## **Evidence Profile**

Authors &	Design	Intervention (I), Comparison	Intervention Delivery methods, frequency,	Country	Population delivered to	Primary Outcome domain	Characteristics of sample	Partici	pants
year	Design	(C), & Group (G)	duration	oounii y		(Measure(s))		I/G	С
STIGMA TYPE: Publ	ic stigma (Intervention	Directed at Reducin	g Public Stigma)					•	
Education Based Int	terventions								
Abraham, Easow, Ravichandren, Mushtaq, Butterworth, & Luty, 2010	Pre-post	I: Educational campaign C: N/A	"Time to Change" campaign delivered via mail to households (postcard, leaflet and bookmark) Frequency: 1 Duration: NR	UK	Society (general public)	-Change in attitude -Change in knowledge (AMIQ)	n=196 78% completion rate) Mean age: 50 SD: NR 32% Male	n= 196	N/A
17% stated that the as aim of cause. 57% stigma scores or fan	y had ever heard of the % endorsed 'Don't know	e Time to Change cam w/None of the above, aign. The 45 participa	No stat. sig. difference from AMI paign. 20% correctly reported k ' and 20% endorsed 'The Libera nts who recognised the campai	key message whe I Party'. 42% had	n presented with five alt contact with a mentally	ernative responses. 24% c	orrectly identified 'discrin ith mental illness had no	significant effect	on the AMIQ
Dietrich, Mergl, Freudenberg, Althaus, & Hegerl, 2010	Prospective experimental, follow-up (10 & 22 months)	independent samples	Information regarding depression, how to get help for depression and ways to help those with depression, delivered via a range of mediums (pamphlets, leaflets, posters, online) Duration: 2 years Frequency: N/A	Germany	Society (general public)	-Change in attitude - Change in knowledge - Change in behaviour (non-validated measures) -Awareness of campaign	Mean age: NR SD: NR	G1: n=1,426 mean age: 48 SD: 18.7 G2: n= 1,507 mean age: 49 SD: 18.2 G3: n= 1,423 mean age: 49 SD: 18.8 Roughly half male	C1: n = 710mean age: 48 SD: 19.4 C2: n = 750mean age: 49 SD: 19.3 C3: n = 707mean age: 49 SD: 19.2
year, lost at 2 years of the NAD: more av notion 'pull yourself	except in those who haw wareness of depressior f together' as treatmen	ad experience with de n and the NAD, more it option. iainly in persons awar I: Educational campaign	ag awareness of campaign (NAD epression (loved one or friend we positive attitudes towards mediate of the NAD and persons who have a range of mediums (radio, newspaper, street art)	vith depression) c cation treatment	r were aware of the cam and antidepressants de	npaign For persons who re weloped and also 'lack of so on.  -Change in attitude -Change in knowledge	ported experience with do elf-discipline' declined as G1: n= 92 47% male	ars of age. Succese pression and per causal explanatio  G1: n= 92 47% male	ssful at 1 sons aware
Henderson, Thornicroft, 2010	and post-test	G1: Tested at T1 G2: Tested at T2 G3: Tested at T3 (Note: independent sample) C: N/A	Frequency: N/A Duration: 4 weeks			-Change in behaviour (RIBS; MAKS; CAMI)	G2: n= 198 52% male G3: n= 120 55% male Mean age: NR SD: NR	G2: n= 198 52% male G3: n= 120 55% male Mean age: NR SD: NR	

Authors &	Design	Intervention (I), Comparison	Intervention Delivery methods, frequency,	Country	Population	Primary Outcome domain	Characteristics of	Participants	
year	Design	(C), & Group (G)	duration	Country	delivered to	(Measure(s))	sample	I/G	С
social contact cont	rolled for. No effect on	the MAKS, CAMI or R	BS measurements		•	•		•	•
Henderson et al., 2012	Prospective experimental	I:Educational campaign G1: sampled in 2008 G2: sampled in 2009 (note: independent samples) C: N/A	Public campaign "Time to Change" aimed to reduce public stigma delivered via the Internet and print media Duration: NR Frequency: NR	UK	Society (individuals with anxiety, depression, bipolar disorder, schizophrenic disorders, personality disorders, eating disorders, SUDs, multiple diagnoses)	-Self stigma -Frequency of experienced discrimination (DISC) -Awareness of campaign	n= 1,584 Mean age: NR SD: NR	G1: n= 537  Mean age: 46 SD: 11 35% male  G2: n= 1,047  Mean age: 46 SD: 11 37% male	N/A
