original papers

Psychiatric Bulletin (2009), **33**, 212–214. doi: 10.1192/pb.bp.108.020925

JASON LUTY, OKON UMOH AND FRANCIS NUAMAH

Effect of brief motivational interviewing on stigmatised attitudes towards mental illness

AIMS AND METHOD
Stigmatised attitudes among the general public towards people with mental illness are one of the main factors delaying such people from seeking treatment, hindering their recovery and rehabilitation. Our aim was to devise a simple motivational interviewing technique to reduce stigmatised attitudes towards people with schizophrenia and substance misuse. We conducted a randomised paired-design trial of 100 adults subjected to a 10 min motivational interview to reduce their stigmatised attitudes; we used the Attitudes to Mental Illness Questionnaire (AMIQ) to measure the effect of the various procedures on stigmatised attitudes.

RESULTS
A small improvement in stigma scores was observed in attitudes towards people with alcoholism but not towards those with schizophrenia.

CLINICAL IMPLICATIONS
A brief intervention involving motivational interviewing can be used to challenge the stigma of mental disorders.

Stigma is a social construction that devalues people as a result of a distinguishing characteristic or mark.[1] The World Health Organization and the World Psychiatric Association recognise that the stigma and discrimination attached to mental disorders is strongly associated with suffering, disability and poverty.[2] The National Health Service *Safer Services* report observed stigma to be a major barrier to treatment seeking and suicide prevention.[3] Concern about the stigma of mental illness has culminated in the Royal College of Psychiatrists' 5-year 'Changing Minds' campaign whose aim was to promote positive images of mental illness, challenge misrepresentations and discrimination, encourage patient advocacy, and educate the public to the real nature and tractability of mental disorder.[4]

The Royal College of Psychiatrists' survey for the 'Changing Minds' campaign showed that people with alcoholism and drug addiction are the most stigmatised groups among people with mental illness.[5] Most respondents thought they were dangerous, unpredictable and hard to talk with and three out of five thought they were to blame for their condition, an opinion endorsed by only 6% of respondents in relation to schizophrenia. We therefore chose to study methods of reducing stigma towards the conditions that clearly evoked the most negative attitudes.

One method of addressing stigmatised attitudes in the interviewee is motivational interviewing, which involves the participant by providing a list of problems that their attitudes may cause to themselves and other people and giving the reasons why they may want to change their own views.[6] Motivational interviewing is a brief intervention and it has been adopted for treatment of people with alcohol dependency in primary care. It can be delivered in a single 5 min consultation and is particularly useful for people who have little insight or interest in further treatment. This interview method has been widely used in individuals with a number of problems including low-self esteem, obesity, eating disorders, psychosis, non-adherence to medication and substance use disorders. It would be an ideal option for changing attitudes towards people with mental illness, especially where the participant's motivation to change is questionable, for example members of the general public.

The objective of our study was to determine whether the motivational interview technique can help reduce stigmatised attitudes of members of the general public towards those with mental illness (schizophrenia) and drug use.

Method

Participants

We recruited the participants from the general population in south Essex by direct mail-shots, newspaper advertisements and word of mouth. There were no specific inclusion or exclusion criteria other than the ability to give written informed consent. The project was approved by the local research ethics committee.

Instruments

The 5-item Attitude to Mental Illness Questionnaire (AMIQ) is a brief, self-completion questionnaire with good psychometric properties that can be used in most situations. The questionnaire was adapted from Cunningham *et al*[7] and validated in 879 adult volunteers.[8] Respondents were asked to read a short vignette describing an imaginary patient and then answer five questions (the questionnaire can be obtained from the authors on request). The individual questions were scored on a 5-point Likert scale (maximum +2, minimum −2; blank questions, 'neutral' and 'don't know' were scored 0). The scores for the five questions were added giving a total score for each vignette (between −10 and +10). Test–retest reliability at 2–4 weeks was $P = 0.702$ ($n = 256$), construct validity was $\alpha = 0.933$ ($n = 879$) and alternate test reliability compared with Corrigan *et al*'s Attributions Questionnaire[2] was $\rho = 0.704$ ($n = 102$).

https://doi.org/10.1192/pb.bp.108.020925 Published online by Cambridge University Press

original papers

Motivational interview

Each person was interviewed in isolation from both the other family member and other participants. The interview was composed of 20 questions adapted from a widely used manual.[6] It was piloted by the lead author (a consultant psychiatrist) in 20 volunteers. He then trained the three other interviewers, who conducted two interviews with each participant, observed by the lead author. The interview was manualised to 20 short stems (the interview schedule is available on request).

Two participants were recruited from each household so that they could act as controls for each other. They were randomly assigned to receive each of the two interviews and asked to complete one version of the AMIQ for either schizophrenia or alcoholism before the motivational interview. The interview was conducted and participants then completed the second AMIQ questionnaire directed to the disorder that had been addressed in the motivational interview. For example, the AMIQ was completed in respect to alcoholism. A motivational interview was conducted regarding attitudes towards schizophrenia. A second AMIQ was then completed in respect to schizophrenia. As many questions were asked from the list of 20 as the 10-minute time period would permit. We reasoned that participants from within a household would be subject to the same socioeconomic factors that might influence their views. Interviews were performed between August 2004 and December 2005.

