

Interventions to Address Stigma in the Health System

For the Chief Public Health Officer's Report on the State of Public Health in Canada 2019

Addressing Stigma: Towards a More Inclusive Health System





Table of Contents

	Key Messages	3
ATTA	Summary of Interventions to Address Stigma	4
	Background	9
	Methodology	10
4111	Limitations	11
	Scope	11
	Literature search	11
	Using the Evidence to Support Stigma	
	Interventions and Intervention Research	12
	Key steps in intervention research	12
	Summary of the State of Stigma	
	Intervention Research	13
	References	14
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Key Messages

- This evidence summary complements the Chief Public Health Officer's Report on the State of Public Health in Canada 2019: Addressing Stigma – Towards a More Inclusive Health System.
- The purpose of this summary is to provide additional details on the effectiveness of anti-stigma interventions, with a focus on those within the health system.
- A rapid review was conducted in 2019 on stigma and health, including interventions to address stigma in the health system. Articles were reviewed by stigma type and intervention level.
- An evidence summary table has been organized by intervention level and includes interventions specific to health conditions (i.e., mental illness, substance use, and HIV infection) and social identities (i.e., First Nations, Inuit, and Métis peoples, African, Caribbean, and Black Canadians, and LGBTQ2+ people).
- The following research has been highlighted:
 - Population level: interventions to reduce stigma using mass-media and in media coverage, and evaluating inclusive policies
 - Institutional level: interventions to address stigma and build cultural competence and cultural safety with healthcare providers and organizations
 - Interpersonal level: interventions to reduce stigma through contact and education and interventions to address implicit bias
 - Individual level: interventions that challenge internalized stigma

- This is an emerging area of inquiry, and the quantity and quality of research varies by stigma topic and intervention level. Research reviews are frequently unable to draw clear conclusions about what works, for whom, and in what context. More work is needed to support rigorous intervention development, implementation, and research, particularly related to multi-level interventions, behaviour change, impacts on health outcomes, and approaches that reach across stigmas.
- This evidence summary should be read with the <u>full report</u> and the <u>What We Heard</u> report, to understand broader perspectives on the impact of stigma and potential ways to address it.
- The findings from this evidence summary can be used in conjunction with the <u>Stigma</u> <u>Pathways to Health Outcomes Model</u>, and the <u>Action Framework for Building</u> <u>an Inclusive Health System</u>, developed for the report.



Summary of Interventions to Address Stigma

TABLE 1: Evidence on Interventions to Address Stigma in the Health System

	Population Level	Intervention Focus
Reducing stigma through mass-media (general population)	Narrative reviews of research on mental health stigma identified education- and/or contact-based mass-media campaigns that were associated with improved public attitudes and/or knowledge, including 'Beyond Blue' in Australia, 'Time to Change' in England, 'Like Minds, Like Mine' in New Zealand, and 'Hjärnkoll' in Sweden. 1, 2 Some were also associated with a reduction in discrimination reported by people living with mental illness, such as 'Like Minds, Like Mine' in New Zealand and 'Time to Change' in England.	Mental illness stigma
Reducing stigma in media coverage (journalists)	A systematic review identified 27 studies from high-income countries that assessed two types of media-related interventions targeting mental illness stigma: media-monitoring projects or reporting guidelines, and education interventions for journalists or journalism students. Findings were mixed, and research quality was generally low. The most promising approaches appeared to be contact-based educational approaches and media guidelines developed and shared by authoritative institutions. ³	Mental illness stigma
Developing inclusive policies	In a longitudinal primary study conducted in the United States, civil union legalization was associated with lower levels of stigma consciousness, perceived discrimination, and depressive symptoms for women in Chicago who identify as lesbian or bisexual. ⁴	Stigma experienced by LGBTQ2+ populations
	Institutional Level	Intervention Focus
Addressing stigma with healthcare providers and	Institutional Level Narrative reviews of research on education- and/or contact-based interventions targeting mental illness stigma among healthcare providers found some evidence for short-term impacts related to attitudes, knowledge and/or intended behaviour. The evidence base in this area is small.	
stigma with healthcare	Narrative reviews of research on education- and/or contact-based interventions targeting mental illness stigma among healthcare providers found some evidence for short-term impacts related to attitudes, knowledge	Focus Mental illness
stigma with healthcare providers and	Narrative reviews of research on education- and/or contact-based interventions targeting mental illness stigma among healthcare providers found some evidence for short-term impacts related to attitudes, knowledge and/or intended behaviour. ^{1, 2} The evidence base in this area is small. A systematic review identified 21 interventions targeting mental illness stigma in health facilities in high-income countries. ⁵ Interventions were generally education- and/or contact-based and targeted healthcare students or healthcare providers. Findings for these interventions were promising, but mixed. Methodological variations across studies made it difficult for	Focus Mental illness stigma Mental illness