being shunned by t decreasing the pro on discrimination s	those aware of diagnosi	is decreased; decreased; reporting discriminat cealing mental health	of experience of discrimination ed discrimination from friends a ion in life domains; no change ir illness from others	nd family; decrea	se not pursuing a close ¡	personal relationship; incre	ease in friends made out o	of service. Not suc	cessful in
Kim & Stout (2010)	Pre-post, control	I: Educational campaign with high interactivity C: Educational campaign with low interactivity	Delivered online via website consisting of a life story of a sufferer of schizophrenia, I1: able to manipulate website and decide on topics to view Duration: NR Frequency: 1	NR	Targeted group (undergraduate students)	-Change in attitude -Change in knowledge -Social distance (non-validated measures)	n= 113 Mean age: 20 SD: NR 38% male	Mean age: 20 SD: NR	N/A
			12: not able to choose topics and viewed website in random order						
			and viewed website in random order Duration: NR Frequency: 1						
•		•	and viewed website in random order Duration: NR Frequency: 1 ignificant desirable effects for a	ll 3 attitude dime	nsions: perception of da	Ingerousness, social distan	ce, perception of severity	. Not successful ir	n moderating
effect of interactivi Kiropoulos, Griffiths, & Blashki, 2011	RCT (1 week)	nger or perception of some	and viewed website in random order Duration: NR Frequency: 1 significant desirable effects for a severity.  I: Delivered via website with 30 minutes explanation/interview time Duration: 1.5 hour Frequency: 1  C: Depression interview Duration: 1.5 hour Frequency: 1	Australia	Targeted group (non-English speaking background)	-Change in attitude -Change in knowledge -Change in beliefs (non-validated measures)	n= 202 Mean age: 65 SD: 8.6	n= 110 Mean age: 66 SD: 8.1 46% male	n= 92 Mean age: 65 SD: 9.0 54% male
effect of interactivi Kiropoulos, Griffiths, & Blashki, 2011	RCT (1 week)  Reported Main Findings	I: Educational campaign C: Control	and viewed website in random order Duration: NR Frequency: 1 significant desirable effects for a severity.  I: Delivered via website with 30 minutes explanation/interview time Duration: 1.5 hour Frequency: 1  C: Depression interview Duration: 1.5 hour	Australia	Targeted group (non-English speaking background)	-Change in attitude -Change in knowledge -Change in beliefs (non-validated measures)	n= 202  Mean age: 65 SD: 8.6	n= 110  Mean age: 66 SD: 8.1  46% male	n= 92 Mean age: 65 SD: 9.0 54% male

Authors &	Design	Intervention (I), Comparison	Intervention Delivery methods, frequency,	Country	Population	Primary Outcome domain	Characteristics of	Partici	pants			
year	Doolgii	(C), & Group (G)	duration	Country	delivered to	(Measure(s))	sample	I/G	С			
2010		campaign G1: Chinese G2: Indian G3: Pakistani	workshop Frequency: 1 Duration: 90 min		(ethnic minorities)	-Change in knowledge -Change in behaviour (non-validated measures)	96% completion rate  Mean age: NR SD: NR  27% male	33% male G2: n= 75 32% male G3: n= 68 12% male No age reported				
Younger age and Ch Chinese community	Summary Author Reported Main Findings: Less stigma post-workshop overall (significant improvement on 6/11 questions). Intervention not successful on 4/11 questions, older age. Stigma worsened on1/11 questions . Younger age and Chinese viewed change more positively.  Chinese community showed less positive change on protection. Females showed more positive change regarding marry . Chinese community and males showed less positive change on questions of contribution.  Pakistani and Islamic community showed less positive change regarding recovery. Younger age responded less positively to questions surrounding disclosure											
Seo & Kim, 2010	Pre-post with follow-up (2 months)	campaign + Video C: Control	Online video, 1 topic per session (e.g. topic: understanding of anxiety and mood disorders)  Frequency: 8 Duration 15-20 mins	Korea	Targeted group (undergraduate students)	-Change in attitude -Change in knowledge -Social distance (SDS; CAMI; non- validated measures)	n= 143 90% completion rate Mean age: NR SD: NR 13% male	n= 69 Mean age: NR SD: NR 16% male	n= 74 Mean age: NR SD: NR 11% male			
