

Running head: STRATEGIES FOR CHANGING STIGMA OF BEHAVIORAL HEALTHCARE

Strategies for Changing the Stigma of Behavioral Healthcare

Lindsay Sheehan

Illinois Institute of Technology

August 2015

For National Academy of Science, Committee on the Science of Changing Behavioral Health Social Norms

Please address correspondence to Lindsay Sheehan, IIT, Department of Psychology, 3424 S. State Street, Chicago, IL 60616; phone 312.567.7983; lsheehan@iit.edu

Opinions and statements included in this paper are solely those of the individual author(s), and are not necessarily adopted or endorsed or verified as accurate by the Board on Behavioral, Cognitive, and Sensory Sciences or the National Academy of Sciences, Engineering and Medicine.

Abstract

Given the destructive consequences of stigma for those with behavioral health problems, efforts to change public knowledge, attitudes and behaviors have been a priority both in the U.S. and abroad. This review draws on recent meta-analyses, systematic literature reviews and national studies of anti-stigma interventions to provide a summary of efforts, identify promising practices and illuminate gaps for future research endeavors. Notably missing from the literature are rigorous investigations of stigma-change programs for substance abuse, social media-based interventions and more global outcomes of stigma-change such as improvement in help-seeking, quality of life and affirming attitudes. Further implications for development of national stigma-change campaigns are discussed.

Keywords: stigma, behavioral health, mental illness, substance abuse, attitudes

Public stigma occurs when society directs negative beliefs, feelings or actions towards individuals with behavioral health challenges. These attitudes and mistreatments lead both to social exclusion and self-withdrawal from care-seeking activities that might label individuals as having a behavioral health diagnosis (Corrigan, Druss & Perlick, 2014). Public stigma may also be internalized as self-stigma, causing an erosion of self-worth and recovery efforts. Given these disturbing effects, anti-stigma interventions have been the focus of recent efforts both in the U.S. and abroad (Corrigan & Fong, 2014). This review summarizes national and international research literature on strategies for changing public stigma of behavioral health. While behavioral health encompasses both mental health and substance abuse recovery, substance abuse is grossly underrepresented in the research literature; hence, the majority of findings presented here focus on stigma-change interventions specific to mental illness. This review examines intervention types, intervention efficacy, and key ingredients of stigma-change programs, focusing on impacts of national anti-stigma campaigns, and concluding with recommendations for future research and public policy.

Goals of Stigma-Change Interventions

Stigma-change interventions have a multitude of goals, including both a reduction in negative attitudes and behaviors *and* an increase in positive attitudes and behaviors of the public. Anti-stigma advocates strive for improvements in public stigma that persist over time and cascade into public policy change, enhanced participation opportunities for people with mental illness, increased care-seeking, enriched health care opportunities and reductions in self-stigma. These secondary effects of stigma change ideally lead to improved quality of life for people recovering from mental illness and substance abuse. With these ultimate goals in mind, a variety of approaches to changing stigma have developed. Some approaches may work together synergistically, while others can oppose each other or have unforeseen consequences (Corrigan & Fong, 2014). Next, common approaches and outcomes of recent stigma-change interventions are summarized.

Approaches to Changing Public Stigma

Three primary types of stigma-change interventions have guided efforts toward public stigma reduction: protest, education and contact (Corrigan et al., 2001). In protest strategies, people with mental illness and their supporters overtly demonstrate against injustice. For example, protest strategies using letter writing campaigns and product boycotts can impact objectionable policies and practices (Arboleda-Flórez & Stuart, 2012). A second strategy, education, involves presenting information about mental illness, usually for the purpose of contradicting commonly-held negative beliefs and attitudes. In the third strategy, contact-based intervention, those with lived experience of mental illness interact with members of the public, often sharing their stories of recovery. This contact can occur either in person or through video. In practice, contact and education interventions are often combined, such that a person with lived experience of mental illness presents educational information or a contact-based video supplements an information session. In addition to the three traditional intervention types, Arboleda-Flórez and Stuart (2012) note that advocacy and legislative reform are also means to achieve change in attitudes and behaviors. For example, recent political advocacy efforts have led to the passage of mental health parity laws and amendments to the Americans with Disabilities Act (ADA). In the following section, the impact of three main anti-stigma approaches (protest, contact and education) are examined in more detail.

