by general practitioners was compared to social status as measured using the MacArthur Scale of Subjective Social Status. General practitioners considered material and social deprivation, health status, sources of income, and level of education to evaluate their patient's social status; and gave a higher estimation of patient social status as compared to the subjective scores of patients. This study also indicated that one in five general practitioners did not ask patients about consultation costs and one in ten general practitioners thought that it was not their role to address the deprivation issues of patients. Yet, it is evident from the literature that tackling the social determinants of health can lead to improvements in health and reductions in health disparities.⁸¹ Thus the key is to learn how health workers can help to achieve this in practice.

1.3.3.2 Practices of physicians to address social determinants of health

Willems *et al*,³⁷ conducted a qualitative study (21 semi-structured interviews) with general practitioners to explore their perceptions of poverty and the ways in which general practitioners in primary care deal with the problem of poverty among their patients to improve patient health. This study identified multiple approaches that health workers use to support deprived patients in practice, including showing empathy for the patient's living conditions, reducing or waiving fees, providing free medication samples when possible, and more coordinated referral to medical and social caregivers. In this way, the goal is to deal with the different dimensions of poverty: socioeconomic aspects, psychological and individual characteristics, and socio-cultural factors.

Loignon *et al.*,¹⁰³ conducted in-depth semi-structured interviews with 35 physicians working in Montreal to identify practices of general practitioners to deliver appropriate care to patients of low socioeconomic status. The general practitioners of this study used three specific skills in caring for these patients: building a personal connection to overcome social distance, aligning medical expectations with patient's social vulnerability and working collaboratively to empower patients.

In Europe, Dr. Julian Tudor Hart used "the anticipatory care model" to improve the health of vulnerable patients in a small mining community by increasing engagement with patients as coproducer of health, proactive practice-based case finding and follow-up, an emphasis on the delivery of medical services to the entire population of his practice area, and attention to a long-term relationship between the patient and the provider.¹⁰⁴ This study found a reduction in blood pressure levels among hypertensive patients and in smoking rates among the study population as compared to a similar neighbouring community.^{105, 106}

1.3.4 Training health care workers how to act on the social determinants of health

1.3.4.1 Education and training of medical students, residents and physicians

Until now, there has been very little empirical research looking at how to train medical students, residents, and physicians to address the social determinants of health of their patients.¹⁰⁷ There are some published studies which focused on teaching social determinants of health to medical students and pediatric interns, as well as internal medicine residents.^{108, 109, 110}

For instance, O'Brien *et al*¹¹¹ presented a 9-month course on social determinants of health to medical students and other health professional students. This course was designed to help students identify social factors that influence health and the potential role of health professionals to improve social conditions through multidisciplinary action. Program evaluation consisted of qualitative reports collected through written reflection and a survey completed by students at the end of the program. The three main themes reported by students were as follows: 1) the program has provided them their first exposure to social determinants of health; 2) they have learned more about the health challenges facing vulnerable population through this program than through other curricular efforts in their medical schools, and 3) this program has shaped their desire to serve vulnerable communities in their medical training and beyond.

In a non-randomized mixed method study conducted by Melissa Klein *et al*, a new curriculum introduced pediatric interns to the basic concepts of social determinants of health.¹¹² This study found that interns in the intervention group were more comfortable discussing social determinants of health, felt more knowledgeable about these issues and also regarding community resources. The skills of pediatric interns in terms of documentation of social issues and their clinical practice of referral to a medical-legal partnership also increased. However, it is important to note that in addition to the training, there was also the availability of "in house" resources at the pediatric primary care center including one social worker as well as legal advocates which might have assisted the physicians in enquiring more about social determinants of health. Such resources, while desirable, are often not available nor financially feasible in most clinical settings.

The Canadian Medical Association (CMA) aims to raise awareness among Canadian physicians more broadly on how to address the social determinants of health. Therefore, a Continuing Medical Education (CME) module with a focus on income deprivation was developed in collaboration between the Canadian Medical Association's Health Policy and Research Development Group, Memorial University of Newfoundland as well as subject matter experts.¹¹³ One of the objectives of this course is to improve the learner's ability to talk with patients about sensitive issues such as dealing with poverty.

Service learning involving medical students volunteering with local community groups serving disadvantaged populations is becoming an increasingly important component in undergraduate medical education to teach medical students about the social aspects of medicine. Making the links (MTL) is one example from Saskatchewan that provides medical students with a longitudinal service-learning experience in underserved communities.¹¹⁴ There is also the CHAP program at McGill University¹¹⁵ and a similar program at Université de Montreal¹¹⁶ that provide students with a service learning experience. Faculty in the department of Family and Community Medicine at the University of Toronto in Ontario have begun to use Technology, Entertainment and Design (TED) Talks for teaching social determinants of health concepts to family medicine residents.¹¹⁷ The teachers of the department of Family and Community Medicine developed a series of workshops to cover topics such as: income and social status, housing, food security, gender and women's health, healthy child development and reduction of child mortality, social support networks and social inclusion, education and literacy.

Thus, there are a rapidly growing number of examples of how health care workers can learn about social determinants of health through innovative curricula and online courses. There are also a number of training opportunities in social determinants of health that are not specifically aimed at frontline health workers, but may nonetheless be useful as a form of more advanced training. For instance, the *Health Equity Prevention Primer* (HEPP)³⁸ serves as a web-based training series for public health practitioners and advocates interested in policy advocacy, community change, and multi-sector engagement to achieve health equity. However, beyond general courses or trainings on social determinants, busy frontline health workers need clinically relevant decision aids with specific and practical guidance that is available at the right place and at the right time to better serve their patients.

1.3.4.2 Clinical practice tools for health practitioners

Various clinical screening tools have been developed to assess life style risk factors, mental health issues, and social issues self-reported by patients in primary care settings.^{118, 119, 120} There are also clinical tools for frontline health workers relating to the social determinants of health that focus on specific issues. For example, The Poverty Toolkit⁴⁴ proposes three ways to address

poverty in primary care: (1) screening patients by asking "Do you ever have difficulty in making ends meet at the end of the month?", (2) adjusting medical risks of patients, and (3) intervening with seven simple questions to help patients living in poverty.

Puget Sound Health Alliance developed a toolkit for improving the quality of care for minority populations.⁴⁸ This toolkit discussed case studies to explore challenges encountered in addressing health disparities by organizations in Washington State in the United States. It suggests four key principles to help medical groups, hospitals and other health care providers to address health disparities of patients, which includes: 1) collect and analyze data [of patient's race, ethnicity and primary language], 2) provide interpreter services, 3) deliver culturally competent communication, and 4) engage leaders in addressing health disparities.

Brcic *et al* ²⁵ did a pilot study to field test questions for use as a poverty-case finding tool with a sample of urban and rural primary care patients presenting to four family practices in British Columbia, Canada. The aim of this study was to develop a poverty-case finding tool to assist primary care providers in identifying poverty in clinical practice. This study created a three item case-finding tool including questions about poverty, food and housing security. The three questions are: "Do you have difficulty making ends meet at the end of the month?", "In the past year, was there any day when you or anyone in your family went hungry because you did not have enough money for food?" and "In the last month, have you slept outside, in a shelter, or in a place not meant for sleeping?" In this study, 85% of the participants who were below the poverty line felt that screening for poverty is important and 67% felt comfortable speaking to their family physician about poverty. This study also suggested that asking patients directly about poverty may help identify patients who needs more support in primary care.

Recently, Goodyear-Smith *et al* used eCHAT (an electronic Case-finding and Help Assessment tool) in primary care in New Zealand, which involved providing patients with a touch-screen computer in the waiting room where they would answer questions about various health issues and their responses were then linked directly into their medical record.¹²¹ The questions asked about problem drinking, smoking and other drug use, gambling, exposure to abuse, anxiety, depression, anger control, and physical inactivity, and whether they want help with these issues.

This study used a multi-strand mixed methods study design to collect anonymized responses from the patients, and then conducted semi-structured interviews with the health staff including physicians and nurses. This electronic tool was found to be an efficient, feasible and costeffective tool for systematically screening patients for mental health and lifestyle issues. This intervention assisted providers in the primary care practice setting by helping to initiate sensitive conversations and facilitating the process of shared decision making.

Thus, here again, there are a growing number of clinical screening tools to help health workers identify social challenges among their patients. However, these tools are often focused on a limited aspect of vulnerability (e.g. minority status, poverty, mental health), and do not necessarily help health workers know what to do or where to refer patients to get help with the underlying social causes of poor health.

1.3.4.3 Tools for supporting wider social action to create supportive environments

While it is important to support individual patients in addressing the social determinants of health, that is only part of the solution, and there also needs to be concomitant wider social action to create more supportive environments for health. Training guides and manuals to raise awareness of health equity and social determinants of health exist not only for frontline health professionals to use in direct patient care in clinical practice settings, but also for policy makers, public health practitioners and community mobilizers to integrate a social determinants approach into policy-making and community development.¹²²

A Rapid Assessment Tool for Small-Area Health Needs was developed by researchers at St. Michael's Hospital, Toronto, Canada.⁴¹ This tool is a questionnaire designed to quickly assess the general and mental health status of neighbourhood residents, aged 18 years or over. This tool provides a structured way of asking community residents about income, education, housing, and social support. This tool can be used by decision-makers and service providers, including Local Health Integration Networks (LHINs), community health centres (CHC), community groups, and other non-profit service providers to be administered in person and will take thirty minutes to complete it. The objective of this methodology is to support community-based service providers to use evidence to address local health needs and find appropriate solutions. In 2007-2008 this

tool was piloted in four neighbourhoods of Toronto, Canada. Similarly, the National Collaborating Centre for Determinants of Health (NCCDH) developed a reference guide for public health practitioners to support them in adopting or revising a community engagement strategy within a broader health equity and social determinants of health strategy.¹²³

Harris *et al* conducted a two-step mixed method study in Australia to identify the work force needs to serve disadvantaged communities.¹²⁴ The first step involved developing a generic workforce needs assessment tool which was applied in a local area using focus groups, key stakeholder interviews and staff surveys. The next step was using this information to identify the competencies needed by the public health workforce to work effectively in disadvantaged communities. It was reported that the "public health workforce involved in this study has a high level of understanding of the relationship between the social determinants and health. However there was a lack of skill in identifying and undertaking effective intervention."

A Health in All Policies (HiAP) Training Manual was developed by the World Health Organization for policy makers, programme managers, and other health professionals.¹²⁵ This training manual includes 12 modules consisting of interactive lectures and group activities. The Health in All Policies Manual uses approaches to improve the accountability of policy makers for health impacts at all levels of policy-making and emphasizes the consequences of public policies on health systems, determinants of health, and well-being.

PAHO/WHO also developed a self-instructional course on social determinants of health and public policy.¹²⁶ The objective of this module is to raise awareness about the social determinants of health to reduce health inequities and encourage changes in the political agenda. The target audience for this module are WHO/PAHO staff members and officials in Health Ministries of all countries who are involved in taking action on the social determinants of health.

1.3.5 Summary of the literature review

The social determinants of health help to explain why some people are healthy and others not. Health disparities exist not only between regions, but between countries and within countries.^{6, 7, 28} Lalonde's landmark report in 1974 emphasized that the major improvements in health would result primarily from improvements in lifestyle, changes to the physical and social environment, and through improvements in our knowledge of human biology.⁸², ¹²⁷ Despite Lalonde's manifesto, it remains difficult for frontline health workers to incorporate knowledge about socioeconomic issues into their clinical practice. One of the indicators of health care system improvement selected by the Health Care Transformation Board Working Group of the Canadian Medical Association (CMA) to gauge progress in the Canadian health care system is an increased awareness of the impact of social determinants on health status as well as policies in place to reduce inequities.¹²⁸ While there exists a growing number of publications with broader guidance on how to address social determinants, or highly specific screening tools applicable to a limited issue or context, few, if any, of the clinical practice tools available deal with multiple vulnerabilities simultaneously, have a "step-by-step" approach to address health disparities, and also have built-in mechanisms for adapting this guidance to make it relevant and meaningful in the local clinical context. Thus, the CLEAR toolkit was pre-piloted in a large family medicine teaching centre to assess its usefulness as a clinical decision aid for frontline health workers in the local context of Côte-des-Neiges, Quebec.

1.4 Objectives and research questions

1.4.1 Objectives

The objectives of this pre-pilot study are as follows:

- To determine whether frontline health workers find the CLEAR toolkit to be useful to address the social causes of poor health of their patients
- To elicit what changes should be made to the toolkit to make it even more useful for frontline health workers to use with their patients
- To understand how the toolkit should be delivered and how it can be adapted to local settings
- To determine why some health workers are "early adopters" of a social determinants of health approach and why others are "late adopters / non-adopters" and how to encourage the latter group to use such an approach
- To better understand the kind of organizational support available to frontline health workers to address the social causes of poor health of their patients, and the currently unavailable support that would help health workers

1.4.2 Research Questions

The research questions for this study are as follows:

- Do frontline health workers perceive that it is their role to help address the social determinants of health of individual patients and the broader community?
- Are health workers already asking their patients about the social causes of poor health, and if so, how do they ask?
- What do health workers do to support patients who are faced with various vulnerabilities?
- Do health workers find that the CLEAR toolkit would be useful to address the social causes of poor health of their patients?
- How could the toolkit be better adapted to health workers working in Côte-des-Neiges to make it even more effective in their clinical practice?
- What organizational supports would help to change the practice of health workers and encourage a social determinants of health approach integrated into clinical care?