Institutional Level

Intervention Focus

A systematic review identified seven studies with interventions targeting stigma towards people who use substances among medical students or other professionals (e.g., police officers, counsellors). This included education and contact interventions, as well as critical reflection techniques, crisis intervention programs, and acceptance and commitment therapy training. Some findings were promising, though evidence was mixed. Studies had varying methodological quality.

Substance use stigma

A systematic review identified four interventions, all from high-income countries, intended to address stigma in health facilities related to substance use (or substance use and mental illness).⁵ Interventions were generally education- and/or contact-based, targeting healthcare students and professionals. Findings were promising, but results and study quality were mixed.

Substance use stigma

In a primary study completed in four Canadian primary health care clinics, the authors describe how they adapted their organizational-level health equity intervention (*EQUIP*) to incorporate an explicit harm reduction lens.⁸ This equity-oriented approach to harm reduction included attention to the role of stigma and discrimination. In their primary study, the authors explore how this led to important discussions about substance use, and changes to organizational policy and practice.

Substance use stigma

A systematic review on implicit racial bias, including racial bias against African-American populations, identified a small research base—with mixed findings—on interventions to reduce implicit bias among healthcare providers. The authors contextualized these findings within broader research on reducing implicit bias, and noted intervention types with potential relevance to healthcare providers, such as individuation and perspective taking.

Stigma experienced by African, Caribbean, and Black Canadians

A narrative review on implicit bias, including implicit racial bias against African-American populations, identified common components of interventions, including self-reflection and approaches to control bias, such as perspective-taking, individuation, and looking for common-identity information. ¹⁰ Since this is an emerging field, the review focused on a synthesis of components rather than evidence of impact. The authors identified the need for more research to understand intervention effectiveness.

Stigma experienced by African, Caribbean, and Black Canadians

In a primary study completed in four Canadian primary health care clinics, an organizational-level health equity intervention (EQUIP) was associated with enhanced organizational capacity to provide equity-oriented health care to marginalized populations, including those living in poverty, facing homelessness, and those living with trauma, including Indigenous peoples.8 The intervention focused on cultural safety, trauma- and violence-informed care, and organizational integration and tailoring. Intervention activities included staff education as well as organizational practice and policy change. The intervention was associated with increased staff confidence and awareness as well as organizational strategies to address racism, improved physical environment of the clinics, and changes to organization policies and practices. Research with a sample of patients at these clinics (41.7% of the sample identified as Indigenous) found that over a 24-month period higher levels of equity-oriented care was associated with greater patient confidence in health care, which was associated with greater patient confidence in managing health.¹¹ Greater patient confidence in managing their health was associated with improved health outcomes (depressive symptoms, PTSD symptoms, chronic pain, and quality of life).

Stigma experienced by First Nations, Inuit, and Métis peoples

A systematic review identified educational curricula and training initiatives intended to inform healthcare students and professionals on LGBT healthcare issues. ¹² Most of the 15 included studies were from the United States. Interventions were associated with short-term improvements in knowledge, attitudes, and practice, but methodological quality was low for most studies.