Opinions and statements included in this paper are solely those of the individual author(s), and are not necessarily adopted or endorsed or verified as accurate by the Board on Behavioral, Cognitive, and Sensory Sciences or the National Academy of Sciences, Engineering and Medicine.

Protest

In two recent meta-analyses, researchers could not locate enough protest-based interventions to sufficiently evaluate the protest approach (Corrigan, Morris, Michaels, Rafacz & Rüschi, 2012; Griffiths, Carron-Arthur, Parsons & Reid, 2014). Although protest has rarely been investigated in a scientific manner, anecdotal evidence supports its impact in specific situations, such as in campaigns to remove stigmatizing media portrayals of mental illness (Corrigan, 2014). However, experts warn that psychological reactance, or a rebound effect, may occur in which negative public opinion is strengthened following experience of protest (Corrigan et al., 2001).

Education

Education is the most common anti-stigma intervention approach examined in the research literature (Griffiths et al., 2014; Quinn et al., 2013). Overall, educational interventions lead to significant changes in public stigma (Corrigan et al., 2012; Griffiths et al., 2014) and these effects persist over time (Corrigan, Michaels & Morris, 2015). Effects seem to apply to a range of diagnoses including depression, psychosis, mental illness and all diagnoses combined (Griffiths et al., 2014). In addition, online interventions were deemed just as effective as face-to-face interventions (Griffiths et al., 2014). Researchers in a large review of European anti-stigma programs concluded that teens in particular benefit from education-based interventions (Borschmann, Greenberg, Jones & Henderson, 2014).

Contact

Although less commonly employed, contact-based interventions have a significant impact on public stigma and appear to have an advantage over education (Borschmann et al., 2014; Corrigan et al., 2012). The meta-analysis by Corrigan and colleagues (2012), including 79 studies and 38,000 participants, found effect sizes for contact on attitude change and intended behaviors that were twice those of education. However, the effects for contact were not sustained long-term in follow-up analyses, likely because of lower number of effect sizes evaluating contact-related interventions (Corrigan et al., 2015). Although there were insufficient studies to evaluate contact interventions alone, the meta-analysis by Griffiths and colleagues (2014) demonstrated that interventions combining education and contact were just as effective as education-only interventions.

A systematic review of anti-stigma programs for college students (including 23 RCTs) concluded that in-person contact and video contact were the most impactful intervention types for changing attitudes and social distance in this population (Yamaguchi et al., 2013). One exception to the contact advantage may be with youth as noted previously (Borschmann et al., 2014). Evidence also suggests that in-person contact has advantages over video contact, with in-person contact having twice the effect size as the latter (Corrigan et al., 2012).

The scarcity of stigma-change interventions for substance abuse precludes definitive conclusions about the relative advantages of contact and education, though a systematic review of 13 studies concluded that education and contact-based intervention are the most commonly used strategies for substance abuse (Livingston, Milne, Tang & Amari, 2012). With the advantages of contact and education interventions established, the following section reviews intervention targets, messages and key ingredients to anti-stigma programs.

Opinions and statements included in this paper are solely those of the individual author(s), and are not necessarily adopted or endorsed or verified as accurate by the Board on Behavioral, Cognitive, and Sensory Sciences or the National Academy of Sciences, Engineering and Medicine.

Targeted Approaches

Stigma is especially harmful when endorsed by people with social power such as employers, landlords and health care providers (Corrigan & Fong, 2014). Whereas some approaches design large-scale interventions for the general public, targeted approaches identify those most likely to interact with individuals in the behavioral health system and design anti-stigma interventions that address the unique beliefs and behaviors of that population. Most commonly, interventions target health providers, student trainees in the helping professions, employers and law enforcement personnel (Dalky, 2012; Livingston et al., 2012). Tackling health provider stigma seems especially pertinent, given the impact that stigma may have on care-seeking and engagement of services. A review of stigma-change interventions for health providers found both contact and education to be effective strategies; however, few studies examined long-term stigma change (Stubbs, 2014). Another area in which anti-stigma programs have been introduced is the workplace (Malachowski & Kirsch, 2013). While some results are promising, few programs have been rigorously evaluated and the majority of interventions are education-based (Malachowski & Kirsh, 2013).