2. MANUSCRIPT

2.1 Preface to the manuscript

We prepared this article for publication in the Canadian Medical Association Journal (CMAJ), to present the results of piloting a training package developed to train frontline health workers of low and middle income countries on how to address the underlying causes of poor health of their patients. The objective of this article was to understand how useful will be the CLEAR toolkit to use by the general practitioners in their clinical practice to address the social determinants of health and how this toolkit could be further improved to use in local context in Montreal, Canada.

A multi-method study conducted to understand the health workers current practices to address social determinants of health and explore why and how the social determinants of health approach of this training package is useful in their everyday practice.

2.2 Title page

Family doctors who ask about social determinants of health are more likely to report helping their patients: A mixed methods study

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2.3 Manuscript abstract

Background

The CLEAR toolkit is a clinical decision-aid that encourages frontline health workers to ask their patients about the social determinants of health, to refer them to local support resources as appropriate, and to advocate for wider social change to improve health. The study objective was to assess the feasibility of implementing this toolkit in a large family medicine teaching centre serving one of the most ethnically diverse populations in Canada.

Methods

A multi-method approach included (i) an online survey of frontline health workers to assess current practices and collect feedback on the toolkit, (ii) in-depth interviews to understand why they consider certain patients to be more vulnerable and how to help such patients, (iii) focus groups to explore barriers to asking about social determinants of health, and (iv) key informant interviews with high-level administrators to identify organizational levers for promoting widespread change in health workers' practices.

Results

In total, 50 health workers responded to the survey (50%), 15 completed in-depth interviews, 14 joined one of two focus groups, and 3 participated in key informant interviews. Most respondents (32/37, 86.5%) considered the toolkit helpful for initiating dialogue around social challenges and better supporting patients in clinical practice. While high-level administrators considered asking about social determinants of health to be part of the mandate of health workers, barriers perceived by frontline clinicians included a lack of formal training, role models, knowledge of local referral resources and time. Health workers with specific ways of asking patients about their social challenges were more likely to report having helped their patients as compared to those who did not know how to ask (93.7% vs. 52.9%; p=0.003).

Interpretation

Most health workers in our specific setting recognize the importance of addressing the social determinants of health, yet they are often reluctant to do so since they are unsure how to ask and

how they can help. The CLEAR toolkit integrates asking about social determinants of health into clinical practice.

2.4 Introduction

Good health cannot be achieved by focusing solely on treating disease.⁷⁹ It is well known that there are systematic, avoidable and unjust differences in health between countries, with variations in life expectancy up to 40 years between the richest and poorest nations.^{60, 61, 71, 129} Even within rich (and poor) countries there are major health gaps among specific population subgroups such as young single mothers, Indigenous persons, immigrants and refugees, and persons with mental health problems.^{6, 7, 76} Some studies have shown that homeless persons in Canada have a life expectancy that is 40 years less than the population average.^{130, 131} These differences in health status are attributed to social determinants of health, defined by the World Health Organization as "the circumstances in which people are born, develop, live and age." ^{4, 43}

There is increasing recognition that, to improve health, we need to develop strategies for increasing health equity (reducing avoidable health differences amongst different population groups). While education, labour, law enforcement and other sectors also need to be involved in policy and community development to create supportive environments for health,¹³² the health sector has an important role to play.

Training health workers to address the social determinants of health is one of the key principles for promoting more equitable health outcomes for patients, families and communities.⁴ This training, however, is only starting to be integrated in medical education^{108, 113} and in primary care practice. Despite a growing literature on the need for training, ^{120, 121, 122, 124} few screening tools are available to assist clinicians in assessing patients' self-reported vulnerabilities like precarious employment, housing problems, difficulties accessing child care, or domestic violence. Most available clinical practice tools look only at a single facet of vulnerability such as income or ethnicity.^{38, 39, 42, 44, 45, 48, 102} Vulnerabilities have a tendency to cluster, however, and different vulnerabilities may require different pathways for finding solutions. We need a more nuanced and multifaceted approach.

Established in 2010, an international collaboration of researchers and policy-makers joined together with the goal of creating a clinical decision aid to help frontline health workers tackle the social determinants of health, particularly in low and middle income countries.⁵¹ The CLEAR toolkit guides health workers in: a) Treating the immediate health problem, b) Asking about underlying social problems, c) Referring to local social support resources, and d) Advocating for more supportive environments.

This study set out to determine whether health workers in a large family medicine practice serving a highly ethnically diverse inner city population would consider such a tool to be practical and useful in supporting their patients and promoting larger social change.

2.5 Methods

2.5.1 Study setting and design

We piloted the toolkit at St. Mary's Hospital Family Medicine Centre, a community-based, university-affiliated hospital teaching unit located in an inner city neighbourhood in Montreal, Canada, with a very high proportion of newly-arrived immigrants and refugees. A multi-method study ^{133, 134, 135} explored health workers' views about the usability of the toolkit in their clinical practice, as well as facilitators and barriers to adopting a more meaningful approach to social determinants of health (Table 2.1). The study included a self-completion online survey and indepth interviews with health workers, focus groups to further explore facilitators and barriers, and key informant interviews with senior health administrators to assess openness to institutional system change to support a social determinants approach. We obtained ethics approval prior to commencing from the Institutional Review Board (IRB) of the St. Mary's Research Centre, Montreal, QC, Canada (Appendix 2.1).
Method	Rationale for using this method
Survey questionnaire	To gather data from health workers about their practices of caring for disadvantaged populations, their opinion about using the toolkit and suggestions about improving the training package.
In-depth interviews	To conduct intensive individual interviews with a wide range of health workers to explore their in-depth knowledge, views, understandings, experience about social determinants of health and perspective on use of training package in their everyday practice.
Focus groups	Using group dynamics/discussion approach to understand and explore the opinion and emerging thinking of health workers in terms of why they do or do not use a social determinants of health approach in their clinical practice. ¹³⁷
Key informant interviews	To conduct in-depth interviews with key health administrators to explore about the barriers and facilitators to follow the social determinants of health approach within their specific organizational context. ¹³⁸ These senior health workers/high level administrators are well connected and informed senior health experts and know what is going on in the community. ¹³⁹ These experienced high level administrators could provide insight into sensitive issues related to using a social determinants of health approach and guide future implementation.

 Table 2.1 Data collection methods used and rationale

2.5.2 Participants

We contacted family physicians, family medicine residents, nurses, and nurse practitioners currently working at the Family Medicine Centre who were on the email mailing list of the center. We also conducted key informant interviews with a purposive sample of senior health administrators. We excluded non-clinical staff from the study (e.g. secretaries, medical records clerks, orderlies).

2.5.3 Sample size

There are around 100 health workers at the family medicine centre (40 family doctors, 50 residents, 8 nurses and 2 nurse practitioners); we sent the questionnaire to all. We continued the in-depth interviews until data saturation was reached (15 in-depth interviews). We conducted two focus groups of 6-8 health workers in each group, and three key informant interviews with senior health administrators.

2.5.4 Data collection

2.5.4.1 Survey

We sent an email invitation to the 100 frontline health workers with a PDF of the draft toolkit and a link to an online self-completion survey (Appendix 2.2 and 2.3). We sent two reminders 5 and 10 days after the initial mailing, and left a paper version of the questionnaire in their mailboxes. Participation was voluntary and responses were anonymous. The online questionnaire incorporated consent to participate. Participants read the draft of the toolkit and then responded to the survey. The survey questions covered seven domains: characteristics of the health workers, experience in caring for vulnerable and disadvantaged patients, first impressions of the CLEAR toolkit, willingness to use the toolkit, suggestions for improvements, how best to distribute the toolkit and recommendations for reinforcing a social determinants approach in clinical practice. The final page of the survey asked if the respondent would further participate in a 20 to 30 minute individual interview. The online questionnaire and semi-structured interview guide had similar contents except that the interview also probed why respondents answered in the way they did and how the toolkit might be improved.

2.5.4.2 Interviews and focus groups

We used snowball sampling¹⁴⁰ to recruit participants for all interviews and focus groups. We attempted to recruit health workers representing different ages, gender, and years since graduation. After participants completed a consent form (Appendix 2.4), an interviewer using a semi-structured guide initiated the discussion (Appendix 2.5). We recruited focus group participants following a routine weekly academic half day educational program. We asked each participant whether he or she agreed with the statement that "every patient visit is an opportunity to discuss their underlying social challenges." Based on their answers, about half of the

participants joined one of two groups -- those who agreed unequivocally and those who disagreed, were not entirely in agreement, or were unsure (Appendix 2.6 and 2.7). We recruited participants for the key informant interviews from a sample of administrators with decision-making power within St Mary's Hospital, the Family Medicine Centre and the McGill Family Medicine Residency Training Program (Appendix 2.8 and 2.9).

2.5.5 Data analysis

2.5.5.1 Survey

Survey questionnaire data were tabulated and analyzed using built-in basic summary statistics capabilities of the online data collection software.¹⁴¹ Statistical analysis of the downloaded data relied on SAS 9.3 software. Statistical significance was assessed at an alpha level of 0.05. Open ended responses were coded into categories reviewed by two independent researchers (AN, AA) to check reliability.

2.5.5.2 Interviews and focus groups

We audiotaped and transcribed verbatim all interviews and focus groups. Data analysis proceeded according to thematic analysis as described in Crabtree and Miller.¹⁴² We created an initial deductive coding frame consisting of broad categories based on the research questions. Within each of these categories, two independent researchers (AN, AA) identified and coded themes and issues that emerged within the data. The researchers compared their coding, resolved disagreements and then coded all remaining transcripts of interviews, focus groups and key informant interviews.

2.6 Results

Of the 100 health workers invited to participate in the survey, 50 responded (n=50/100, 50%), though the response rate varied for different questions. The majority of participants were staff physicians [n=13/33, 39.4%] or family medicine residents [n=15/33, 45.4%]. Over two thirds were female [n=24/33, 72.7%] and under 40 years of age [n=23/33, 69.6%], and one quarter over 50 years [n=9/33, 27.3%]. Almost half were in training [n=15/33, 45.4%], a third completed their training more than 10 years ago [n=11/33, 33.3%] and the remainder were recent graduates. The

results of this study are presented here by integrating the responses to the survey, the 15 interviews, the 2 focus groups and the 3 key informant interviews around 5 main themes:

2.6.1 Why do health workers consider certain patients to be more vulnerable?

Almost all survey respondents reported ever having been involved in caring for a wide range of vulnerable patients (Figure 2.1) including persons with mental health problems [n=46/50, 92.0%], recent immigrants and refugees [n=44/50, 88.0%], people living in poverty [n=41/50, 82.0%], single parents [n=39/50, 78.0%], persons with substance abuse and addictions problems [n=39/50, 78.0%], and isolated seniors [n=38/50, 76.0%].

Figure 2.1 Health care workers who have ever cared for vulnerable patients in clinical practice



Health care workers were asked to describe one vulnerable patient to whom they provided care. Often, these patients had multiple overlapping vulnerabilities including unemployment, financial problems, legal problems, child care challenges, addictions, mental health problems, abusive relationships and discrimination (Table 2.2).

Table 2.2 Examples of vulnerable patients cared for by family doctors and trainees

- Male with multiple health problems, being sued by government to pay off debt, has three children and a wife who is pregnant.
- Recent immigrant couple, no job, a three-year old daughter with Down Syndrome and no family support.
- Unemployed gentleman about 50 years old, was admitted to hospital with hypertensive crisis, no family living in the city, limited number of friends, socially isolated. Most of his income goes to rent and medication, little money left to eat, goes to a local organisation to eat one meal a day for a nominal fee.
- Patient of Inuit origin who suffers from alcoholism and is also homeless was admitted for a perforated gastric ulcer, but also suffered from chronic non-healing wounds and heart failure.
- Newly arrived immigrant who barely speaks English, no French at all, who is living in poverty and doesn't have enough money to pay for the medication he needs.
- Elderly man with psychosis who refuses CLSC visits at home and who has no other social contact. He suffers from painful neuropathy and distrusts medical treatment and doctors in general.
- Urbanized Cree woman, widow of abusive immigrant alcoholic, with adult children in unstable social situations (abusive relationships, addictions, suicide).
- Divorced mom, 2 kids (one with autism), trying to earn money and go to school.

During the in-depth interviews, respondents explained the reasons why certain groups are more vulnerable (Table 2.3) including being unable to navigate the local health system, being a victim of violence, and lacking an adequate social support network. Respondents considered that vulnerable patients often have greater health needs, but if one didn't reach out to these patients and continue to follow closely, they most likely would not get the care they needed. According to one respondent, "If you don't follow them they can get lost in the system... they disappear in the wind. A lot of them could become homeless... so you are there to keep a watchful eye on these people. So at least they know somebody else is watching over them... the fact that they have a link to us, you know, as physicians and nurses, they feel that somebody cares about them and supports them and actually cares for their well-being."

Table 2.3 Factors that make certain patients more vulnerable according to health workers

1) **Being isolated** (whether as a result of advanced age and reduced mobility, due to mental health challenges and social stigma, or being new to the community),

2) **Being unfamiliar with and unable to navigate the local system** (especially for those who speak a different language, believe in different value systems and have different cultural conceptions of health and health care),

3) **Being a victim of violence** (including verbal, physical and sexual violence whether perpetrated by a spouse, a family member or a stranger),

4) Lacking an adequate social support network to face the challenges of day-to-day life (for instance single mothers who don't have someone to help look after their children or new immigrants and refugees who are disconnected from their family),

5) **Having low social capital and living in sub-standard conditions** (such as moving to a new country and no longer having your credentials recognized or valued, being unable to find steady well-paying work, living in poor housing conditions, not having enough money for food and basic necessities).