Stigma experienced by LGBTQ2+ populations

	>	Institutional Level	Intervention Focus
		A critical review of transgender stigma and health explored the potential of education and contact interventions to improve knowledge and attitudes among healthcare providers. This synthesis explored the potential of various approaches, but this is an emerging field and few results were available.	Stigma experienced by LGBTQ2+ populations
		A systematic search identified interventions from the United States, predominantly education- or contact-based, intended to reduce LGBT stigma, including some initiatives targeting healthcare providers. As this is an emerging field with little rigorous intervention research, the synthesis focused more on the components and activities of these interventions, rather than a detailed review of impact. ¹⁹	Stigma experienced by LGBTQ2+ populations
,	Building cultural competence with healthcare providers and organizations	A systematic review of interventions to improve cultural competency related to patients with disabilities—with the vast majority of studies focused on mental illness—identified 25 interventions that targeted healthcare students or healthcare providers in high-income countries. ¹⁴ Interventions were predominantly contact- and/or education-based. Findings were mixed, research quality was generally low, and it was not possible to draw conclusions across studies.	Mental illness stigma
		A systematic review identified 23 articles that explored cultural competence interventions undertaken in the United States to address health disparities among racialized groups, including African-American populations. Interventions included provider education, interventions to improve patient/provider interactions, and culturally tailored interventions. Low quality evidence made it difficult to draw conclusions about effectiveness.	Stigma experienced by African, Caribbean, and Black Canadians
		An earlier review of 19 systematic reviews, in which some studies had a focus on African-American populations, identified a number of interventions intended to improve cultural competency in healthcare. This included health practitioner training, culturally specific programs for patients, peer education, patient navigators, and exchange programs. Many initiatives were associated with changes in health provider knowledge, skills or attitudes or changes in patient health care access. Evidence was weaker for impact on patient outcomes. Methodological rigour was low among included studies.	Stigma experienced by African, Caribbean, and Black Canadians
		A systematic review identified 16 studies of interventions to improve cultural competency in health care for Indigenous peoples, including: health provider and health student education; culturally specific health programs; and recruitment of Indigenous healthcare providers. Study quality varied, and there were few rigorous evaluations. Some interventions were associated with increased healthcare provider confidence, health care accessibility and patient satisfaction.	Stigma experienced by First Nations, Inuit, and Métis peoples
		A systematic scoping review identified 16 interventions intended to improve cultural competence with Indigenous and racialized peoples among health-care workers. To Some interventions were associated with improvements in practitioner knowledge, skills or attitudes. There was limited evidence of impact on health care and health outcomes. Quality of evidence varied, with several studies of low quality included.	Stigma experienced by First Nations, Inuit, and Métis peoples
		A systematic scoping review identified 15 studies of organization-level interventions to improve cultural competency with Indigenous and racialized groups, including two main types of initiatives: audit and quality improvement; and organization-level policy or practice change. ¹⁸ Some promising approaches were identified, but evidence quality was low.	Stigma experienced by First Nations, Inuit, and Métis peoples
		A systematic review of cultural competence initiatives intended to improve culturally appropriate health care for populations who identify as LGBT identified 11 studies. ¹⁴ Interventions included training and skill-building for healthcare providers, among others. The strength of evidence was low, and no conclusions could be drawn from the review.	Stigma experienced by LGBTQ2+ populations

	Institutional Level	Intervention Focus
Building cultural safety with health providers and organizations	A scoping review of 30 publications identified the following components of cultural safety initiatives in Canada: collaboration/partnership; power sharing; addressing the broader context of the patient's life; safe environment; organizational and individual level self-reflection; and training for healthcare professionals. ²⁰ Since this is an emerging field, the review focused on synthesis of components rather than evidence of impact.	Stigma experienced by First Nations, Inuit, and Métis peoples
	A scoping review of six articles on cultural competency and safety in Canadian hospital emergency departments recommended that initiatives: be developed in partnership with Indigenous communities and with the recognition of colonialism and its impacts; train practitioners in relationship-building and self-awareness; focus on the needs of patients who face barriers accessing non-emergency health services; and work to prevent discrimination. ²¹ The review focused on synthesis of barriers and facilitators rather than evidence of impact.	Stigma experienced by First Nations, Inuit, and Métis peoples
	Interpersonal Level (person-to-person)	Intervention Focus
Reducing stigma through contact and education interventions	Systematic and narrative reviews suggest education and/or contact interventions are often associated with short-term to medium-term knowledge improvements and/or attitudinal improvements related to mental illness stigma. 1, 2, 22, 23 Methodological and intervention quality varied across studies. In some reviews, contact was identified as more effective than education, whereas the impact of both approaches was similar in other reviews. 2, 22, 23	Mental illness stigma
	One recent systematic review included a meta-analysis of interventions to reduce stigma related to severe mental illness. 23 Methodological quality varied. After adjusting for publication bias, contact interventions were associated with reductions in stigmatizing attitudes (d = 0.24) and desire for social distance (d = 0.40). Education interventions were associated with reductions in stigmatizing attitudes (d = 0.30) and desire for social distance (d = 0.27).	Mental illness stigma
	A systematic review identified stigma reduction efforts intended to improve knowledge and reduce negative attitudes towards people living with HIV. While the scope of the systematic review was worldwide, the review identified many studies from the United States and some in Canada. Most interventions were education-based. The review included a meta-analysis of 42 studies. This identified significant improvements in HIV knowledge (Cohen's d = 0.48 from interventions with control groups; Cohen's d = 0.42 for those without control groups) and attitudes towards people living with HIV (Cohen's d = 0.39 from intervention with control groups; Cohen's d = 0.25 without control groups) among participants. However, many studies lacked methodological rigour.	HIV stigma
	An earlier systematic review identified 48 articles, from across the world, reviewing interventions intended to reduce HIV stigma and discrimination. While most took place in low- or middle-income countries, some interventions were implemented in the United States or Canada. Interventions were identified at various levels, but education, skill-building, and contact interventions were most common. Many studies were promising, and research quality varied but was generally high.	HIV stigma
	A systematic review identified three studies of education and contact interventions with promising, but mixed, impacts on stigma attitudes towards people who use substances. The review included a small number of studies, and quality of research varied. ⁷	Substance use stigma