Biogenetic Messages

Approaches that include biogenetic conceptions of mental illness (“that person with schizophrenia has a genetic brain disorder”) were put forth to alleviate the blame surrounding a mental health diagnosis (“it’s not because of your weak personality that you have schizophrenia—it’s genetics”) (Schomerus et al., 2012). However, these attributions appear to intensify negative attitudes and behaviors by emphasizing “differentness” and de-emphasizing recovery potential. A meta-analysis revealed that, when programs highlighted biogenetic causes of mental illness, participants were less likely to blame people with mental illness; however, participants also believed people with mental illness were less likely to recover and had lower desire to interact with them (Kvaale, Haslam & Gottdiener, 2013). Biogenetic explanations may lead to the “why try” effect, wherein an individual endorses the explanation that they are biologically defective, becomes hopeless about recovery and ceases trying to reach mental health and life goals (Corrigan, Larson & Rüsck, 2009; Kvaale et al., 2013).

Mental Health Literacy

Under the assumption that greater knowledge about mental illness will reduce stigma, some interventions have focused on mental health literacy as a means to combat stigma. Mental health literacy programs provide information about recognition of mental disorders, prevention, treatment, self-help strategies and skills-training in handling mental health crises (Jorm, 2012). Beyondblue and Mental Health First Aid (MHFA) programs are recent examples of mental health literacy strategies. Proponents of mental health literacy argue that when the public and policymakers understand the serious concerns of behavioral health, changes in funding and policy will follow (Jorm, 2012). In a meta-analysis of MHFA, moderate effect sizes were found for enhancement of mental health knowledge, decrease in negative attitudes and increase in supportive behaviors for MHFA program participants (Hadlaczky, Hökby, Mkrtchian, Carli & Wasserman, 2014). However, critics question whether knowledge of mental health actually reduces stigma, or whether this approach can be harmful (Corrigan & Fong, 2014). In support of this viewpoint, a population survey in Germany found that although knowledge of mental health had increased over time,

measures of social distance failed to show positive change, with some indicators actually suggesting decreased interpersonal comfort when interacting with the mentally ill (Angermeyer, Holzinger & Matschinger, 2009).

National Campaigns

Organized national campaigns in several countries provide preliminary research on large-scale strategies to change the stigma of mental illness. National campaigns are difficult to evaluate because of confounding economic and sociocultural influences, coupled with failure to establish baseline trends in local stigma-change (Evans-Lacko, Corker, Williams, Henderson & Thornicroft, 2014). However, results from national campaigns are generally promising; research finds decreases in negative attitudes, increased prevalence of help-seeking and reductions in suicide rates following the campaigns (Quinn et al., 2013). A review of depression anti-stigma programs in Europe identified programs that primarily targeted mental health literacy and were not rigorously evaluated (Quinn et al., 2013). New Zealand's "Like Minds Like Mine" initiative, which began in 1997, reported that over half of mental health services users believe discrimination has decreased and many attribute it to the program (Thornicroft, Wyllie, Thornicroft & Mehta, 2014). An unexpected finding in several national analyses has been that people exposed to anti-stigma programs are more likely to expect discrimination from others (Jorm, Christensen & Griffiths, 2006; Corker et al., 2013). Thus, anti-stigma programs may aid recognition of injustices towards those with mental illness, which may be a precursor to changing behaviors. Next, three prominent national campaigns are discussed in depth, namely: Time to Change, beyondblue, and Opening Minds.

Time to Change

England's Time to Change (TTC) program began in 2009 with a coordinated media campaign including TV, radio, internet, print, social media, outdoor advertising, events and other mental health and anti-stigma initiatives. Between 38 to 64% of people became aware of the social marketing aspects of the campaign, with higher campaign awareness associated with greater knowledge, more positive attitudes and more favorable intended behavior (Evans-Lacko, Malcolm et al., 2013). Purportedly in response to targeted interventions with journalists and media organization, media coverage of people with mental illness became more positive during the course of the campaign (Thornicroft et al., 2013). Overall during this time period, significant population-level improvements in intended behavior occurred along with a positive trend in attitudes towards people with mental illness (Evans-Lacko, Henderson & Thornicroft, 2013). Knowledge and reported behaviors towards people with mental illness remained unchanged during the time period. Importantly however, people with mental illness reported fewer experiences of discrimination following the campaign, with the rate of discrimination falling 2.8% from 2008 to 2011 (Corker et al., 2013).