2.6.2 Are health workers already asking about and taking action on social determinants? Most respondents agree that it is the role of health workers to address the underlying social issues of their patients (n=44/50, 88.0%). According to one respondent, "*I think that patients really trust their doctors, especially their family doctors… they want an interaction with their family doctor to guide them with their problems.*" However, only one third of respondents had specific ways of asking their patients about potentially sensitive topics (Table 2.4) such as poverty, structural racism, food insecurity, family violence and other social conditions that can lead to or exacerbate health problems (n=16/49, 32.6%).

Table 2.4 Examples of how health workers ask patients about social determinants of health

Begin with non-judgemental open-ended questions

- How are you doing?
- How is it going at home?
- How is your family situation?
- Can you tell me about the struggles in your life?
- Are you having difficulties in any particular area?

Followed by direct questioning to better understand the key issues

- **Social isolation**: Are you married or single? With whom do you live with? Is the father of the baby aware of your pregnancy?
- Violence: Do you feel safe at home? Have you ever felt threatened? How do you resolve conflict at home?
- **Food insecurity**: How are you eating? What do you eat? In the past month have you found yourself worrying about how you would put food on the table?
- **Housing problems**: Where do you live? How many rooms do you have? Do you have any problems with mold, cockroaches or mice?
- Unemployment and precarious employment: How are you supporting yourself? How is your work situation? Do you work? What kind of work do you do? Has your recent job change created financial stress?
- **Poverty**: Are you worried about making ends meet at the end of the month? Do you have financial problems? Do you feel able to pay your rent and food? Do you have concerns about being able to afford all the expenses for your future baby?

And assessing social support and existing resource use

- Do you have relatives here?
- Do you have any close friends if you need help?
- Have you ever used a food bank or other community resource?

A key finding of this study (Table 2.5) is that when health workers have specific ways of asking patients about the social causes of poor health almost all of them report having been able to help their patients address these issues, whereas only half of those who do not have ways of asking consider that they have helped their patients [n=15/16, 93.8% vs n=9/17, 52.9%; p=0.003].

Table 2.5 Bivariate association of health workers having specific ways of asking patients about social determinants of health and having taken action to help vulnerable patients (N=47)

Health worker	Health worker h	as taken action			
has specific	to help support vulnerable patients ^b			Total	p-value*
ways of asking	Yes	No	Unsure	N (%)	
patients about	N (%)	N (%)	N (%)		
vulnerability ^a					
Yes	15 (93.8)	0 (0)	1 (6.2)	16 (34.0)	0.003 ^c
No	9 (52.9)	5 (29.4)	3 (17.7)	17 (36.2)	
Unsure	8 (57.1)	0 (0)	6 (42.9)	14 (29.8)	
TOTAL	32 (68.1)	5 (10.6)	10 (21.3)	47 (100.0)	

a, b Missing data for each specific question=1, 2

c Fischer Exact test p-value, *p value<0.05

Indeed, health workers mentioned multiple ways of helping their vulnerable patients including non-judgemental listening, being empathetic and supporting their patients in problem-solving (Table 2.6). According to one respondent, *"The most important thing is to refer them to the right community resources, taking the time to explain how they work and how to access them."*

Table 2.6 What health workers are doing to support their vulnerable patients

Understanding and acknowledging the patient's social situation

- Providing a safe space and being approachable
- Asking about the patient's social context
- Listening with a non-judgemental attitude
- Using the services of a translator as needed
- Finding out what is most important to that person
- Showing empathy and concern about their situation
- Letting them know that I understand their situation
- Normalizing and destigmatizing their situation
- Telling them that they are not alone

Being aware of and referring to resources available in the community

- Asking patients if they are aware of specific programs and resources that can help
- Explore with patients what they can do to help themselves
- Referral to social worker and local community services
- Explaining how these support resources work
- Motivating them in seeking help
- Involving the team nurse in their care
- Showing them that I support them in their choices

Being supportive and following-up over time

- Accommodating patient needs (e.g. not having to miss work to visit the clinic)
- Writing letters to government authorities (e.g. help relative get travel visa to care for newborn)
- Letting them know I am there for anything if they need help
- Following up on their social issues at future visits

Engaging in community level action

- Community involvement and supporting local organizations (e.g. board member, donations)
- Conducting research and publishing articles on vulnerable populations
- Volunteering in clinics that serve specific vulnerable populations (e.g. refugee clinic)
- Outreach programs in the community (e.g. sexual health education in local schools)
- Setting up an NGO or specific clinic for vulnerable groups if one doesn't exist
- Advocacy and activism (e.g. lobbying for policy change)
- Voting for a political party that believes in social justice

2.6.3 When health workers do not ask and do not take action, why not?

The main barriers to asking patients about the social causes of poor health include lack of training, lack of role models, unclear whether this is part of their mandate, and time constraints. One family medicine resident said: *"For me I think it is really a very good idea because I know these things are important, but I don't always know what to do. How do I approach this or that or whatever? I think we got less training about vulnerable populations, and that can be hard."* Another resident stated: *"I know the social issues exist but often I am unsure of what questions to ask to address them or how to integrate them into my interview."*

Nonetheless, a senior administrator considered that this is already part of resident training, though perhaps something that still needs to be developed even further: *"We have encouraged our residents in the past to consider this as part of their career obligations once they practice. And we have also in the past encouraged some of them to do this as a part of resident project."* Another administrator also suggested that senior physicians should be more involved in asking about social issues and to act as role models for their residents.

2.6.4 What is helpful about the CLEAR toolkit and what could be improved?

Most respondents found the toolkit (Figure 2.2) to be clearly written [n=37/37, 100%], easy to understand [n=36/37, 97.3%], relevant to their work [n=33/37, 89.2%], and helpful for them to address the social causes of poor health [n=32/37, 86.5%]. Half agreed that it would change the way they practice [n=18/36, 50.0%] and had inspired them to take on larger social actions related to social determinants of health [n=21/36, 58.3%]. According to one family medicine resident, "Yes, I like the format: the treat, ask, refer, advocate. I think that is very helpful. It is a simplified message and it also says that you are not alone, just because you ask about it does not mean that you are taking it all on your shoulders." Another respondent also appreciated the multi-faceted nature of the toolkit: "the interesting thing about the toolkit is that it is just addressing certain questions... to determine if this person is doing ok. Depending on how they answer the questions then you can identify the areas that need more support. So I find that is critical."



Figure 2.2 Health workers' first impressions of the CLEAR toolkit (n=37)*

* For two questions, n=36

Participants recommended that the toolkit be shortened and simplified and include a list of key referral resources for each social issue (e.g. food insecurity, family violence, etc.), including phone numbers to facilitate the referral process. They also suggested there should be more content on how to influence policy and build community partnerships to create more supportive environments for health, rather than "putting on band-aids" after people are already suffering from complex health and social issues.

2.6.5 What could be the impact of using the toolkit in practice?

Over 80% of respondents agreed that the CLEAR toolkit should be distributed to physicians, nurses and medical residents [n=28/30, 93.3%], as well as to social workers [n=26/30, 86.7%] and outreach workers [n=25/30, 83.3%]. They suggested that widespread use of the toolkit could potentially have multiple impacts (Table 2.7) including improving health worker knowledge of social determinants, changing clinical practice to be more supportive of vulnerable patients, empowering and connecting patients to local resources, improving the health and social situation of patients, and thus reducing "revolving door" medicine and unnecessary ER visits.

Table 2.7 Potential impacts of using the CLEAR toolkit in practice

HEALTH WORKER-RELATED OUTCOMES

Improvement in provider knowledge of social determinants of health Greater frequency of asking patients about underlying social issues during routine patient visits Increased health worker awareness of local support resources Greater empowerment in being able to help patients with complex health and social issues Increased support of vulnerable patients Reduction of avoidance behaviours relating to social issues Increased frequency of follow-up on social issues in future visits Increased engagement in local community advocacy and action

PATIENT-RELATED OUTCOMES

Improvement in social situation Improvement in perceived physical and mental health Reduction in social isolation / Increased social support Greater empowerment and self-efficacy to address social challenges Improvement in patient social capital and community social capital Greater patient satisfaction with care Reduction in losses to follow-up Reduction in "revolving door" problems / unscheduled visits / ER visits Improvement in relationship of trust / patient-doctor relationship

According to one respondent, the impact of the toolkit to support vulnerable patients: "could be measured by the fact that they are still walking into your office and they are still alive. They haven't committed suicide and somebody hasn't killed them."

2.7 Interpretation

Our study suggests that health workers are routinely involved in caring for a wide range of vulnerable patients, and understand the importance of addressing the social determinants of health, but more training and clinical practice tools are needed to help busy frontline health workers in better supporting their patients.

Our study found that health workers who ask patients about their social problems were better able to help their patients. These results are consistent with previous studies where delivery of culturally competent care⁴⁸ and understanding the social context of patients are important factors in patient centered care.¹⁴³ This can have important implications for adherence to medical

treatment.^{144, 145} Educating health professionals about the social determinants of health, providing practical guidance on how to ask patients about social problems,^{101, 112, 113} and linking patients to supportive resources have been identified as important interventions.^{101, 126}

The CLEAR toolkit is an evidence-informed and user-friendly clinical decision aid designed to help health workers assess different aspects of patient vulnerability. It can be easily adapted to the local context to identify key referral resources to better support patients in managing a range of social issues that can negatively impact their health.

2.7.1 Strengths and limitations

Our study used a flexible multi-method approach to understand the complexities of encouraging health workers to focus on social determinants in their day-to-day practice. While the response rate for the survey component of the study was only 50%, it is well known that busy family doctors are difficult to recruit in research studies.^{146, 147, 148} Our response rate is similar to that obtained in other studies involving similar populations.^{149, 150} Those who did respond to the survey did not always answer all of the questions resulting in more missing data, limiting our ability to assess associations. Non-responders are typically senior, male, and in practice for more than 15 years.¹⁵¹ Possibly related to self-selection of responders, we found a slightly higher proportion of health workers with specific ways of asking their patients about potential social issues than an earlier published study.¹⁰⁰ It could therefore be interesting in future to explore further the possible relationships between support for a focus on social determinants and age and gender, or by type of health worker, since our sample size was too small to conduct a sub-group analysis in the current study. As well, further pilots across different settings would also be needed to ascertain the external validity of this study and whether the results are generalizable to other types of clinical settings (e.g. non-academic family medicine practices, low- and middleincome countries, rural and remote settings, etc.)

2.7.2 Conclusion and implications for policy and practice

In this study, responding health workers understood the importance of the social determinants of health, but many were unsure how to take action. They considered the toolkit a helpful first step to guide asking patients about social issues and to know where to refer for support. Strong

organizational support is needed, however, to facilitate the use of a social determinants approach in clinical practice. Implementation in different settings will require adaptation informed by local health worker trainers and community group organizers in order to identify effective referral pathways to support resources and to build stronger linkages with the community.

2.8 Author's contributions

AN participated in the data collection and data analysis, and drafted the manuscript. AA participated in the design of the study; coordinated the data collection; participated in analysis of the data, and drafted the manuscript. NA, RL, and ER participated in the design of the study. All of the authors critically reviewed the manuscript for intellectual content and approved the final manuscript.

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3. THESIS COMMENTARY

3.1 Summary of the key results of the thesis

In this study we aimed to explore the perceptions of health workers regarding the usefulness of the CLEAR toolkit as a clinical decision aid in day-to-day family medicine practice to help ask patients about and address the social determinants of poor health. We also explored how this toolkit can be improved, and the barriers and facilitators to adopting the toolkit in a teaching hospital setting in the local context of Côte-des-Neiges in Montreal. We found that health workers are generally in agreement that addressing the social determinants of poor health is an important part of their role. As well, those health workers who are already asking their patients about social challenges were much more likely to report having been able to help their patients by providing support and referring them to appropriate local resources. The toolkit was considered a useful reminder to encourage health workers to ask patients about their underlying social issues and to know what to do next with this information. Those who were more reluctant to use a social determinants of health approach in clinical practice cited a lack of training, mentorship and time as the key reasons. However, high-level administrators agree that this is already considered to be part of the mandate of health workers, and that while some training already exists, this can certainly be reinforced. While the toolkit would need to be adapted to the local context of Côte-des-Neiges by including a simple contact list of local resources for various social challenges, widespread use of the toolkit could lead to improved health worker knowledge, greater support of vulnerable patients, improved health and social outcomes, and fewer emergency room and urgent care visits.

3.2 Discussion of the main results of the thesis in line with current evidence

3.2.1 Most health workers are regularly involved in caring for vulnerable patients

Our results suggest that, in general, frontline health workers are already involved in caring for a wide range of vulnerable patients. Published studies identified the same categories of socially vulnerable groups including: people with mental health problems, newly arrived immigrants and refugees, people living in poverty, single parents, persons with substance abuse problems or other addictions, isolated seniors, and young children from disadvantaged households.^{152, 153, 154}

For the majority of health workers, there are several different reasons to consider various patient groups as vulnerable. First, communication barriers (whether the origin is linguistic or cognitive) pose major obstacles to receiving health care services especially for immigrants, refugees and elderly people.¹⁵⁵ While health workers who can speak more than one language are able to communicate easily with some of their patients, translation services are often not readily available in the clinical setting. Even accessing the health worker can pose a barrier.

Furthermore, different cultural backgrounds also impede immigrants and refugees from receiving health care. These patients are new to the system, and do not know how to navigate the health system, how to discuss their health issues with health care providers and receive proper treatment. Even if these vulnerable people get treatment they may not be able to follow it because of lack of financial means, reduced access to transportation, social isolation and loneliness, lack of community cohesion and low social status.