Summary Author Ro Contact Based Inter		: No change: social di	stance, knowledge, authoritaria	inism, community	mental health ideology	, social restriction . Increas	sed benevolence in exper	imental group				
Evans-Lacko et al., 2012	Pre-post follow-up (4-6 weeks)	I: Educational campaign with contact intervention G1: Had mental health problems G2: Had no mental health problems C: N/A	"Time to Change" delivered via various electronic and print mediums and in-person via a roadshow in major locations staffed by individuals with direct MI experience Duration: 21 Sept- 17 Oct, 2009 Frequency: N12 events	UK	Society and group (general public)	-Change in behaviour -Willingness to disclose mental health problem (RIBS; non-validated measures) -Awareness of campaign	T1: n= 403 T2: n= 83 Mean age: 38 SD: NR	G1: n= 53 Mean age: 38 SD: 13 G2: n= 30 Mean age: 37 SD: 14	N/A			
	lated behavioural inten		cilitated meaningful intergroup t campaign engagement 4–6 we									
Nguyen , Chen, & O'Reilly, 2012	Pre-post	I: Educational campaign with direct contact intervention (C): Educational campaign with indirect contact intervention	I: Delivered via workshop with mental health consumer/educated Frequency: 4 Duration: 2 hours  C: Delivered via film of mental health consumer/educated Frequency: 4 Duration: during 90 minutes		Targeted group (pharmacy students)	-Change in attitude -Social distance (experimental use of validated measures SDS; AQ)	n= 349 76% completion rate Mean age: NR SD: NR	I: n=136 Mean age: 21 SD: 0.2 38.5% male	C: n= 213 Mean age: 22 SD: 0.2 36.9% male			

Authors &	Design	Intervention (I), Comparison	Intervention Delivery methods, frequency, duration	Country	Population	Primary Outcome domain	Characteristics of	Partic	ipants			
year	Design	(C), & Group (G)			delivered to	(Measure(s))	sample	I/G	С			
individual item and negative attitude q	ummary Author Reported Main Findings: Direct: significant improvement on 37/39 stigma questions. Indirect: significant improvement on 27/39 stigma questions. Both resulted in a significant decreased mean SDS advisional item and total scores; but not difference by intervention type (equivalent success). Direct: stronger improvement on reducing negative attitudes fir 5 questions; no difference between interventions for 6 egative attitude questions. No effect: 2 questions in the Direct intervention no effect 12 questions in the Indirect intervention											
Anderson & Jehannine, 2012	Pre-post, follow-up (1 month)	I: Educational campaign + Film C: N/A	Delivered via film (documentary "Cracking Up" on sufferers of MI learning stand-up comedy) Frequency: 1 Duration:45 minutes	NR	Targeted group (genetic counsellors and students)	-Social distance (Social distance scale) - Stereo-typing (Stereotype endorsement scale)	T1: n= 87 T2: n= 57 (66% completion rate) Mean age: NR SD: NR 7% male	n= 87	N/A			
significantly more I a result of watching less bedraggled. No More willing to inti	Summary Author Reported Main Findings: At T2, 34.5%felt more comfortable to ask about a family history of mental illness with their patients. Those who were uncomfortable/ambivalent at T1 (n = 31, 36.9%) were significantly more likely to report rarely or never asking patients about family history of mental illness in clinical practice, significantly more likely to report increased comfort to ask about a family history mental illness as a result of watching the film at T2. Significant decrease in the degree to which genetic counsellors and students endorsed negative stereotype about individuals with mental illness; rated as more healthy, reasonable and ess bedraggled. No sig diff mean stereotype endorsement for those with personal experience w/ mental illness and those without. No sig diff btw groups on stereotype endorsement. Significant decrease social distance; More willing to introduce someone w mental illness for a job and introduce to a friend as a relationship partner. No difference social distance for those w/ personal experience of mental illness. Those who were uncomfortable at T1 sig decrease in social distance at T2; No change in those who were comfortable w/ mental illness.											