Beyondblue

Australia's national mental health initiative, beyondblue, is a widely-recognized campaign that includes stigma reduction as a primary goal (Dunt et al., 2011; Jorm, Christensen & Griffiths, 2005). As some states initially had more funding available to implement the initiative, it was possible to compare states that had implemented anti-stigma programs with those that had not

(Borschmann et al., 2014). In states with greater program exposure, people were more positive toward help-seeking (Jorm et al., 2005). Although social distance and stigma towards depression have decreased during the implementation of the program, stigma remains a significant problem for the majority of those with mental illness in Australia (Dunt et al., 2011).

Opening Minds

In existence since 2009, Canada's Opening Minds anti-stigma program primarily targets health providers, youth, the workforce and the media (Mental Health Commission of Canada [MHCC], 2013). Rather than using a large-scale, mass media approach, this initiative evaluates grassroots efforts already in practice and emphasizes contact-based education programs. While some goals of the program have been met, (MHCC, 2013) no comprehensive evaluation of Opening Minds is currently available.

Gaps in the Literature

Reviews and meta-analyses reveal substantial gaps in the research literature. While targeted interventions have rightly addressed stigma in health providers, law enforcement, journalists and students, other important perpetrators of stigma have seldom been sought out for intervention programs. These include landlords, religious leaders, policymakers, human resources gatekeepers and most notably, friends and family of those with behavioral health challenges. In several national studies, the most often cited perpetrators of discrimination were family members or friends (Corker et al., 2013; Thornicroft et al. 2014), suggesting that interventions for this population are especially essential.

Few interventions in these reviews focus on children or teens as targets of stigma-change (Livingston et al., 2012). Peer-reviewed research on classroom anti-stigma programs for youth are particularly sparse in the literature (Mellor, 2014), although the Opening Minds program is currently evaluating several youth programs (MHCC, 2013). No media-based anti-stigma interventions for children have yet been evaluated (Clement et al., 2013).

Media-based anti-stigma interventions in general are nearly absent in the literature and are usually poorly evaluated (Borschmann et al., 2014; Corrigan, 2012; Clement et al., 2013). Social media such as Facebook and Twitter have been used in national efforts in Australia, Spain, New Zealand and Sweden (Betton et al., 2015), but a comprehensive review was unable to identify media interventions using multiple types of media or any that evaluated television, radio, cell phone or movies (Clement et al., 2013).

Research has largely neglected comparison of protest, advocacy and legislation change strategies with contact and education interventions. Clearly, each may have situation-specific advantages and disadvantage to be further explored. Recent evaluations of stigma-change find few studies measuring actual behavior towards individuals with mental illness (Dalky, 2012). As behavioral change is the ultimate goal of stigma-reduction, more research efforts are required in this area. Also absent from the literature, is exploration of the stigma-quality of life connection; research has not established that a decrease in stigma leads to better care and life improvement for those with behavioral health challenges (Corrigan, Druss & Perlick, 2014). Stigma-change programs have emphasized the alleviation of negative stigma, overlooking the importance of promoting positive attitudes and affirming actions (Corrigan et al., 2012; Evans-Lacko et al., 2014). Additionally, interventions have rarely evaluated cost effectiveness, or made arguments for the

economic benefits of the intervention (Dalky, 2012; Clement et al., 2013). Use of program fidelity measures and further analyses of key ingredients for specific targets will enhance existing programs and aid in design of more effective interventions (Corrigan & Fong, 2014)

Although substance abuse falls under the umbrella of behavioral health, we may need more targeted strategies or different approaches to address this specific stigma. As noted earlier, anti-stigma programs for substance abuse are inadequately researched, especially in terms of long-term impact (Livingston et al., 2012). In a public opinion survey, people with drug addiction in particular were viewed even more negatively than people with mental illness, and discrimination towards this group is more socially accepted (Barry, McGinty, Pescosolido & Goldman, 2014), suggesting that there is great need for efforts in this area. Relatedly, we still know little about how to change stigma related to suicide or other co-occurring conditions, how advantageous diagnosis-specific programs might be, or how to design and test stigma programs that are culture-specific (Dalky, 2012).