In addition, for immigrants with professional backgrounds the lack of recognition of their foreign experience and credentials,¹⁵⁶ difficulties in adapting to their new realities, growing economic and social issues,¹⁵⁷ as well as lack of access to available health and social services, create a vicious cycle of vulnerability and poor health, as discussed in earlier published studies.¹⁵⁸

3.2.2 Many health workers have experience taking action to support vulnerable patients

On a positive note, our study found that more than two-thirds of respondents reported having taken actions in the past to help their vulnerable patients. For instance most of the health workers in our study did try to normalize their patient's situation, by identifying their problems, listening to them, supporting their patients by writing letters to authorities, and, referring them to appropriate community resources. These findings are consistent with those of earlier studies which reported that physicians engaged in practices to help support their vulnerable patients have adopted strategies including empathizing with their patients, waiving fees to access care, referral to medical and social care services, and working collaboratively to empower patients.^{37, 101, 105, 159} The primary care physicians of our study also suggested some of the key levers to address health disparities including: providing interpreter services, delivering culturally

competent care, and engaging local leaders in addressing health disparities. These suggestions were also presented in earlier studies.^{101, 48, 160}

3.2.3 Not knowing how to ask leads to missed opportunities to support vulnerable patients

One of the key novel findings of our study is that frontline health workers who know how to ask their patients about social challenges in a sensitive and culturally appropriate way were significantly more likely to report having been able to help their patients with these issues. However, only one third of respondents had specific ways of asking their patients about potential social issues that lead to health problems, which is even slightly higher than an earlier published study.¹⁰⁰ Thus in spite of all the good work that already occurs; there are vast missed opportunities for supporting vulnerable patients in clinical practice.

For the over two-thirds of respondents who were unsure of how to ask questions about social problems their reasons for this included lack of training, mentorship and time. These factors are the major barriers identified by respondents to account for their reticence in enquiring about and taking action on the underlying social problems of their patients. These findings are consistent with studies of the Canadian Medical Association,¹⁰¹ O'Brien *et al.*¹¹² which cites a lack of formal education in social determinants of health in medical school curriculum, and Povall *et al.*¹⁶¹ where inadequate guidance and perceived lack of methods and tools were reported as reasons for the inability to address health equity. Whereas, in other studies, implementing a systematic training on the social determinants of health produced a marked improvement in knowledge^{109, 162} and the ability of health workers to ask patients about social issues.¹¹³

3.2.4 Senior physicians are important role models for adopting an upstream approach

Medical residents (family physicians in training) cited the priority of their supervisors to focus on and treat the medical problems of patients as an additional barrier which prevented them from asking about the underlying social issues of their patients. Our study found that some respondents share the perception that senior health workers expect their medical residents to focus more on medical issues as they think that screening for social issues can certainly be done by anyone, whether by physicians, by nurses or by social workers. This practice of medically focused provision of clinical care has also been acknowledged in a study by Tomasik *et al*,¹⁶³ where family physicians / general practitioners considered diagnosis and treatment competencies more important than disease prevention and health promotion competencies. However, in contrast with the actual experience of junior health workers, senior health administrators stated that providing training to family medicine residents on social determinants of health is already a part of their training program; and senior physicians should help them to practice asking about the social issues of their patients, and thereby act as role models for their residents.

3.2.5 Health workers need more support and clinical practice tools to address social issues

Health workers acknowledged that it is a part of their mandate for whole person care to ask about social issues and consider that they do have the power to effect change. However, some health workers perceive that they can address the social problems of a patient "to a degree only." Moreover they identified the need for inter-professional support as they alone cannot solve all of their patients' social problems. Most respondents did mention that they do not have enough knowledge and skills to influence the social issues of their patients and did not know enough about available resources for their patients. These findings are consistent with an earlier study where health workers understand the nature of problem to be addressed, but are markedly less confident on identifying the work to be done¹²⁶ and need collaborative support.^{162, 164}

A limited number of training curricula and various toolkits have been developed to train health practitioners, community health workers and policy makers with a focus on addressing the social determinants of health to improve health equity.^{40, 44, 120, 128} Some published studies provide evidence about the use of these trainings and tools and evaluated the barriers and facilitators for their use.¹²⁴ However the results of these studies are difficult to synthesize and draw broader conclusions due to differences in study settings, populations studied, available resources and training methodologies. In addition, there is a paucity of research which evaluated the usefulness of clinical practice tools from the perspective of primary health care providers in their day-to-day practice to help them address the social causes of their patients.

3.2.6 The CLEAR toolkit helps health workers ask about and act on social determinants

Our study found that the CLEAR toolkit, an evidence-informed clinical decision aid, not only raises awareness among primary care physicians and serves as a reminder to ask their patients

about social issues, but also guides them in a step-wise and systematic way to help provide patients with support, refer them to local community resources, and assist them in addressing the underlying social challenges that threaten their health. In general, the younger medical professionals who just started their training express more interest in using this toolkit in their clinical practice. However, all participants provided valuable suggestions to improve this clinical decision aid for future use in practice.

3.3 Conclusions

This study found that health workers understand the importance of addressing the social determinants of health and agree that it is part of their role. However, knowledge and expertise on how to ask patients about social issues and knowing what to do next with this information is an important clinical skill that would require further capacity strengthening. Importantly, those health workers who do know how to ask their patients about social vulnerability are significantly more likely to report having been able to help their patients in addressing these issues. However, the reality is that most health workers are unsure how to ask about and take action on the social determinants in practice and need further training, clinical decision aids, role modelling and strong organizational support. The CLEAR toolkit serves as a useful reminder to help frontline health workers know how to ask patients about social problems and where to refer them to local resources for support.

3.4 Strengths of the study

This study is one of a very small number of examples of how training curricula and clinical decision aids have been used to help health workers address the social determinants of health in clinical practice. While this is a burgeoning area of research and the number of publications are growing from year to year, this study is an innovative attempt in using a multi-phase mixed methods approach to delineating the multiple complex and intertwined factors that are involved in determining whether health workers will adopt a social determinants of health approach in clinical practice – including the knowledge and attitudes of health workers, their perceived self-efficacy in being able to take action, the presence of practical clinical tools to identify how to ask about social issues and local resources to refer to, the response and reaction of patients to such enquiries, availability of broader training on social determinants in general, role modelling by

clinical teachers and higher-level support structures within the organization to promote such an approach. Despite an extensive literature review, we also did not find any study to date that has piloted a clinical decision aid similar to the CLEAR toolkit, which provides practical guidance for supporting vulnerable patients, in addition to encouraging broader community-based advocacy to create more supportive environments for health. Thus, in many ways this is an innovative study which provides an important contribution to the existing literature.

3.5 Limitations of the study

The limitations of this study are related mostly to the quantitative component, and in particular, the response rate, missing data and self-selection of respondents. It is well known that health workers have very busy schedules therefore the response rate to survey questionnaires are often low in this study population, While a 50% response rate is somewhat lower than what is often considered desirable, in this particular study population, it is actually quite a good response rate and on par with what is often obtained in similar surveys with health workers which often have much lower response rates. The other challenge was the missing data due to respondents not completing all of the questions in the questionnaire even though it was only 2 pages long and had been pre-tested. Therefore, the combination of the low response rate and missing data reduced the power of the survey to detect statistically significant differences, but did not affect our ability to report on descriptive statistics which are still very informative. Finally, health workers who did not participate in the study might have self-selected due to their lack of interest in the topic area or inexperience in addressing the social causes of poor health. Nonetheless, the multimethod nature of this study and availability of qualitative data for the purposes of data triangulation made these limitations much less problematic than if this had been the only basis for the overall study.

4. RECOMMENDATIONS

Based on the findings of this study, we are able to make recommendations for action at two levels. First, we have recommendations on how to revise and improve the CLEAR toolkit to further strengthen this innovative clinical decision aid and increase its use in clinical practice. As well, we are also able to make broader recommendations on how to promote the adoption of a social determinants of health approach in day-to-day clinical care, whereby the use of clinical decision aids is but one of several important components required for promoting the behaviour change of health workers and improving health and social outcomes for vulnerable patients.

4.1 Recommendations for policy and practice

4.1.1 Improving, disseminating and evaluating the CLEAR toolkit in clinical practice

The findings of this study were used to modify and strengthen the CLEAR toolkit to make it shorter in length, less academic and more generic in the overall look so that it would appeal to people from many different contexts (Appendix 4.1). In addition, the newer version of the CLEAR toolkit also contains a special "insert" with locally adapted ways of asking patients about their social issues and a short contact list of resources for referral (Appendix 4.2).

This revised version of the toolkit would now need to be further piloted in clinical practice to test whether and how this makes an impact on clinical care and patient outcomes. Moreover, the toolkit would also need to be translated into different languages (see example in Appendix 4.3) and piloted and tested in a wide variety of different contexts to determine whether it is feasible and easily adaptable for use in a range of high and low-income settings. There are already translations of the toolkit into Urdu, Arabic, Spanish and Chinese, as well as plans underway for pilot studies to be conducted in a number of diverse sites including rural Pakistan, an urban slum in Uganda, and remote Aboriginal communities in Northern Canada.

4.1.2 Supporting health workers in taking action on the social determinants of health

Beyond providing front line health workers with clinical decision aids, our study identified multiple other ways of further reinforcing these actions and supporting health workers in asking about and addressing the social determinants of health.

4.1.2.1 Education and training of health workers

From our study we identified that health workers need training not only about general concepts relating to social determinants, but concretely, what can health workers do? For instance, what are the best ways for health workers to initiate conversation with their patients about social issues in a sensitive and culturally appropriate way? What are the best ways of supporting patients with various social issues and where to refer these patients to get appropriate help? Indeed, this study has shed new light on the ways in which experienced clinicians approach these issues in practice and this can help to create innovative training materials to help trainees also learn these techniques (e.g. beginning with open-ended questions, then identifying specific vulnerabilities, followed by developing a management plan, etc.). While the CLEAR toolkit incorporates this content for knowledge and skill development, it is important to have multiple modalities for education and training to reinforce these concepts throughout a health worker's learning trajectory. Thus training is needed at all levels from undergraduate medical and nursing school curricula, to post-graduate training, as well as various forms of continuing medical education for health workers already in practice.

4.1.2.2 Creating systems to help health workers adopt a social determinants approach Even well-intentioned health workers who are aware of what to do to address the social determinants may come up against various barriers in real-life clinical settings which are often rushed and focused on "putting out fires" rather than sitting back and thinking of the big picture perspective. Thus it is important to create systems and to develop effective strategies to overcome the barriers inherent to busy primary care practice including time constraints, communication problems and the medically-focused attitude of health workers (rather than thinking of the bio-psycho-social model). Some initiatives to overcome these barriers include the Health Leads program whereby clinicians assess patient needs during a medical visit and make a "prescription" for social care (e.g. food bank, women's shelter) and then Health Leads volunteers in the waiting rooms act as patient navigators to help patients reach the support resources they need.¹⁶⁵ Senior health professionals can also help to foster a social determinants approach through better role modelling, informal teaching around clinical cases where there are complex and intertwined health and social issues, and also teaching time management to ensure there is a space carved out during each patient visit to also address the underlying social issues. Some large clinical centres hire a psychologist and/or social worker to better support patient needs. Addressing the social determinants of health requires an integrated and inter-professional team approach including nurse, social workers and other allied health professionals as well as community resources.

4.1.2.3 Linkages with the community to support patients and advocate for social change

As mentioned at the start of the thesis in the literature review, making progress in improving the social determinants of health requires intersectoral action that goes far beyond the health sector. Thus, community involvement and engagement is critical for making larger-scale changes to create more supportive environments and improve population.

At one level, community linkages are important to help orient vulnerable patients to a broader network of support systems. Thus, through these referral networks, health workers are not alone in addressing the social issues of patients and need not feel overwhelmed and reluctant to ask about these issues in the first place. Indeed, by following-up with patients at subsequent visits, they will be able to know whether these referrals were helpful, and what else worked well to help patients overcome their social challenges. There will be a learning curve, but there is no better way than learning by doing.

However, in addition to patient-level care, just as important, is the interface between health workers and community groups to join together in larger-scale advocacy at the population level for improved living conditions for the entire community. Health workers are respected members of the community and their experience on the frontlines, with stories of how living conditions affect the health of those who are most vulnerable can provide strong arguments for the political, economic and social changes that are needed to better support these groups as a whole (e.g. high quality low-income housing, tax subsidies for vulnerable groups, universal access to low-cost child care and early childhood development programs, etc.). This will not be easy for busy clinicians to fit into their schedules, but once again, there is no need to take on the entire responsibility, but rather, through joining existing community-based advocacy networks and sharing experiences and expertise, can help bring about change to create healthier communities.

5. APPENDICES

Appendix 1 Oral presentation: Canadian Global Health Conference, 2014













But there are many missed opportunities for action...



For example, a Brazilian study showed that when child labourers came to the emergency with an injury, rarely did health workers ask about the underlying cause, and children were sent back out into the same risky environment

Photo courtesy David Parker













	Outline
Background	
 Objectives 	
 Methods 	
Outcomes	
 Discussion 	
Conclusion	

The aim of this study

 To determine whether a training tool designed to help frontline health workers in low and middle income countries ask about and act upon social determinants of health could also be used in a high income country setting by a large family medicine practice serving a highly ethnically diverse inner city population

Outline

- Background
- Objectives
- Methods
- Outcomes
- Discussion
- Conclusion

Mixed methods study

- Setting
 - One of the largest family medicine academic training centres in Canada
- Study population
 - Physicians, nurses, residents, allied health workers
- Data collection (July-Sep 2013)
 - Online survey
 - In-depth interviews

Data collection instruments

- Prior to using the CLEAR toolkit, have health workers been involved in addressing the social causes underlying poor health?
 - How do they ask patients about sensitive issues?
 - What have they done to support their patients and/or to take action at a community level?
- Opinions on the CLEAR toolkit
 - Would this be helpful in their daily work?