Clement et al., 2012	RCT, follow-up (4 months)	I: Educational campaign delivered via film (DVD) C: Educational campaign delivered in person C: Controls (Lecture only)	I: Film "Combating Stigma", duration 60 minutes followed by discussion Duration (total): 71 minutes Frequency: 1  C1: Presentation of "Social Contract" model covering similar topics to I1, followed by discussion Duration (total(: 85 minutes; Frequency: 1  C2: Lecture presented by individual with no knowledge of stigma Duration (total): 60 minute Frequency: 1	NR	Targeted group (nursing students)	-Change in attitude -Change in knowledge -Change in behaviour -Social distance (MICA; RIBS) - Emotional Reactions to Mental Illness Scale (ERMIS)	T1: n= 216 T2: n= 193 89% follow-up rate	I: Mean age:24 SD: 6.9 13% male	C <sub>1</sub> Mean age:24 SD:6.2 11% male C <sub>2</sub> : Mean age: 25 SD: 7.7 15% male			
			rences between the DVD and li- ure group, the latter difference l: "In Our Own Voice", program facilitated by one individual recovering from serious MI, including film, with discussion Duration 30 minutes Frequency: 1									

Authors &	Design	Intervention (I), Comparison	Intervention Delivery methods, frequency, duration	Country	Population	Primary Outcome domain	Characteristics of	Partici	pants
year	200.8.	(C), & Group (G)			delivered to	(Measure(s))	sample	I/G	С
		C <sub>2</sub> : Educational campaign (live presentation)	C <sub>1</sub> : "In Our Own Voice", program facilitated by two individuals recovering from serious MI, including film, with discussion Duration 90 minutes Frequency: 1						20 SD: 3.4 30% male
			C <sub>2</sub> : Live presentation on the misunderstanding of MI and facts with discussion Duration 30 minutes Frequency: 1						
Summary Author R	eported Main Findings	: Both IOOV conditior	ns had significantly better ratios	than education.	These findings suggest t	he 30 min version of IOOV	is as effective as the 90 n	nin standard.	
Economou, Peppou, Louki & Stefanis, 2012	Pre-post	I: Educational campaign with contact intervention C: N/A	Lecture and psychiatry placements (observations & clinical cases) Duration: 4 weeks Frequency: NR	Greece	Targeted group (medical students)	-Change in attitude -Change in beliefs -Social distance (non-validated measures)	n = 155 97% response rate Mean age: 22 SD: NR	n = 155	N/A
belief that people w	•	een in public talking t	egarding poor parenting as the continuing as the continuing as the continuing are appearous to the public					•	
Galletly & Burton, 2011	Pre-post	I: Educational, Contact, Experiential + Film	Delivered via film, followed by simulated auditory hallucinations Duration: 85 minutes Frequency: 1	Australia	Targeted group (medical students)	-Change in attitude -Change in behaviour (AMIQ)	n= 87 Mean age: NR SD: NR 34% male	n= 87	N/A
•		•	I ant improvement in mean AMIC orkshop showed the most signif	•	I ticipating in the				l
cant improvement,	whilst there was little o	hange for students w	ho held more positive attitudes						
Kassam, Glozier, Leese, Loughran, & Thornicroft, 2011	Cluster RCT	I:Educational campaign with contact intervention C1:Educational campaign with contact intervention and	I: Presentation to groups of 8- 10 on MI-related stigma and personal testimonies from sufferers and carers, Duration: 1 hour Frequency: 1 C1: Same as I1, with addition	UK	Targeted group (medical students)	-Change in attitude -Change in knowledge -Change in behaviour (MICA; non-validated measures)	n= 110 Mean age: NR SD: NR	I: n= 87 Mean age: 22 SD: 2.5 27% male C: n= 87 Mean age: 23 SD: 4.4	n= 87 Mean age: 23 SD: 3.3 36% male
		role-play with feedback C <sub>2</sub> : Control	c1: Same as 11, with addition of role-playing session and feedback Duration: 1.5 hour Frequency: 1					8% male	