Implications

Clear recommendations are for targeted interventions (Borschmann et al., 2014; Parcesepe & Cabassa, 2013) that are designed in collaboration with various disciplines and measured over time (Cook, Purdie-Vaughns, Meyer & Busch, 2014; Corrigan et al., 2012; Dalky, 2012; Gaebel et al., 2008). Importantly, those interventions that involve contact with people with lived experience and emphasize positive aspects of recovery will be most effective (Corrigan et al., 2014; Knaak et al., 2014). Program developers should be wary of propagating biogenetic explanations (Borschmann et al., 2014) and of making the assumption that knowledge is the sole key to stigma reduction (Angermeyer et al., 2009).

Existing literature suggests that national campaigns be designed with multiple levels (Parcesepe & Cabassa, 2013) and be more thoroughly evaluated (Borschmann et al., 2014). Other suggestions include the incorporation of anti-stigma programs into workplace diversity trainings and include people with lived experience in the planning and execution of such programs (Malachowski & Kirsch, 2013). Finally, anti-stigma programs embedded within school curricula should be further implemented and evaluated to determine whether early interventions might have greater impacts on youth before behavioral health stigma is fully formed (Parcesepe & Cabassa, 2013).

References

- Angermeyer M. C., Holzinger A., & Matschinger, H. (2009). Mental health literacy and attitude towards people with mental illness: a trend analysis based on population surveys in the eastern part of Germany. *European Psychiatry, 24*(4):225-32. doi: 10.1016/j.eurpsy.2008.06.010.
- Arboleda-Flórez, J. & Stuart, H. (2012). From sin to science: Fighting the stigmatization of mental illnesses. *The Canadian Journal of Psychiatry / La Revue canadienne de psychiatrie, 57*(8), 457-463.
- Barry, C. L., McGinty, E. E., Pescosolido, B. A., & Goldman, H. H. (2014). Stigma, discrimination, treatment effectiveness, and policy: public views about drug addiction and mental illness. *Psychiatric Services, 65*(10), 1269-1272. doi: <http://dx.doi.org/10.1176/appi.ps.201400140>
- Betton, V., Borschmann, R., Docherty, M., Coleman, S., Brown, M. & Henderson, C. (2015). The role of social media in reducing stigma and discrimination. *The British Journal of Psychiatry, 206* (6) 443-444. doi: 10.1192/bjp.bp.114.152835
- Borschmann, R., Greenberg, N., Jones, N., Henderson, R. C. (2014). Campaigns to reduce mental illness stigma in Europe: A scoping review. *Die Psychiatrie: Grundlagen & Perspektiven, 11*(1), 43-50.
- Clement S., Lassman F., Barley E., Evans-Lacko S., Williams P, Yamaguchi S, Slade M., Rüsç N. & Thornicroft G. (2013). Mass media interventions for reducing mental health-related stigma. *The Cochrane Library, 7*.
- Cook, J. E., Purdie-Vaughns, V., Meyer, I. H., & Busch, J. T. (2014). Intervening within and across levels: A multilevel approach to stigma and public health. *Social Science & Medicine, 103*, 101-109. doi: <http://dx.doi.org/10.1016/j.socscimed.2013.09.023>
- Corker, E., Hamilton, S., Henderson, C., Weeks, C., Pinfold, V., Rose, D., ... & Thornicroft, G. (2013). Experiences of discrimination among people using mental health services in England 2008-2011. *The British Journal of Psychiatry, 202*(s55), s58-s63. doi: 10.1192/bjp.bp.112.112912
- Corrigan, P. W. (2012). Where is the evidence supporting public service announcements to eliminate mental illness stigma? *Psychiatric Services, 63*(1), 79-83. doi: 10.1176/appi.ps.201100460
- Corrigan, P. W. (2014). *The stigma of disease and disability: Understanding causes and overcoming injustices*. Washington, DC: American Psychological Association.
- Corrigan, P. W., Druss, B. G., & Perlick, D.A. (2014). The impact of mental illness stigma on seeking and participating in mental health care. *Psychological Science in the Public Interest, 15* (2), 37-70. doi: 10.1177/1529100614531398
- Corrigan, P. W., & Fong, M. W. M. (2014). Perspectives on erasing the stigma of illness: What says the dodo bird? *Social Science & Medicine, 103*, 110-117. doi:10.1016/j.socscimed.2013.05.027
- Corrigan, P.W., Larson, J. E., & Rüsç, N. (2009). Self-stigma and the “why try” effect: impact on life goals and evidence-based practices. *World Psychiatry, 8*(2), 75-81.
- Corrigan P. W., Michaels P. J. & Morris S. (2015). Do the effects of anti-stigma programs persist over time? Findings from a meta-analysis. *Psychiatric Services, 66*(5):543-6. doi: 10.1176/appi.ps.201400291.