Outline

- Background
- Objectives
- Methods
- Outcomes
- Discussion
- Conclusion

It is the role of health workers to address the social determinants

- Of the 100 health workers surveyed, half responded to the questionnaire (RR 50%).
- The majority of respondents consider that health workers should address the underlying social issues that are the root causes of poor health for their patients (88%, n=44/50).

The CLEAR toolkit can help health workers address the social causes

- The CLEAR toolkit is...
 - easy to understand (97.3%, n=36/37)
 - relevant to their work (89.2%, n=33/37)
 - can help address the social causes (86.5%, n=32/37)

Knowing how to ask about the social determinants is the first step

- Prior to having read the toolkit, less than one third of health workers (32%, n=16/50) reported having specific ways of asking their patients about social issues such as poverty, racism, food insecurity and family violence.
- Those who had ways of asking were twice as likely to report having helped their patients with such issues (93.8%, n=15/16, vs. 54.8%, n=17/31; p=0.003).

Outline

- Background
- Objectives
- Methods
- Outcomes
- Discussion
- Conclusion

Discussion

- Health workers agree that it is part of their role to take action on the social determinants
- However, most are unsure about how to go about doing this in practice
- Those who know how to ask patients about social vulnerability felt that they were able to help their patients in addressing these issues

Outline

- Background
- Objectives
- Methods
- Outcomes
- Discussion
- Conclusion

Conclusion

- The CLEAR toolkit is a training package developed through a global health research collaboration which has the potential to make important contributions in addressing health disparities locally and globally by training the frontline health workers to ask about and address the social causes of poor health
- Piloting of the toolkit is currently being organized in Pakistan, Uganda and Brazil




Appendix 2 Poster presentation: Family Medicine Forum, 2014

Barriers to addressing the social determinants of health in primary care: A qualitative study McGill
Anila Naz and Anne Andermann on behalf of the CLEAR Collaboration Department of Family Medicine, McGill University, Montreal, Canada

Background

To make a real impact on improving heath requires addressing the underlying social causes of poor health. Yet, many frontline health workers feel helpless when faced with the social and economic challenges that patients encounter in their daily lives.

The CLEAR Collaboration

Founded in 2010, the CLEAR Collaboration was created to build capacity among community-based

primary health care workers in tackling the social causes of poor health, particularly in low and middle income countries.



The CLEAR toolkit

The CLEAR toolkit is the first training tool developed to provide health workers with practical skills to ask about and act upon the social determinants of health



Objective

As a part of a larger global health research programme, the purpose of this study was to better understand the barriers to asking about and addressing the social determinants of health during routine clinical encounters in primary care.

Setting

The study was carried out in March 2014 with family doctors, residents and nurses in one of the largest family medicine academic training centers in Canada serving an ethnically diverse population.

Study Design

A qualitative study was conducted by inviting participants to join one of two focus groups:

- The "early adopter group" who were already taking action on the social determinants of health
- The "late adopter group" who were more reluctant to get involved in this aspect of patient care

Data Collection

A semi-structured interview guide was used to explore potential barriers to taking action on the social determinants in practice and the ways in which the CLEAR toolkit training package could be improved to overcome these barriers.

Results

The main barriers to taking on a social determinants approach in clinical practice include a lack of role modeling, training, and time. Some respondents were concerned that patients may not feel at ease discussing their social issues and that such questions may extend beyond their mandate and "comfort zone." Overcoming these barriers requires more education and training, including clinical practice tools to map out local referral resources.

Conclusions

Frontline health workers understand the importance of taking action on the social determinants of health, but require more education, training and support to overcome barriers in adopting a social determinants approach in their routine practice.

Acknowledgements

We are grateful to our funders: Grand Challenges Canada, Canadian Institutes of Health Research, Fonds de la recherche en santé du Québec, St. Many's Research Centre, Fédération des médecins spécialistes du Québec, and McGill University.

For more information

Please visit our website: www.mcgill.ca/clear or contact us at: anne.andermann@mail.mcgill.ca

Appendix 1.1 CLEAR toolkit version 2.0



The CLEAR toolkit TREAT – ASK – REFER – ADVOCATE

Version 2.0

Stop the vicious cycle



Health workers try very hard to fight disease and illness. When a person is unwell, the health worker provides treatment and advice to help that person get better. However, when this person goes back to the same unhealthy living conditions, they often become ill again and again. The only way to stop this vicious cycle is to also do something to improve the living conditions of our patients.

1. TREAT

the immediate health problem

Of course, when a patient seeks care, the main role of frontline health workers is to treat the immediate health problem. Whether it is an infection or an injury or some other disease, frontline health workers use evidence-based guidelines to help patients with their health problems in a competent and respectful way.

2. ASK

about underlying social problems

However, to avoid the "rebound effect" when the patient returns again and again with recurring disease or worsening health problems, it is also important to ask about underlying social problems that are often interconnected and lead to the health problems in the first place. For instance, lack of clean drinking water, unsafe work environment, irregular access to food, social isolation, etc.

3. REFER

to local social support resources

While there are no simple solutions to these social problems, there are generally resources available in the community that health workers can use to further support their patients in improving their living conditions. For instance, there may be a local shelter, a food bank, a women's support group, or a local Elder who can provide guidance and advice. Even in situations where such resources do not exist, simply helping your patients to talk about and problem-solve these issues in a respectful and non-judgemental way can be helpful.

4. ADVOCATE

for more supportive environments

A key to creating lasting change on a larger scale is advocating for improvements in living conditions for the entire community. As trusted and valued members of the community, health workers are well-positioned to document the ways in which poor living conditions can lead to harm, to partner with communities and advocacy groups, and to encourage community leaders in taking action to create safer and more supportive environments.

The CLEAR toolkit MY PATIENTS, MY COMMUNITY

Version 2.0

How can the CLEAR toolkit help you prevent disease and premature death for your patients and for your community?

Think about your patients. Identify one patient who has major health and social problems that are complex and have been challenging to manage until now. Without using their name, describe the health and social issues that the patient faces, how these issues interact, what actions have been done to date, and what are the ongoing challenges for this patient:

Next, reflect on the following questions:

- Question 1. What are the immediate and longer-term threats to the health of this patient (and to the health of their family)?
- Question 2. What are some of the social, cultural and economic factors that are likely to play an
 important role in determining the health outcomes of this patient and their family (for example,
 suffering from poverty, belonging to a minority group, not understanding the local language...)
- Question 3. What actions could you take to manage the current situation for THIS PATIENT, and what other resources in the community can you refer to?
- Question 4. What actions could be taken to help improve the health not only of this patient, but
 of all people in THE COMMUNITY who share similar challenges?
- Question 5. In what ways can frontline health workers advocate for better living conditions to
 protect their patients and promote the health and well-being of the community (for example,
 talking with local community leaders, raising these issues with their immediate supervisors and
 other health authorities...)?

The CLEAR toolkit A FAIR START IN LIFE

Version 2.

"There is no known biological reason why every population should not be as healthy as the best... The scale and pattern of disease reflect the way that people live and their social, economic and environmental circumstances." - Geoffrey Rose



There is growing evidence that a child's development during their early years plays a critical role in their future health and well-being as adults.



Surviving childbirth and the first 5 years

Of course, the first priority for many children is simply survival. While

childhood mortality rates have generally been on the decline in recent decades, in some countries, more than 1 in 5 children die before their 5th birthday (20%). This is in stark contrast with a growing number of countries where there are only 3 or 4 deaths per 1,000 live births (<1%), demonstrating that almost all childhood



deaths are preventable and, therefore, needless human tragedies.

Early childhood development

More than survival, children need proper nutrition, stimulation, care and a



safe environment to explore, learn and grow. Parents and caregivers require support in catering to the needs of young children, whether through parenting classes, affordable and high quality child care, or "head start" and other school readiness programs.

Older children and youth

Yet, there is not much point placing a huge emphasis on the development of infants and young children if older children and youth then end up engaging in harmful activities such as hazardous child labour or dropping out of school. It is therefore important to consider the needs of children from birth through to adulthood, and how these needs evolve and develop over time.

The CLEAR toolkit

Version 2.0

1. Who are the most disadvantaged and vulnerable groups in my community?

Prioritize the top 5 disadvantaged groups in YOUR COMMUNITY who need more support:

Possible examples of disadvantaged and vulnerable groups that you can choose from:

Single mothers, refugees and internally displaced persons, infants and children under 5 years old, Indigenous populations, children working in hazardous conditions, pregnant women, orphans, families living in poverty, visible minorities, people with low literacy, recently arrived immigrants, school dropouts, people who do not speak the local language, unemployed persons, people with mental illness, religious minorities, people with HIV/AIDS, rural and isolated communities, people living in urban slums, women and girls, homeless persons, victims of abuse, isolated elderly, etc.

2. What questions can I ask my patients to identify those that are disadvantaged?

List 3 questions you could ask YOUR PATIENTS to find out who is in need of more support:

Possible examples of questions to ask your patients that you can choose from:

How long have you been living in this area? Can you understand the local language? What is your highest level of schooling? Do you work in dangerous or violent settings? Have you ever been repeatedly insulted, threatened or physically hurt? Do you ever have difficulty making ends meet at the end of the month? Have you ever been worried that your food would run out before you got money to buy more? Do you have a clean and safe place to sleep? Do you ever have any difficulties at home, school or work? Have you ever had health problems in any way related to your work? Do you have any close friends or relatives you can rely on in case you need help? Do you ever feel worried about your safety? etc.

3. Who can help me get services and support to my disadvantaged patients?

Identify 5 local persons or organizations who can help to support YOUR PATIENTS in need: Possible examples of local people, services or organizations who can support your patients:

	Local food bank, community-run women's group,
1.	mental health support group, local community
	leader, government sponsored conditional cash
	transfer program or other social income support,
2	local police, job placement service, confidential
	HIV testing and treatment centre, local Elders,
3	religious organizations, orphanage, social worker,
	center for newly arrived immigrants and refugees,
4	homeless shelter, youth protection authorities,
.	shelter for abused women, local midwife, legal-aid
	clinic, low cost housing project, language training
5	center, human rights advocacy group, etc.

4. What more can I do to help disadvantaged groups in my community?

Beyond helping individual patients, list 3 main actions you can do in YOUR COMMUNITY:

Possible examples of community actions you can be involved in to support disadvantaged groups:

Reach out to local disadvantaged groups who may otherwise face barriers to accessing health care services, document how poor living conditions are harming your patients and present a summary to local community leaders to stimulate change, develop partnerships with local community-based advocacy groups, raise awareness in your community about the problems that disadvantaged groups face, be a role model in taking action to help support disadvantaged groups, involve local disadvantaged groups in setting priorities and identifying solutions, conduct research that aims to help improve the health of disadvantaged groups, etc.

The CLEAR toolkit HEALTHIER COMMUNITIES

Version 2.0

How can I be healthy if my community is not healthy?



The health of each individual is closely linked to the health of their family, of their community and of the broader society that they live in. Consider a young child, the health and wellbeing of that child depends on the home environment, whether the parents have an education, good jobs, a steady income. Of course, the family situation also depends on the community in which they live. It is all interconnected, and therefore, you cannot improve the health of a child, unless you also do something about the family and community circumstances that lead to these health problems.

CASE-BY-CASE

While each patient has their own unique situation and social problems that require a case-by-case solution, each family and community also has their unique challenges which also require case-by-case solutions. However, what can health workers do? They cannot solve all the social problems of their patients nor of their patient's families and communities. But, they can be an important part of the solution.

COMMUNITY PARTNERSHIPS

Improving the health and well-being of communities requires the involvement of a wide range of community partners to identify the shared problems and try to come up with shared solutions to these problems. These partners can include community leaders, advocacy groups, women's support groups, local police enforcement, youth protection, religious leaders, business owners, teachers, and health workers.

PROVIDING HEALTH LEADERSHIP

Frontline health workers are able to provide valuable expertise and information to community leaders and other community partners about the health and social problems that exist in the community as well as providing ideas for potential solutions to these problems. Specific strategies for improving health need to come from the community, born out of the realities that people face. Health workers therefore have an important role in developing strategies for creating healthier communities.

The CLEAR toolkit

The story of Ines and the working children

Ines is a community-based health worker in a large urban center. She works for a faith-based charity which has established a local clinic next to one of the biggest slums in the city.

Every day Ines takes two buses to get to work. She changes buses in the main bus terminal. It always bothers her to see the packs of children in ragged clothes asking for handouts or trying to sell peanuts to the morning commuters. How is it that other people appear not to see these children? They just quickly walk past them holding tightly onto their bags or their pockets.



Version 2.0

Like many of these children, Ines is from the countryside. She too came to the city when she was just a girl. Her father had been ill and

the family quickly ran out of food, so she needed to go find work to survive. Although she had little education, she was very lucky that she was able to work in a shop where her boss gave her food and a place to sleep and did not beat her. She had heard so many horror stories from the other children. But what can be done about this? It is just a fact of life. Or is it?



One day Ines went to a refresher training workshop for the local community health workers where she learned about The CLEAR toolkit. She learned that there were things that she could do in her local community to improve the health of disadvantaged and vulnerable groups. Ines decided that she would give it a try.