Authors &	Design	Intervention (I), Comparison	Intervention Delivery methods, frequency,	Country	Population	Primary Outcome domain	Characteristics of	Participants	
year	Design	(C), & Group (G)	duration	Country	delivered to	(Measure(s))	sample	I/G	С
Summary Author F	Reported Main Finding	s: Improved knowledg	e. No change in attitudes or bel	naviour			•		
O'Reilly, Bell, & Chen, 2010	Pre-post with follow-up (T1: 6 weeks; T2: 12 months)	I: Educational campaign with contact intervention C: N/A	Delivered via lectures, weekly placements and tutorials with mental health educators in classes with approximately 25 students Duration: 1 week Frequency: 10	Australia	Targeted group (pharmacy students)	-Change in attitude -Change in knowledge -Change in beliefs (non-validated measures)	n = 258 total n= 225 baseline 87% participation rate Mean age: 21 SD: NR 33% male	T1: n= 230 T2: n= 228	N/A
Not successful in ch	nanging opinions regard	ding change; schizophi	in stigma on 75% of items (deprenia consistently rated as more mselves to blame at baseline ar	unpredictable a	nd less likely to recover v	s. depression. 25% of ite	· ·		
O'Reilly, Bell, Kelly, & Chen, 2011	Pre-post (post- assessment at 6 weeks)	I: Educational campaign + Film C: Control	I: Program to teach skills to recognise signs of MI and how to provide help, delivered via workshop and film Duration: 12 hours Frequency: 1  C: Standard education program Duration: 1 hour lecture and 2 hour tutorial on MI Frequency: 7 es in social distance and knowless of interventions in depression	Australia  dge: able to corre	Targeted group (pharmacy students)	-Change in attitude -Change in knowledge -Change in behaviour -Social distance (non-validated measures)	•	. •	
identifying drug-rel	ated problems. Not su	ccessful in improving	agreement with health professi ding medication, counselling ar	onal consensus fo	or helpfulness of interve	ntion for schizophrenia; ab	oility to recognize specific		
Quinn, Shulman, Knifton & Byrne, 2011	Pre-post	I: Other1 C: N/A	Film festival focusing on mental health including exhibitions, debates, feature films, documentaries, community events, concerts, plays, workshops Duration: 2 weeks Frequency: N/A	Scotland	Society (general public)	-Change in attitude -Change in behaviour -Change in beliefs (non-validated measures)	n= 196 Mean age: NR SD: NR	n= 196 Mean age: NR SD: NR	N/A
Summary Author F	Reported Main Finding	s: Significant decrease	in stigma regarding return to w	ork. Not successf	ul in changing attitude a	nd behaviour on 6/8 ques	tions. Made stigma regard	ding dangerousne	ss worse
Imagined Exposure	e/Imagined Contact Ba	sed Interventions							
Birtel & Crisp, 2012	Pre-post (randomized)	I: Imagined exposure imagining two successive	Delivered online, imagining an interaction with an adult with schizophrenia followed by a free recall period directly after		Targeted group (undergraduate psychology students)	- Intergroup anxiety (Intergroup anxiety scale)	n= 29 (n per group NR) Mean age: 21	NR	NR

Authors &	Design	Intervention (I), Comparison	Intervention Delivery methods, frequency,	Country	Population delivered to	Primary Outcome domain (Measure(s))	Characteristics of sample	Participants	
year	200.g.i	(C), & Group (G)	duration	Country				I/G	С
Summary Author R	eported Main Findings	imagining first a negative encounter followed by a positive encounter	to write-down the imagined encounter Frequency: 1 Duration NR	Imagining a nega	tive encounter at T1 pr	oduced higher anxiety con	SD: 4.96  14% male  npared with imagining a p	ositive encounter	. Time 2,
			ounter, subsequent anxiety was inter resulted in lower anxiety of			•	ed with first imagining a p	ositive encounter	at T1.