	Interpersonal Level (person-to-person)	Intervention Focus
Addressing implicit bias	A systematic review identified 30 articles of interventions to reduce implicit bias, particularly implicit Black/White racial bias. While evidence was mixed, and the quality of evidence varied, some approaches were identified as promising, such as intentional strategies to overcome biases, evaluative conditioning, identifying with the outgroup, and exposure to counter stereotypes. ²⁶	Stigma experienced by African, Caribbean, and Black Canadians
	Individual Level	Intervention Focus
Challenging internalized stigma	One systematic review of interventions designed to reduce internalized mental illness stigma identified 14 studies. Five of these studies were eligible for inclusion in meta-analysis. ²⁷ The pooled standardized mean difference (SMD) for three psychosocial interventions was – 0.43, a small to moderate impact on internalized stigma among people living with severe mental illness. However, issues in study quality were identified.	Mental illness stigma
	A systematic review of five randomized control trials (RCTs) suggested the effectiveness of interventions targeting self-stigma among people who live with mental illness was uncertain, in part due to heterogeneity and risk of bias. ²⁸	Mental illness stigma
	A previous critical review identified 14 studies, including some promising interventions, but the quality of research was too low to draw firm conclusions. ²⁹	Mental Illness Stigma
	A systematic review identified 23 studies of interventions intended to reduce self-stigma experienced by people living with HIV, as well as their families. Most studies took place in North America, and most studies targeted adults living with HIV. Psychoeducational interventions were most common, including educational, skill-building, empowerment, and social support approaches. While some findings were promising, results were mixed and the quality of the studies varied. The review identified few interventions that focused on family members of people living with HIV.	HIV stigma
	A more targeted systematic review identified five studies exploring interventions intended to address intersectional stigma experienced by African/Black diasporic women living with HIV.31 Interventions included Emotional Writing Disclosure (EWD), behavioural interventions focused on knowledge and coping, and a participatory educational intervention focused on knowledge and skill-building. Most interventions were associated with reductions in HIV-related stigma. However, sample sizes were small, studies were heterogeneous, and firm conclusions cannot be made.	HIV Stigma
	A systematic review identified three studies of interventions that targeted self-stigma among people with substance use disorders. This included acceptance and commitment therapy, skills training and vocational counseling, as well as plastic surgery to remove needle track-marks. There were few studies and the quality of research varied, but some findings were promising. ⁷	Substance use stigma
	A systematic search identified interventions from the United States, particularly cognitive behavioural and narrative interventions, intended to improve coping resources among populations who identify as LGBT. ¹⁹ As this is an emerging field with little rigorous intervention research, the synthesis focused more on the components and activities of these interventions, rather than a detailed review of impact.	Stigma experienced by LGBTQ2+ populations
	A critical review of transgender stigma and health explored the potential of therapeutic, coping, and social support interventions to address self-stigma among populations who identify as transgender. ¹³ While some findings are promising, this is an emerging field and few results were available.	Stigma experienced by LGBTQ2+ populations



Background

This evidence summary supports the Chief Public Officer's Report on the State of Public Health in Canada 2019: Addressing Stigma – Towards a More Inclusive Health System (2019 CPHO Annual Report). It will be of value to those who are interested in developing or adapting interventions to address stigma and/or undertaking intervention research in the health system, which includes health care, public health, and other allied health services.

The 2019 CPHO Annual Report summarized research across stigma types, as well as emerging and promising interventions in Canada. This evidence summary has a greater focus on published evaluation findings.