While no single person can change the world, everyone can do their part. Ines decided that in her community the

main priority was to help working children who suffer from a much higher burden of physical and mental illness as compared to the general population. However, what can she do? She already has a job which keeps her running from morning until night. She doesn't have time to do more.



According to the CLEAR toolkit, helping to improve the living conditions of disadvantaged and vulnerable groups is an integral part of the role of frontline health workers and an important mechanism for preventing disease and premature death. It is also something that can be done fairly quickly and easily as part of a health worker's routine day-to-day work

Ines decided that each time she would see a child in her clinic, she would ask 3 key questions: "Is your health problem in any way related to your work?" "Do you have a clean and safe place to sleep?" "Have you ever been repeatedly insulted, threatened or physically hurt?" If a

child answers "yes" to any of these questions, Ines had put together a list of local contact people that she could call upon to provide these children with additional support.

For instance, there is the local community organization that provides street children with a safe place to stay the night. There is the youth protection office and a shelter where Ines can refer children who are victims of abuse. And although there are no specific services in the community for children involved in hazardous work, Ines found a local community leader and well-respected business-owner who believes that no child should be made to work under harmful conditions and has agreed to help in any way that he can.

Thus in addition to helping children with the specific health problem that brought them to the clinic, Ines also asks these children about their living conditions, listens respectfully to their needs and refers



them to additional support services. Moreover, she also carries in her pocket a small notebook where she marks down the age and gender of each child worker that she comes across and the way in which they have been harmed by their work. Each month, she brings this list to the local community leader and he uses this information to help advocate for better conditions for children in the community.

In this way, Ines is making a difference in the lives of her patients and the larger community.

The CLEAR toolkit REACHING OUT TO THOSE IN NEED

Version 2.0

Without contact there can be no impact

Supporting those in the community who are the most disadvantaged and vulnerable requires reaching out. This can happen in several ways.

No more missed opportunities

Very often, people from disadvantaged and vulnerable groups are your patients. They are sitting in front of you. You provide them with treatment and medical advice, and then they leave. Very likely, they will become ill again, and then see someone else. And so the vicious cycle of poor living conditions and recurrent disease continues. Therefore, it is important not to miss your chance. Each patient encounter is an opportunity to find out whether people are disadvantaged or vulnerable in some way, and to ask whether they are struggling with various underlying social problems. Patients may not volunteer this information if you do not ask.

Why should I open myself up to you?

Even if health workers do ask their patients whether they are struggling with social problems, vulnerable patients may be reluctant to disclose this information out of fear of repercussions. For instance, a woman may not want to divulge that she is being abused by her husband out of fear that her children may be taken away by the police to live with a foster family. Therefore, sensitive communication and attention to potential cultural or social class differences is important in providing a neutral space and a relationship of trust where patients feel safe to discuss these complex issues.

Are you available when your patients need you?

There are many ways in which health workers can be more available to the patients who are most in need by thinking about where local disadvantaged and vulnerable groups live, what do they do during the day and night, and anticipating when they most need help. Flexible office hours, locating health centres close to where disadvantaged and vulnerable groups live and work, and partnering more closely with these groups can help make you more available and responsive to the needs of these patients.

Reaching out by going into the community

Of course, some disadvantaged and vulnerable groups are particularly difficult to reach and very unlikely to seek conventional health care services unless health workers actively go into the community to seek them out and offer care. Mobile clinics, home visits, and "community rounds" (where health workers walk through the community looking for people who may need their help) are examples of how to reach out and provide care to those most in need.

The CLEAR toolkit LOCAL SUCCESS STORY

Version 2.0

Write your own success story about a local health worker who helped a patient from a disadvantaged or vulnerable group in your community

Describe a local health worker in your community:

Describe a patient from a disadvantaged or vulnerable group that this health worker commonly encounters in their work with the local community:

Give examples of how the health worker provided support for this patient:

Give examples of what actions were taken at the community-level:

Describe the impact that this had on the patient and the community:

The CLEAR toolkit CONTACT LIST FOR LOCAL RESOURCES

Version 2.0 While frontline health workers sometimes feel as though they have no one to turn to for help in supporting disadvantaged and vulnerable patients, you are not alone. Most communities have an extensive network of local support services that you can tap into, ranging from government services to large non-governmental organizations and charities, and even informal grassroots networks of neighbours, friends and extended family members. These resources can play an important role in helping you to support your patients in need. Improving living conditions and addressing the social causes of poor health is not something that one person can do alone. It requires a systems approach. Here is where you can list the key contact information for the local social support resources in your community A FAIR START IN LIFE ACCESS TO HEALTH CARE QUALITY HOUSING SOCIAL SUPPORT A GOOD EDUCATION A DECENT JOB A STABLE INCOME ©Dr. Anne Andermann on behalf of the CLEAR Collaboration. Suggested citation: Andermann A on behalf of the CLEAR Collaboration. The CLEAR Toolkit: Helping Health Workers Tackle the Social Causes of Poor Health [version 2.0]. Montreal: Department of Family Medicine, McGill University, 2013. Available at: http://www.mcgill.ca/familymed/research/clear

The CLEAR toolkit FURTHER READING

Version 2.0

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Tools for community development and health planning

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The Population Health Template Working Tool. Ottawa: Public Health Agency of Canada, 2001. <u>http://www.phac-aspc.gc.ca/ph-sp/pdf/template_tool-eng.pdf</u>

What is the CLEAR Collaboration?

The Child Labour Evidence to Action Research (CLEAR) Collaboration was founded in 2010 by Dr. Anne Andermann and Dr. Muazzam Nasrullah to protect children and youth from hazardous child labour through building capacity among primary health care workers in low and middle income countries to address the social causes of poor health. Based on the evidence and experience of co-opting the health sector in fighting poverty and injustice, the Collaboration has developed this broader guidance to support frontline health workers worldwide – whether in rich or poor countries – as health inequities are ubiquitous and know no boundaries. <u>http://www.mcgill.ca/familymed/research/clear</u>

Members of the CLEAR Collaboration (in alphabetical order):

Tajul Islam Abdul Bari, Deputy Programme Manager, Child Health Programme, Directorate General of Health Services (Dhaka, BANGLADESH); Alayne Adams, Senior Social Scientist, Centre for Equity and Health Systems, International Centre for Diarrhoeal Disease Research, Bangladesh (Dhaka, BANGLADESH); Anne Andermann, Director, CLEAR Collaboration, Department of Family Medicine, McGill University (Montreal, CANADA); Lisa Andermann, Assistant Professor, Division of Equity, Gender and Population, Department of Paychiatry, University of Toronto (Toronto, CANADA); Saeed Awan, Director, Centre for the Improvement of Working Conditions & Environment, Department of Labour and Human Resources, Government of Punjab (Lahore, PAKISTAN); Theresa Betancourt, Director, Research Program on Children in Global Adversity, Harvard School of Public Health (Boston, USA), Ryoa Chung, Associate Professor, Department of Philosophy, Université de Montréal (Montreal, CANADA); Myriam Denov, Associate Professor, School of Social Work, McGill University (Montréal, CANADA); Peter Dorman, Professor, Department of Economics, The Evergreen State College (Olympia, USA); Dijbo Douma, National Program Coordinator, Department of Neuropsychiatry, Université Abdou Moumouni (Niamey, NIGER); Timothy Evans, Dean, James P. Grant School of Public Health, BRAC University (Dhaka, BANGLADESH); Rebecca Freeman Grais, Director, Epidemiology and Public Health, Epicentre - Médecins Sans Frontières (Paris, France); Susan Gunn, Senior Technical Specialist, Hazardous Child Labour, International Labour Organization (Geneva, SWITZERLAND – observer); Jorge Iniart, OPartment of Family Medicine, McGill University (Montreal, CANADA); Jahangir Khan, Lead Health Economist, International Centre for Diarrhoeal Disease Research, Bangladesh (Dhaka, BANGLADESH); Nicholas King, Director, Measurement, Ethics and Decision-Making Collaborative, McGill University (Montreal, CANADA); Ann Macaulay, Director, Mortreal WH0/PAHO Collaborating Centre for Research and Training in Mental Health,

This work is made possible with financial support from:



Appendix 2.1 IRB Approval letter

This thesis research has complied with all ethical standards. Documentation available upon request from <u>anne.andermann@mail.mcgill.ca</u>.

Appendix 2.2 Email invitation to participate in the survey

CLEAR toolkit pilot study

Invitation to participate in the survey to be sent by email

Dear colleague,

I hope this email finds you well. I am excited to announce that our international collaboration of researchers and policy-makers (<u>http://www.mcgill.ca/familymed/research/clear</u>) has recently developed the CLEAR toolkit to help health workers prevent disease by improving the living conditions of their patients (please see attached PDF).

As you know, there is growing evidence that people in lower socioeconomic groups have more health problems and die earlier than the richest and most educated segments of society. But what can frontline health workers do about this? The CLEAR toolkit provides examples of key action areas to help frontline health workers address the social causes of poor health, both at an individual patient-level and also at an overall community-level.

We would be very interested to have your feedback and comments on the toolkit. Please click on the link below to participate in a 15-minute survey:

https://www.surveymonkey.com/s/8WLL62N

The purpose of this research is to learn how to better support disadvantage patients and communities. This research study has been approved by the Family Medicine Centre and the St Mary's Research Ethics Committee. I therefore hope that you can participate. Your input is very valuable to us.

Thank you in advance for your time.

Yours sincerely,

Dr. Anne Andermann

Anne Andermann, MD, MPhil, DPhil, CCFP, FRCPC Medical Specialist – Public Health and Preventive Medicine First Nations and Inuit Health Branch, Health Canada Public Health Department, Cree Board of Health and Social Services of James Bay Family Medicine Centre, St Mary's Hospital Faculty of Medicine, McGill University 3830 avenue Lacombe Montréal, Quebec H3T 1M5 CANADA Email: anne.andermann@mail.mcgill.ca Website: http://www.mcgill.ca/familymed/research/faculty/

Appendix 2.3 SurveyMonkey questionnaire for health workers

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CLEAR toolkit pilot study

SurveyMonkey questionnaire for health workers

Lead researcher Anne Andermann, Associate Professor, McGill University, <u>anne.andermann@mcgill.ca</u>

PAGE 1: Introduction

Research study title: Addressing the social causes of poor health pilot study Principal investigator: Dr. Anne Andermann

You have been selected to participate in a survey on the role of health workers in addressing the social causes of poor health. Participation in this research study involves completing a single online questionnaire which should take approximately 15 minutes. The answers to the questions are confidential. The results of this survey will be used to make improvements to "The CLEAR toolkit: Helping health workers tackle the social causes of poor health." This research study has been approved by the Family Medicine Centre and the St Mary's Research Ethics Committee.

If you consent to participating in the study, please open the PDF file attached to the email and read the CLEAR toolkit, then click the "next" button below to complete the questionnaire. Your participation in this study is voluntary, and you may withdraw your consent and discontinue participation at any time. Your refusal to participate will not result in any penalty. Thank you in advance for your time which is greatly appreciated. For any questions about the study, please contact the study supervisor Dr. Anne Andermann (anne.andermann@mail.mcgill.ca).

PAGE 2: Caring for vulnerable and disadvantaged populations

- Have you ever been involved in caring for any of the following patient populations? (please tick ALL THAT APPLY) People living in poverty, people suffering from food insecurity, isolated seniors, single parents, young children from disadvantaged households, victims of abuse and neglect, persons with mental health problems, persons with substance abuse problems or other addictions, homeless persons, Indigenous persons, newly arrived immigrants and refugees, other (please specify):
- Do you have specific ways of asking patients about potentially sensitive topics such as poverty, structural racism, food insecurity, family violence and so forth? (Please tick ONE ONLY) Yes, no,

1

unsure. If yes, please give examples of particularly helpful questions or phrases that you use to broach the subject: ______

- When patients have underlying social problems at the root of their health problems, do you
 think it is the role of health workers to address these social issues? (Please tick ONE ONLY) Yes,
 no, unsure. Please explain your answer: ______
- 4. In caring for patients who are vulnerable or marginalized, was there anything you said or did that you considered particularly helpful for these patients? (Please tick ONE ONLY) Yes – there were helpful things that I did, no – nothing was helpful, unsure. Please explain your answer:

PAGE 3: Your first impressions of the CLEAR toolkit

The CLEAR toolkit was attached to the email invitation to participate in this survey. If you have not already done so, please return to the email, open the PDF, and read the CLEAR toolkit. Once you have read the toolkit, please proceed to answering the following questions:

- What did you like about the CLEAR toolkit? _____
- What did you dislike about the CLEAR toolkit?
- How would you rate the following statements (for each statement, please tick ONE ONLY: strongly agree, agree, disagree, strongly disagree)
 - a. The CLEAR toolkit is clearly written
 - b. The CLEAR toolkit is relevant to my work
 - c. The CLEAR toolkit is useful in my local context
 - d. The CLEAR toolkit can help me address the social causes of poor health
 - e. The CLEAR toolkit can help me interact with my patients
 - f. The CLEAR toolkit has given me concrete tools to improve health
 - g. The CLEAR toolkit is easy to understand
 - h. The CLEAR toolkit is user friendly
 - i. The CLEAR toolkit will change the way that I practice clinically
 - j. The CLEAR toolkit has inspired me to take on larger social action
- Are you glad that you received the CLEAR toolkit? (please tick ONE ONLY) Yes, no, unsure. If no, why not: ______
- Would you recommend the CLEAR toolkit to your colleagues? (please tick ONE ONLY) Yes, no, unsure. If no, why not: ______

PAGE 4: Using the CLEAR toolkit

10. With which patient groups would you be most likely to use the CLEAR toolkit? (please tick ALL THAT APPLY) People living in poverty, people suffering from food insecurity, isolated seniors, single parents, young children from disadvantaged households, victims of abuse and neglect, persons with mental health problems, persons with substance abuse problems or other addictions, homeless persons, Indigenous persons, newly arrived immigrants and refugees, other (please specify):______

- 11. Briefly describe a patient in your clinical practice with complex health and social issues (please do not use any names or identifying features): _____
- 12. Prior to having read the CLEAR toolkit, had you taken any action to address the social factors that were contributing to the poor health of THIS INDIVIDUAL PATIENT? (please tick ONE ONLY) Yes, no, unsure. If yes, what actions did you take: ______ If no, why didn't you act on the social causes of poor health:
- 13. Prior to having read the CLEAR toolkit, had you taken any action to address the social factors that were contributing to the poor health of THE OVERALL POPULATION? (please tick ONE ONLY) Yes, no, unsure. If yes, what actions did you take: ______ If no, why didn't you act on the social causes of poor health: ______
- 14. Now that you have read the CLEAR toolkit, would you do anything differently to improve the health of THIS INDIVIDUAL PATIENT? (please tick ONE ONLY) Yes, no, unsure. If yes, what would you do differently? ______ If no, why won't you do anything differently?
- 15. Now that you have read the CLEAR toolkit, would you do anything differently to improve the health of THE OVERALL POPULATION? (please tick ONE ONLY) Yes, no, unsure. If yes, what would you do differently? ______ If no, why won't you do anything differently?