- Corrigan, P. W., Morris, S. B., Michaels, P. J., Rafacz, J. D., & Rüsch, N. (2012). Challenging the public stigma of mental illness: A meta-analysis of outcome studies. *Psychiatric Services*, 63(10), 963-973. doi: 10.1176/appi.ps.201100529.
- Corrigan P. W., River L. P., Lundin R. K., Penn D. L., Uphoff-Wasowski K, Campion, J.,...Kubiak, M. A. (2001). Three strategies for changing attributions about severe mental illness. *Schizophrenia Bulletin*, 27, 187-95.
- Dalky, H. F. (2012). Mental illness stigma reduction interventions: Review of intervention trials. *Western Journal of Nursing Research*, 34(4), 520-547. doi: 10.1177/0193945911400638
- Dunt, D., Robinson, J., Selvarajah, S., Young, L., Hight, N., Shann, C., & Pirkis, J. (2011). beyondblue, Australia's national depression initiative: an evaluation for the period 2005-2010. *International Journal of Mental Health Promotion*, 13(3), 22-36. doi: 10.1080/14623730.2011.9715659
- Evans-Lacko, S., Corker, E., Williams, P., Henderson, C., & Thornicroft, G. (2014). Effect of the Time to Change anti-stigma campaign on trends in mental-illness-related public stigma among the English population in 2003–13: An analysis of survey data. *The Lancet Psychiatry*, 1(2), 121-128. doi: [http://dx.doi.org/10.1016/S2215-0366\(14\)70243-3](http://dx.doi.org/10.1016/S2215-0366(14)70243-3)
- Evans-Lacko, S., Henderson, C., & Thornicroft, G. (2013). Public knowledge, attitudes and behaviour regarding people with mental illness in England 2009-2012. *The British Journal of Psychiatry*, 202(s55), s51-s57. doi: 10.1192/bjp.bp.112.112979
- Evans-Lacko, S., Malcolm, E., West, K., Rose, D., London, J., Rüsch, N., ... & Thornicroft, G. (2013). Influence of Time to Change's social marketing interventions on stigma in England 2009-2011. *The British Journal of Psychiatry*, 202(s55), s77-s88. doi: 10.1192/bjp.bp.113.126672
- Gaebel, W., Zäske, H., Baumann, A. E., Klosterkötter, J., Maier, W., Decker, P., & Möller, H. J. (2008). Evaluation of the German WPA “program against stigma and discrimination because of schizophrenia—Open the Doors”: Results from representative telephone surveys before and after three years of anti-stigma interventions. *Schizophrenia Research*, 98(1), 184-193.
- Griffiths, K. M., Carron-Arthur, B., Parsons, A., & Reid, R. (2014). Effectiveness of programs for reducing the stigma associated with mental disorders. A meta-analysis of randomized controlled trials. *World Psychiatry*, 13(2), 161–175. doi:10.1002/wps.20129
- Hadlaczky, G., Hökby, S., Mkrтчian, A., Carli, V., & Wasserman, D. (2014). Mental Health First Aid is an effective public health intervention for improving knowledge, attitudes, and behaviour: A meta-analysis. *International Review of Psychiatry*, 26(4), 467-475. doi: 10.3109/09540261.2014.924910
- Jorm, A. F. (2012). Mental health literacy: Empowering the community to take action for better mental health. *American Psychologist*, 67(3), 231-243. doi: 10.1037/a0025957
- Jorm, Christensen & Griffiths. (2005). The impact of beyondblue: the national depression initiative on the Australian public's recognition of depression and beliefs about treatments. *Australian and New Zealand Journal of Psychiatry*, 39(4)
- Jorm, Christensen & Griffiths. (2006). Changes in depression awareness and attitudes in Australia: the impact of beyondblue: the national depression initiative. *Australian and New Zealand Journal of Psychiatry*, 40(1), 42-46.
- Knaak, S., Modgill, G., & Patten, S. B. (2014). Key ingredients of anti-stigma programs for health care providers: a data synthesis of evaluative studies. *Canadian Journal of Psychiatry*, 59(10 Suppl 1), S19-S26.