The summary is organized by intervention level and highlights stigma types featured in the <u>full report</u>. These include stigmas related to specific health

conditions (i.e., HIV, substance use, and mental illness) and social identities (i.e., First Nations, Inuit, and Métis peoples, African, Caribbean, and Black Canadians, and LGBTQ2+ people). The inclusion of all levels is intended to demonstrate the multi-level nature of stigma and the multi-level interventions necessary to address stigma across the health system.

How is this evidence summary different from the report?

The 2019 CPHO Annual Report sought to incorporate different ways of knowing and experiencing stigma. For example, input from people who experience stigma was included throughout the stigma chapters and the intervention section explored emerging and promising literature.

This evidence summary has a greater focus on published evaluation research. This research base is more limited, reflecting embedded biases in the production of evidence, including how colonialism and racism have influenced which knowledge systems are valued and which are not.



Methodology

A rapid review was conducted by the Office of the CPHO in the Public Health Agency of Canada (PHAC) to i) clarify the definition of stigma; ii) describe the impacts of stigma on health outcomes; iii) assess the effectiveness of interventions to reduce stigma in the health system and to improve health outcomes; and iv) analyze the policy landscape to address stigma in Canada.

A literature search strategy was developed in conjunction with the PHAC Health Library. The search was performed in February 2019 using the following databases: Medline, Embase, ProQuest Public Health, and Scopus. Studies published after January 1, 2009 were included for initial screening. However, a time limit was not applied to publications that explored stigma concepts, drivers, frameworks, and models. Search filters were applied to identify articles focused on stigma related to key health conditions and social identities. Only studies from Canada, the United Kingdom, Australia, New Zealand, and the United States were included.

The search yielded 3500 articles after removal of duplicates. Two independent reviewers screened 80% of the articles at the title and abstract level. Data was organized into three main stigma categories: i) concepts and methods; ii) research related to the selected health conditions and social identities; and iii) intervention research addressing stigma and health. Reviewers assessed full text articles for relevance and quality. A total number of 516 studies were included for full text review. Additional targeted searches were completed after February 2019, including bibliographic searches, reviewing grey literature, and ancestry searching. A final search

was also completed in August 2019 to identify any new publications in this field. The identification of systematic reviews, narrative reviews, and critical reviews in the health system was prioritized for the evidence summary. High-quality primary studies were also included. The strongest evidence found through the review was included in the summary. Where available, Canadian research has been highlighted.

Articles were organized by level of intervention and stigma topic. Most research reviews summarized the state of evidence across a number of different intervention types. Alongside limitations in methodology, this meant that most research reviews concluded with general statements rather than calculations of overall effect sizes for particular interventions. As a result, the evidence table summarizes the state of the research rather than specific conclusions about what works. When articles covered several stigma topic areas, evidence for each stigma topic was separated where possible.

Interpersonal-level education and training interventions targeting healthcare providers are included under institutional interventions, since they generally focus on individuals in the context of their role within healthcare institutions.



Limitations

Scope

The scope of the 2019 CPHO Annual Report was limited to stigma and the health system. Consequently, interventions that address broader factors that drive and fuel stigma and discrimination were not explored in this evidence summary, such as other social determinants of health and social drivers such as political movements. Other factors related to stigma in the health system were also not included, such as the impact of stigmatizing language on medical decision making, policies that impact equity-oriented healthcare, or the historic and ongoing health impact of discriminatory policies. ^{32, 33, 34}

Additionally, efforts to collectively resist stigma are not included in this evidence summary; however, the *2019 CPHO Annual Report* does highlight community-based leadership driving action in this area.

Literature search

The searches conducted were not exhaustive and may not have captured all relevant literature. Only literature published in English and French was reviewed, and some literature may have been excluded on this basis. A detailed review of study quality and risk of bias was not assessed in this review. Finally, the review predominantly focused on articles published after January 1, 2009.



Using the Evidence to Support Stigma Interventions and Intervention Research

This evidence review is intended as a companion product to the 2019 CPHO Annual Report. Policy leaders, researchers, practitioners, and service providers are encouraged to first use the **Stigma** Pathways to Health Outcomes Model to understand the stigma process and identify areas of potential intervention. This stigma model can be used to understand individual stigmas while also considering how stigmas intersect, and the impact of co-occurring stigmas on health outcomes. The Action Framework for Building an Inclusive **Health System** can then be used in conjunction with the evidence summary to develop multi-level and comprehensive approaches to address stigma. This approach may also serve as a starting point to consider other stigmas not included in the table, such as those targeting age, class, gender, and other health conditions.