PAGE 5: Improving the CLEAR toolkit

- 16. Is the length of the CLEAR toolkit ... (please tick ONE ONLY) too short, just right, too long?
- Is anything missing from the CLEAR toolkit? (please tick ONE ONLY) Yes, no, unsure. If yes, please specify what should be added: ______
- Is there anything that should be removed from the CLEAR toolkit? (please tick ONE ONLY) Yes, no, unsure. If yes, please specify what should be removed: ______
- Is there anything that needs to be reworded or rewritten to make the CLEAR toolkit more useful? (please tick ONE ONLY) Yes, no, unsure. If yes, please specify what needs to be rewritten: ______
- 20. Is there anything else that should be changed to improve the CLEAR toolkit? (please tick ONE ONLY) Yes, no, unsure. If yes, please specify what should be changed: ______

PAGE 6: Distributing the CLEAR toolkit

- Who should receive the CLEAR toolkit? (please tick ALL THAT APPLY) Doctors, nurses, residents, medical students, social workers, psychologists, outreach workers, hospital administrative staff, other (please specify): ______
- 22. What media should be used to distribute the CLEAR toolkit? (please tick ALL THAT APPLY) Paper pamphlets, wallet cards, email attachments, posters in hallways, patient leaflets in waiting rooms, other (please specify): ______
- 23. If the toolkit is distributed globally, is it sufficient to translate the guide into different languages or does it need to be further adapted to different local contexts? (please tick ONE ONLY)

Translation only, translation and adaptation, it depends, unsure. Please explain your answer:

- 24. Would you be interested in taking an online course that provides information on what health workers can do to address the social causes of poor health? (please tick ONE ONLY) Yes, no, unsure
- 25. Would you like a copy of the final version of the CLEAR toolkit? (please tick ONE ONLY) Yes, no, unsure (If yes, please provide your email address _____)

PAGE 7: About you

- 26. What is your role? (please tick ALL THAT APPLY) Staff physician, nurse, administrator, medical resident (incoming R1), medical resident (R1 going into R2), medical resident (R2 just graduated or soon to be graduating), social worker, psychologist, other (please specify)
- 27. How long ago did you complete your training? (please tick ONE ONLY) Still in training, less than 5 years ago, 5-10 years ago, more than 10 years ago
- 28. How old are you? (please tick ONE ONLY) Under 20 years, 20-29 years, 30-39 years, 40-49 years, 50+ years
- 29. What gender are you? (please tick ONE ONLY) Male, female
- 30. Do you have any other comments or suggestions?

PAGE 8: Further input

This completes the questionnaire. Thank you for your valuable time and contribution to this work. As a follow-up to this questionnaire, we are conducting individual interviews to provide an opportunity for more in-depth discussion on how to further improve the CLEAR toolkit to make it as practical and user friendly as possible. If you are interested in taking part in one of these interviews, please write your name, phone number and email address below as well as the date and time which would be most convenient for you and we will contact you. Thank you again for your kind support of this initiative.

N.B. If you do not want to write your name on the questionnaire, you can also send an email to <u>anne.andermann@mail.mcgill.ca</u>

Please complete the following information:

Name	
Phone number	

Email	

Preferred date and time _____

Appendix 2.4 In-depth interview consent form

🐯 McGill

FMC / _ _ / ID - ___ / ___ : ___

CLEAR toolkit pilot study

Interview and focus group consent form

Lead researcher: Anne Andermann, Associate Professor, McGill University, <u>anne.andermann@mail.mcgill.ca</u> Coordinating institution: Family Medicine Centre, St Mary's Hospital, Montreal, Canada Sponsors: Fonds de la Recherche du Quebec – Sante, St Mary's Research Centre, Grand Challenges Canada

Hello. My name is and I am an independent researcher working for Dr. Anne Andermann at McGill University. We are conducting a research study called the CLEAR toolkit pilot study. The purpose of this research study is to learn about how frontline health workers can better support disadvantaged patient groups and improve the health of the overall community. The research is being funded in part by Grand Challenges Canada and the St Mary's Research Centre and is based in the Department of Family Medicine at McGill University. This study has been approved by the Family Medicine Centre and the St Mary's Research Ethics Committee.

If you choose to participate in this research study, it would involve participating in one focus group / interview lasting no more than 1 hour. During the focus group / interview , you will be asked questions about the role of health workers in supporting disadvantaged patient groups and improving the health of the overall community, and how such services could be improved in future. Your answers to these questions will be tape recorded to keep a record of what you said in your own words. If you do not want to be tape recorded, you can say so and we will not record you, and take written notes instead. All paper records and tape recordings of the interviews will be kept in a safe and secure place for five years. Only the researchers will be able to access this information. You do not have to give your name, and even if you do, any information that could identify you will be removed from all written documents and future publications from the research study, so it will not be possible to trace the answers back to you.

The research is intended to benefit disadvantaged patient groups and communities, but there is no direct benefit to you from participating in this research. **Participation in this research is entirely voluntary**. You can decide not to participate in the project at any time, even during the focus group. You can refuse to answer any questions that make you feel uncomfortable. If you have any concerns after participating in the research you can contact **Rebecca MacDonald**, **St Mary's Senior Ethics Officer**, **514-345-3511 ext. 3698** who is not part of the research team, but rather an independent person who can provide you with additional support. You are welcome to ask questions at any time. Do you have any questions?

Name (first, last):

The study has been explained to me and my questions have been answered to my satisfaction	Yes	No
I agree to participate in this study	Yes	No
I agree to my interview being audio-taped	Yes	No

There are 2 copies of the consent form, one copy is for you. If you have any additional questions about the research project in future, you can contact the Lead researcher at <u>anne.andermann@mail.mcgill.ca</u>

July 3, 2013

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Appendix 2.5 In-depth interview guide

🐯 McGill

CLEAR toolkit pilot study

In-depth interview guide

Lead researcher

Anne Andermann, Associate Professor, McGill University, anne.andermann@mail.mcgill.ca

[Prior to starting, complete the consent form for each participant] Thank you for having signed the consent form and agreeing to participate in the focus group / interview. Are there any last questions? [pause] Okay then, I will now turn on the audio recorder and we will begin.

- 1. In your experience, which patient groups are most vulnerable or disadvantaged?
 - a. Why do you consider these groups to be more vulnerable than other patients?
- 2. What has been your role in providing medical treatment or other forms of care to particularly vulnerable or disadvantaged patients?
 - a. How have you asked patients about potentially sensitive topics such as poverty, food insecurity, family violence, structural racism and so forth? Please give examples.
 - b. What kinds of actions have you taken to address the social causes of poor health for these vulnerable or disadvantaged patients? What else have you done?
 - c. Beyond supporting individual patients, have you ever gotten involved in taking action to improve health at a community level? If yes, please describe what types of action you were involved in and what impact this had on the health of the population.
 - d. Is it the role of health workers to address the social causes of poor health? Please explain.
- 3. Have you heard about the CLEAR toolkit? If yes, what are your thoughts on this toolkit?
- 4. Here is a copy of the toolkit. Please feel free to take a couple minutes now to browse through it.
 - a. Do you feel that this toolkit would be helpful to your day to day work?
 - b. Do you feel that this toolkit is relevant to your local context?
 - c. Do you think this toolkit can help you to address the social causes of poor health
 - d. Does the toolkit inspire you to take on larger social action to improve the health of the overall community? Prompts: If yes, how? If no, why not?
- 5. With which patient groups would you be most likely to use the CLEAR toolkit?
- 6. What impact would using the toolkit have on improving the lives of disadvantaged patients and populations and how could this impact be measured?
- 7. Having read the toolkit, what do you think you might do differently now? (If nothing, why not?)
- 8. What would you do to improve the toolkit and make it even more useful to you in practice?
- 9. Would you recommend this toolkit to your colleagues? Why or why not?
- 10. In your view, who should receive this toolkit? How should it be distributed?
- 11. If the toolkit is distributed globally, does it need to be adapted to different contexts? If yes, why?
- 12. The interview is now over. Thank you so much for your time. Do you have any additional comments that you would like to add? Would you like a copy of the final version of the toolkit?

Appendix 2.6 Focus group consent form

🐯 McGill



CLEAR toolkit pilot study

Focus group consent form

Lead researcher: Anne Andermann, Associate Professor, McGill University, <u>anne.andermann@mail.mcgill.ca</u> Coordinating institution: Family Medicine Centre, St Mary's Hospital, Montreal, Canada Sponsors: Fonds de la Recherche du Quebec – Sante, St Mary's Research Centre, Grand Challenges Canada

Hello. My name is ------ and I am a research assistant working for Dr. Anne Andermann at McGill University. We are conducting a research study called the CLEAR toolkit pilot study. The purpose of this research study is to to know your views on the role of health workers in addressing the social determinants of health and to better understand the barriers and facilitators to adopting the CLEAR toolkit approach in the local St Mary's context? The research is being funded by the St Mary's Research Centre and is based in the Department of Family Medicine at McGill University. This study has been approved by the Family Medicine Centre and the St Mary's Research Ethics Committee.

If you choose to participate in this research study, it would involve participating in one focus group discussion lasting 30 to 45 minutes. During the focus group, you will be asked questions about barriers and facilitators to adopting the CLEAR toolkit approach in the local St Mary's context. Your answers to these questions will be tape recorded to keep a record of what you said in your own words. If you do not want to be tape recorded, you can say so and we will not record you. All paper records and tape recordings of the interviews will be kept in a safe and secure place for five years. Only the researchers will be able to access this information. You do not have to give your name, and even if you do, any information that could identify you will be removed from all written documents and future publications from the research study, so it will not be possible to trace the answers back to you.

The research is intended to benefit disadvantaged patient groups and communities, but there is no direct benefit to you from participating in this research. **Participation in this research is entirely voluntary**. You can decide not to participate in the project at any time, even during the focus group. You can refuse to answer any questions that make you feel uncomfortable. If you want to talk to someone not connected with the study about your rights as a study participant, or if you have any complaints about the research, you can call the St. Mary's Ombudsperson at (514) 345-3511 ext. 3301. You are welcome to ask questions at any time. Do you have any questions?

Name (first, last):	Date:	
The study has been explained to me and my questions have been answered to my satisfaction	Yes	No
I agree to participate in this study	Yes	No
I agree to my interview being audio-taped	Yes	No

There are 2 copies of the consent form, one copy is for you. If you have any additional questions about the research project in future, you can contact the Lead researcher at anne.andermann@mail.mcgill.ca

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Appendix 2.7 Focus group interview guide

🐯 McGill

CLEAR toolkit pilot study

Focus group interview guide

Lead researcher

Anne Andermann, Associate Professor, McGill University, anne.andermann@mail.mcgill.ca

[Prior to starting, complete the consent form for each participant] Thank you for having signed the consent form and for agreeing to participate in the focus group. Are there any last questions? [pause] Okay then, I will now turn on the audio recorder and we will begin. I am handing out another copy of the most recent version of the CLEAR toolkit that you can refer to during this focus group.

- 1. Are you someone who tends to focus more on the acute and chronic medical problems that patients present with or do you also frequently ask about and deal with the underlying social problems that patients often have but may not bring up unless prompted to do so?
 - a. FOR THOSE WHO FOCUS ON THE MEDICAL PROBLEMS: Why do you focus more on the medical problems? Do you ever ask about the underlying social problems? Why or why not? What would help you to ask more about the underlying social problems?
 - b. FOR THOSE WHO OFTEN ASK ABOUT SOCIAL PROBLEMS: Why do you also ask about the social problems? When you have asked, do you find that you are able to help the patient with these issues? Why or why not? Has addressing the social issues been helpful in improving the health of your patients? If yes, please give an example. What could be helpful to you in future when asking patients and dealing with their social problems?
- 2. Overall, would you consider yourself to be more of a supporter of the CLEAR toolkit approach (The basic idea of the CLEAR toolkit is to encourage health workers to treat the immediate health problem, ask about underlying social problems, refer to local social support services and advocate for larger social change to improve the health of their patients and the wider patient community) or are you someone who has lots of reservations about using such an approach in your day-to-day practice, and why?
 - a. Are there certain aspects of the toolkit approach that you are more supportive of and other aspects where you have more reservations? Which ones and why?
 - b. Do you think that most of your colleagues are supporters of the CLEAR toolkit approach or do they have more reservations about using such an approach?
 - c. Can you think of someone in particular who is a supporter? Why do you think that person is a supporter of the CLEAR toolkit approach?