- Kvaale, E. P., Haslam, N. & Gottdiener, W. H. (2013). The ‘side effects’ of medicalization: A meta-analytic review of how biogenetic explanations affect stigma. *Clinical Psychology Review*, 33(6), 782-794. doi: 10.1016/j.cpr.2013.06.002
- Livingston, J. D., Milne, T., Fang, M. L. & Amari, E. (2012). The effectiveness of interventions for reducing stigma related to substance use disorders: A systematic review. *Addiction*, 107(1), 39-50. doi: 10.1111/j.1360-0443.2011.03601.x
- Malachowski, C. & Kirsh, B. (2013). Workplace anti-stigma initiatives: A scoping study. *Psychiatric Services*, 64(7), 694-702. doi: 10.1176/appi.ps.201200409
- Mellor, C. (2014). School-based interventions targeting stigma of mental illness: systematic review. *Psychiatric Bulletin*, 38(4), 164-171. doi: 10.1192/pb.bp.112.04172
- Mental Health Commission of Canada. (2013). *Opening Minds Interim Report*. Retrieved from <http://www.mentalhealthcommission.ca/English/initiatives-and-projects/opening-minds/opening-minds-interim-report>
- Parcesepe, A. M., Cabassa, L. J. (2013). Public stigma of mental illness in the United States: A systematic literature review. *Administration and Policy in Mental Health and Mental Health Services Research*, 40(5), 384-399. doi: 10.1007/s10488-012-0430-z
- Quinn, N., Knifton, L., Goldie, I., Van Bortel, T., Dowds, J., Lasalvia, A., ... & Thornicroft, G. (2013). Nature and impact of European anti-stigma depression programmes. *Health Promotion International*, das076. doi: 10.1093/heapro/das076
- Schomerus, G., Schwahn, C., Holzinger, A., Corrigan, P. W., Grabe, H. J., Carta, M. G., & Angermeyer, M. C. (2012). Evolution of public attitudes about mental illness: a systematic review and meta-analysis. *Acta Psychiatrica Scandinavica*, 125(6), 440-452. doi: 10.1111/j.1600-0447.2012.01826.x
- Stubbs, A. (2014). Reducing mental illness stigma in health care students and professionals: A review of the literature. *Australasian Psychiatry*, 22(6), 579-584. doi: 10.1177/1039856214556324
- Thornicroft, A., Goulden, R., Shefer, G., Rhydderch, D., Rose, D., Williams, P., ... & Henderson, C. (2013). Newspaper coverage of mental illness in England 2008-2011. *The British Journal of Psychiatry*, 202(s55), s64-s69. doi: 10.1192/bjp.bp.112.112920.
- Thornicroft, C., Wyllie, A., Thornicroft, G., & Mehta, N. (2014). Impact of the “Like Minds, Like Mine” anti-stigma and discrimination campaign in New Zealand on anticipated and experienced discrimination. *Australian and New Zealand Journal of Psychiatry*, 48(4), 360-370. doi: 10.1177/0004867413512687
- Yamaguchi, S., Wu, S. I., Biswas, M., Yate, M., Aoki, Y., Barley, E. A., & Thornicroft, G. (2013). Effects of short-term interventions to reduce mental health-related stigma in university or college students: A systematic review. *The Journal of Nervous and Mental Disease*, 201(6), 490-503. doi: 10.1097/NMD.0b013e31829480df