Stathi, Tsantila, & Crisp, 2012	Pre-post	I: Imagined exposure C: Control	Imagined exposure of an interaction with a sufferer of schizophrenia that was relaxed, positive and comfortable Duration: 1 min Frequency: 1  C: Imagined walking outside Duration: 1 min Frequency: 1	UK	Targeted group (undergraduate students)	-Stereotyping -Inter-group anxiety (non-validated measures)	n= 57 Mean age: 23 SD: 4.9 37% male	n= NR Mean age: NR SD: NR	n= NR Mean age NR SD: NR
interactions with pe		•	agined a positive encounter wit ed feelings of anxiety about fut	•	person reported weake	ned stereotypes and form	ed stronger intentions to	engage in future s	social
Meta-Analysis  Corrigan, Morris, Michaels, Ranfacz, Rusch (2012)	Meta-analysis		Public Stigma	14 countries represented in data set		Public Stigma	72 articles  Search terms: stigma, mental illness (such as schizophrenia and depression) and change program (including contact and education)  Search limited to October 2010	n = 38, 364 total all studies combined	

STIGMA TYPE: Self stigma

Authors &	Design	Intervention (I), Comparison (C), & Group (G)	Intervention Delivery methods, frequency, duration	Country	Population delivered to	Primary Outcome domain (Measure(s))	Characteristics of sample	Participants	
year	Design							I/G	С
Therapy Based Inte	erventions	•	•				•	•	•
Sibitz, Provaznikova, Lipp, Lakeman, & Amering, 2013	Pre-post (randomization)	C: Control	Group therapy emphasising empowerment and recovery, 9 people per group Duration: 2 months Frequency: 5 days a week Control: waitlist Duration: NA Frequency: NA	Germany	Targeted group (individuals with schizophrenia)	-Self stigma (ISMI)	n= 97 57% completion rate Mean age: NR SD: NR	n= 40 Mean age: 32 SD:11.3 55% male	n= 40 Mean age: 32 SD:9.6 60% male
			oful in reducing stigma, decreas	ed stigma especia	lly subscale assessing ali	ienation at 5 weeks post-ir	ntervention (post-interver	ntion assessment)	
	W SELF-STIGMA REDU	CTION							
Mittal, Sullivan, Chekuri, Allee, Corrigan (2012)	Systematic Review / Critical Review	-		Half the studies conducted in the united states	n = 8 studies persons with schizophrenia or serious mental illness n = 3 studies persons with substance use disorders n = 2 groups at risk to develop a mental disorder (college students with symptoms of depression or anxiety and veterans in post deployment transition	Self-Stigma Reduction	n = 14 studies met inclusion criteria Search between January 2000 and August 2011 n = 12 studies conducted in outpatient clinical settings	In general studies sample size were small; n = 6 studies sample size n = 50 or smaller; n = 4 had sample size between 50-100 and n = 4 studies with an n >100	

Summary Author Reported Main Findings: Predominantly samples with either schizophrenia or depression. Two major approaches to self-stigma reduction: (1) alter stigmatizing beliefs and attitudes in the individual (2) enhance skills for coping with self-stigma through improvements in self-esteem, empowerment and help-seeking behaviour. Six self-stigma reduction strategies identified. Psychoeducation most frequently tested intervention. High degree of variability between self-stigma definitions, measurements and conceptual frameworks, with some studies lacking a theoretical framework. Six different scales used across studies to measure self-stigma