- d. Can you think of someone in particular who has lots of reservations? Why do you think that person has these reservations about the CLEAR toolkit approach? Is there anything that could be done to help this person become more of a supporter?
- e. What else is needed to further improve the CLEAR toolkit and help reduce the concerns and reservations that some people may have about using the toolkit?
- f. What wider organizational changes or other structural changes may be needed to help support frontline health workers in using the CLEAR toolkit approach in this context?
- g. Who would need to be involved to create the wider organizational support for using such an approach across the entire organization? In particular, what actions or activities could support the institutional adoption of the CLEAR toolkit approach?

The interview is now over. Thank you so much for your time. Do you have any additional comments that you would like to add? Would you like a copy of the final version of the toolkit?

Appendix 2.8 Key Informant Interview consent form

🐯 McGill

FMC / _ _ / ID

CLEAR toolkit pilot study

Interview consent form

Lead researcher: Anne Andermann, Associate Professor, McGill University, <u>anne.andermann@mail.mcgill.ca</u> Coordinating institution: Family Medicine Centre, St Mary's Hospital, Montreal, Canada Sponsors: Fonds de la Recherche du Quebec – Sante, St Mary's Research Centre, Grand Challenges Canada

Hello. My name is ------ and I am a research assistant working for Dr. Anne Andermann at McGill University. We are conducting a research study called the CLEAR toolkit pilot study. The purpose of this research study is to know your views on the role of health workers in addressing the social determinants of health and to better understand the barriers and facilitators to adopting the CLEAR toolkit approach in the local St Mary's context? The research is being funded by the St Mary's Research Centre and is based in the Department of Family Medicine at McGill University. This study has been approved by the Family Medicine Centre and the St Mary's Research Ethics Committee.

If you choose to participate in this research study, it would involve participating in one brief interview lasting 15-20 minutes. During the interview, you will be asked questions about barriers and facilitators to adopting the CLEAR toolkit approach in the local St Mary's context. Your answers to these questions will be tape recorded to keep a record of what you said in your own words. If you do not want to be tape recorded, you can say so and we will not record you. All paper records and tape recordings of the interviews will be kept in a safe and secure place for five years. Only the researchers will be able to access this information. You do not have to give your name, and even if you do, any information that could identify you will be removed from all written documents and future publications from the research study, so it will not be possible to trace the answers back to you.

The research is intended to benefit disadvantaged patient groups and communities, but there is no direct benefit to you from participating in this research. **Participation in this research is entirely voluntary**. You can decide not to participate in the project at any time, even during the focus group. You can refuse to answer any questions that make you feel uncomfortable. If you want to talk to someone not connected with the study about your rights as a study participant, or if you have any complaints about the research, you can call the St. Mary's Ombudsperson at (514) 345-3511 ext. 3301. You are welcome to ask questions at any time. Do you have any questions?

ne (first, last): Date:		
The study has been explained to me and my questions have been answered to my satisfaction	Yes	No
I agree to participate in this study	Yes	No
I agree to my interview being audio-taped	Yes	No

There are 2 copies of the consent form, one copy is for you. If you have any additional questions about the research project in future, you can contact the Lead researcher at anne.andermann@mail.mcgill.ca

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Appendix 2.9 Key informant interview guide for health administrators



FMC/__/ __ - __ - __ / __ : __

ID

CLEAR toolkit pilot study

Key informant interview guide for Health Administrators

Lead researcher

Anne Andermann, Associate Professor, McGill University, anne.andermann@mail.mcgill.ca

[Prior to starting, complete the consent form for each participant] Thank you for having signed the consent form and agreeing to participate in the interview. Are there any last questions? [pause] Okay then, I will now turn on the audio recorder and we will begin.

- 1. Do you think it is the role of health workers in this unit to address the underlying social causes of poor health? Why or why not?
- 2. To your knowledge, do frontline health workers in this unit (e.g. doctors, residents, nurses) tend to focus more on the acute and chronic medical problems that patients present with or do they also frequently ask about and deal with the underlying social problems that patients often have but may not bring up unless prompted to do so?
 - a. FOCUS MORE ON THE MEDICAL PROBLEMS: Why do you think that health workers in this unit focus more on the medical problems? Are they ever trained or encouraged to ask about the underlying social problems? Why or why not? What would help them to ask more about the underlying social problems?
 - b. OFTEN ASK ABOUT SOCIAL PROBLEMS: Why do you think that health workers in this unit also ask about the social problems? When they have asked, do you think that they are able to help the patients with these issues? Why or why not? Has addressing the social issues been helpful in improving the health of patients who attend this unit? If yes, please give an example. What could be helpful to support frontline health workers in future when asking patients and dealing with their social problems?
 - c. UNSURE: How could one go about finding out whether the frontline health workers ask about the underlying causes of poor health?
- 3. Overall, would you consider yourself to be more of a supporter of the CLEAR toolkit approach (The basic idea of the CLEAR toolkit is to encourage frontline health workers to treat the immediate health problem, ask about underlying social problems, refer to local social support services and advocate for larger social change to improve the health of their patients and the wider patient community) or are you someone who has lots of reservations about using such an approach in the day-to-day practice of this unit, and why?
 - a. Are there certain aspects of the toolkit approach that you are more supportive of and other aspects where you have more reservations? Which ones and why?

- b. What else is needed to further improve the CLEAR toolkit and help reduce the concerns and reservations that some people may have about using the toolkit?
- c. What wider organizational changes or other structural changes may be needed to help support frontline health workers in using the CLEAR toolkit approach in this context?
- d. Who would need to be involved to create the wider organizational support for using such an approach across the entire organization? In particular, what actions or activities could support the institutional adoption of the CLEAR toolkit approach?

The interview is now over. Thank you so much for your time. Do you have any additional comments that you would like to add? Would you like a copy of the final version of the toolkit?

Appendix 4.1 CLEAR toolkit version 4.0



EMPLOYMENT	+
CHILDCARE	•
EDUCATION	•
NUTRITION	•
HOUSING	•
DOMESTIC VIOLENCE	•
CHILD MALTREATMENT	•
DISCRIMINATION	•
ISOLATION	+
	CHILDCARE EDUCATION NUTRITION HOUSING DOMESTIC VIOLENCE CHILD MALTREATMENT DISCRIMINATION



STEP 4: ADVOCATE

This can be achieved by involving the leaders of the community, from government officials and religious leaders to business owners and charitable organisations. Help identify champions within the community who can aid you in building better and healthier environments for your patients.

HOW TO INFLUENCE CHANGE:



Appendix 4.2 Locally adapted insert for Côte des Neiges

	<u>USING THE CLEAR TOOLKIT IN</u> <u>CÔTES-DES-NEIGES</u>		
right (questi	n problems are often directly linked to, or exacerbated by, people's social circumstances. Asking the questions in the right way will help you identify underlying problems. Start by asking more general ons and then follow up with more specific questions to tease out what challenges your patient may ing and where you can refer them for additional support.		
intere relatio	mber: When you ask, be respectful, non-judgemental and friendly. Make sure to explain that you are sted in knowing more about how things are going at home, at work, at school, and in their onships, as these things can have an important impact on their health and well-being and you may be o help in these areas as well.		
alone patiei team	onstrating your concern and providing supportive listening can go a long way. But you are not in helping your patients cope with complex health and social issues. You can refer your its to local community groups that can provide support. You can discuss the case with the nurse or during a team meeting for advice on what to do next. Where needed, you can also to social work or other allied health professionals for further assessment and care.		
Here a	are some examples of opening questions to get the conversation started:		
	What is the one thing in the past few weeks that has really been stressing you? What is one issue in your life that you need help with aside from medical issues?		
Here a	are some examples of specific questions to better understand the situation (GO TO PAGE 2):		
• • •	Have you tried to solve this problem before? What did you do? Did it help? Do you have anyone who can help you with this problem?		
Here a	are some examples of how you can offer support and help problem-solve (GO TO PAGE 2):		
• • •	Is this something that you would like some help with? I have a list of referral services that we use here in the hospital		
Here a	are some examples of how you can conclude the visit:		
•	Perhaps next visit we can spend more time discussing this further to see what can be done Is there one thing that you could do differently to start to make some changes in your life? Shall we try that and talk again next visit?		
	are some examples of how you can follow-up at future visits:		
Here			

YOU ARE NOT ALONE Resources in Cote des Neiges

Issues	Sample questions	Community referral resources
Poverty and unemployment	 Do you have trouble making ends meet at the end of the month? Do you have problems paying your rent each month? Do you have stable employment with benefits? 	Project Genesis 514-738-2036 http://genese.qc.ca/ Job Search Centre 514-733-3026 http://crecdn.com/
Housing problems	 Do you and your family have a safe place to sleep every night? Do you have cockroaches, mice or mold in the home? 	OEIL 514-737-2866 http://www.oeilcdn.org/
Food insecurity	 Do you and your family have enough to eat? Do you ever need to make difficult choices about whether to pay bills or whether to buy food or medicine? 	MultiCaf 514-733-0554 http://www.multicaf.org/ Montreal Diet Dispensary 514-937-5375 http://www.dietdispensary.ca/
Early childhood	 Who looks after your children when the adults are working or out of the house? Do you ever feel overwhelmed or unable to cope looking after your children? And if so, what do you do in those situations? Who do you turn to when you have questions about parenting? 	La Maison Bleue 514-509-0833 http://www.maisonbleue.info/ Baobab Familial 514-734-4097 http://www.baobabfamilial.org/
Domestic violence, mental health and addictions	 Do you feel safe at home? How is your relationship with your partner? Does anyone in your family suffer from mental health or addiction problems? 	SOS Violence Conjugal 1-800-363-9010 http://www.sosviolenceconjugale.ca/ Club Ami 514-739-7931 http://www.clubami.qc.ca/
Child maltreatment	• Have you ever been worried that your child's safety may be threatened?	Batshaw 514-935-6196 http://www.batshaw.qc.ca/en
Discrimination	 Do you ever feel pressured, bullied or intimidated? Have you ever been refused employment, housing, services or benefits based on you age, gender or ethnic background? 	Promis 514-345-1615 http://promis.qc.ca/index.php Multi-écoute 514-737-3604 http://www.multiecoute.org/
Isolation	• Do you have any family members, friends or neighbours here in Montreal you can count on in times of need?	Femmes du Monde 514-735-9027 http://www.femmesdumondecdn.org/
Appendix 4.3 CLEAR toolkit – Urdu translation for future pilot study





کے حالات کے بارے میں ان سے پوچھنے کے بعد آ جاۓ قین کہ بہتر خیال کرسکیں کہ ان کو کیا مسائل ہ کن چیلنجوں کا سامنا ہے۔ ان چیلنجوں میں سے کچھ ناقابل تسخیر لگ سکتے ہے کے مسائل حل کرنے کے لئے اور مقد کرنے میں اکیل ایک مثالی پوزیشن میں ہیں اور مقامی وسائل اور حما	
کے نیٹ ورک جن کے بارے میں آپ کے مریضوں کو اور زندگی کے حالات کی بہتر بنانے میں مدد کر سکتے	مثالی رجوع کے ادارے مرکز ملازمت، روزگار کی مہارت کی دوبارہ ترییت، ایر نٹس
رام ، پڑوس میں چلنے والے بچے کی دیکھ بھال کے ادارے	بچے کی دیکھ بھال کے معاون ادارے ، ابتدائی بچپن کے ترقی کے پروگ
	اسکول بورڈز، وزارت تعلیم ، بچوں کے حقوق کی ایجنسیاں
	کھاتا فراہم کرنے والے ادارے ، کمیونٹی باغات
	ریبائیئں کے حقوق کے وکالٹ گرویوں، کراپے دارو <mark>ں کے بورڈ</mark>
مکاترین کے لئے ٹیلی فون باٹ لائن	خواتین کی بناہ گاہیں، خواتین کی معاونتی گروپ، گھر <mark>بلو تشدد کے</mark>
کے مسائل کو حل کرنے کے ادارے	نوجوانوں کو تحفظ فراہم کرنےوالے ادارے، محکمہ یولیس، عوام
معاونتى گروپ	قانونی امداد کے کلینک، انسانی حقوق کی نتظیموں، نقاقتی کمبونٹی
	معاونتی گروپ، مذہبی ادارے ، پڑوس نیٹ ورکس 3
	مریضوں کو ابتدائی علاج قراہم کرنے کے بعد اور س کے حالات کے بارے میں ان سے بوچھنے کے بعد ا کن جیلنجوں کا سامنا ہے۔ ان جبلنجوں میں سے کچھ ناقابل تسخیر لگ سکتے ہی کے مسائل حل کرنے کے لئے اور مدد کرنے میں اکبل ایک مثالی بوزیشن میں ہیں اور مقامی وسائل اور حما کے نیٹ ورک جن کے بارے میں آب کے مریضوں کو میں بروگر ام ایم بروس میں جانے والے بچے کی دیکھ بھال کے ادارے ارام ، بڑوس میں جانے والے بچے کی دیکھ بھال کے ادارے مندرین کے لئے ٹیلی فون باٹ لائن



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