Though much of the research in this field has explored the impact of one intervention at one level, researchers increasingly emphasize the importance of working at multiple levels to enable, reinforce, and sustain change. Guided by a public health approach to prevention, broad interventions that target health inequities can be prioritized to achieve the most benefit to the greatest number of people. Population- and institution-level interventions to address stigma drivers and prevent stigma practices are most aligned with this approach.

The limitations associated with this research field reflect the challenges associated with intervention research overall. It is time and resource intensive to complete all steps in intervention research. To provide further context for the limitations identified in the literature, and to support future intervention development, adaptation, and implementation in this field, key steps in intervention research are briefly summarized below.

Key steps in intervention research

Use theory, evidence, and collaboration with people with lived experience to:35-38

- 1 Understand the problem, including causes, population of interest and context
- 2 Determine intervention level and type; what will have the greatest impact?
- Explore and account for how context will influence success of intervention
- 4 Design, adapt, and detail the core components of the intervention, including how they are expected to create change and should be implemented

- 5 Test and improve
- 6 Rigorously evaluate
- Develop strategies for knowledge mobilization, scaling, and sustainability



Summary of the State of Stigma Intervention Research

This review also identified a number of limitations across the research addressing stigma in relation to health. As noted above and in the 2019 CPHO Annual Report, these limitations often prevent clear conclusions about what works to reduce stigma

and discrimination. Table 2 describes the most common research limitations associated with this topic. This is intended to provide context to better understand the state of the evidence.

TABLE 2: Common Limitations in Stigma Intervention Research

Common Research Limitations	Details
Considerable variation	Stigma research is quite varied, with different conceptualizations of stigma, intervention types, target populations, and outcome measures. Though the breadth of initiatives is an encouraging recognition of the importance of addressing stigma, the diversity of approaches makes it difficult to draw firm conclusions.
	With so many different approaches, it is challenging to advance understanding and interventions in the stigma field overall. ^{39, 40} While there is a need to balance a focus on what is unique between and also within stigmatized groups, there is potential for interventions that target stigma across health conditions and social identities or other characteristics. ^{5, 14, 21, 41, 53}
Little focus on long-term impact	Little stigma intervention research has explored the long-term impact of interventions, including their impact on behaviour change or how stigma reduction could reduce health inequities. 1, 2, 7, 12, 14–18, 23, 24, 26, 27, 31, 40, 42–46
Need for more rigorous intervention development	The research base on stigma lacks strong intervention development. A greater focus on incorporating theory, lived experience and existing knowledge about 'what works' is necessary for developing evidence-based and equitable interventions. 1, 5, 12, 23, 26-28, 45
Methodological limitations	There are a number of methodological limitations in stigma intervention research, particularly a lack of rigorous research methods. ^{1, 5, 7, 9, 16–18, 23, 25, 26, 36, 37, 45, 47} This includes reliance on self-report measures, lack of generalizability in study population, selection and/or attribution bias, inadequate focus on what works for different groups (e.g., by age, gender) and lack of randomization.
	Much of the research focuses on self-reported changes in attitudes, knowledge or intended behaviour, rather than objective measures or reported experiences of stigma and discrimination. ^{2, 17, 23, 24, 43, 44, 48} Outcomes and perspectives of those with lived experience with stigma are infrequently included in evaluation activities. ^{2, 9, 14–17, 42, 43}
Need for greater focus on population-level	While there has been little research on the structural, organizational, or policy changes required to address stigma and discrimination, efforts at these levels have the greatest potential to create change. 1, 5, 13–16, 26, 28, 31, 36, 37, 45, 47, 49–51
and multi-level interventions	Calls for action at the structural level are often linked to a wider discussion about the importance of multi-level interventions that concurrently address stigma across levels. 5, 13, 39, 40, 43, 45, 47, 50, 52
Need for greater focus on intersectionality	Stigma and discrimination research often exists in silos. ^{39, 40} The lives of people who experience stigma cannot be separated into discrete categories, as many experience overlapping stigmas. Some research reviews explore multiple stigma topics, but there has been little focus on how to understand and address co-occurring stigmas. ^{5, 14, 40} The lens of intersectionality can deepen understanding of stigma and inform the development of interventions relevant for populations experiencing co-occurring stigmas. ^{14, 25, 31, 40, 50}

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