Data analysis

Correlation coefficients and non-parametric tests were used to compare differences in subgroups. The Wilcoxon's matched-pairs signed-ranks test was used to calculate statistical significance. The measurements were not normally distributed, although the means, standard errors and effect sizes have been quoted for convenience. These were performed using the StatsDirect statistical package for social scientists (version 2.1) for Windows.

Results

There was no difference in demographic characteristics between the control and experimental groups. For the alcohol control group and schizophrenia control group respectively the measured indices were: age (mean = 44.6 years, s.d. = 18.1 *v.* mean = 40.2 years, s.d. = 14.9), gender (39 *v.* 32% male), employment status (76 *v.* 78% in paid employment), ethnic origin (94 *v.* 92% White British) and age when leaving formal education (mean = 16.9 years, s.d. = 3.2 *v.* mean = 16.8 years, s.d. = 2.1; 65% of both groups left full-time education at 16 or younger).

An improvement in stigma scores was observed in attitudes towards people with alcoholism (Table 1; AMIQ scores = 1.2, s.e. = 0.5 *v.* AMIQ = −0.8, s.e. = 0.4 in controls; $P = 0.006$; two-sided Wilcoxon signed-rank test adjusted for ties) but not towards those with schizophrenia (AMIQ score = −1.1, s.e. = 0.4 *v.* AMIQ = −1.5, s.e. = 0.4 in controls; $P = 0.035$). The median difference in scores for the attitude towards alcoholism was two units (95% CI 3−0.5) that translated into an effect size of 0.43.

Table 1. Results of motivational interviewing, AMIQ scores[1]

Intervention	Control group	Experimental group	*P* (two-sided Wilcoxon test)
Alcoholism	−0.8 (s.e. = 0.4)	1.2 (s.e. = 0.5)	0.006
Schizophrenia	−1.1 (s.e. = 0.5)	−1.5 (s.e. = 0.4)	0.035

AMIQ, Attitude to Mental Illness Questionnaire.
1. Scores are for the AMIQ in 50 pairs of volunteers before and after a 10 min motivational interview directed against stigma of mental illness.

Each researcher interviewed 20−40 participants. There was no difference in outcomes between the three interviewers (a psychiatrist, a social worker and a support worker). The results of the trial are comparable with those from the large study that was used to validate the AMIQ.[8] Participants from both studies were self-selecting volunteers drawn from the general public.

Discussion

Attitudes to Mental Illness Questionnaire

We used the AMIQ as it is convenient and has been well validated. Other instruments are available, although these tend to be much longer, involve interviews or tend to address the experience of stigma by people with mental illness (e.g. the Internalised Stigma of Mental Illness scale),[9] rather than members of the general public.

Other methods to reduce stigma

Anti-stigma methods, such as the 'Changing Minds' campaign,[4] provide factual information addressing misconceptions about people with mental illness. These have been reported to reduce stigma regardless of whether they comprise brief fact sheets or more extensive interventions such as educational courses on mental illness.[10,11] Unfortunately, their effects tend to be small, especially if the negative consequences of a mental illness are also disseminated. Although Holmes & River discuss some cognitive−behavioural methods to deal with self-stigma, the technique was not devised to exercise changes in other people's negative attitudes to those with mental illness.[12]

There is a well-known report from a controlled study of the effect of a public education campaign on community attitudes towards people with mental illness following the closure of Tooting Bec Hospital in London.[13] Public attitudes in the experimental area improved and patients' social integration was enhanced. However, this was probably caused by the increased contact with patients in the experimental area rather than the dissemination of the information. Two earlier studies of a public education campaign were ineffective.[14,15]

https://doi.org/10.1192/pb.bp.108.020925 Published online by Cambridge University Press

original papers

Motivational interviewing used to reduce stigma towards mental illness

Motivational interviewing avoids generating resistance in the participants by having them, rather than the therapist, giving reasons for a change in attitude. It is the best described example of a brief intervention and it has been used widely among people with alcohol problems, including in two very large trials: Project MATCH and the UK Alcohol Treatment Trial (UKATT).[16,17] It can be delivered in a small number of sessions (four sessions were used in Project MATCH and UKATT).

In our study, motivational interviewing produced a small but statistically significant (10%) improvement in the AMIQ stigma score towards people with alcohol dependence; the effect size of 0.43 is conventionally regarded as modest. A smaller, insignificant improvement (2%) in attitudes towards people with schizophrenia was seen. It is possible that attitudes towards alcoholism are more flexible than those towards schizophrenia because of the negative media presentation of schizophrenia. Another factor may be that people are more likely to have personal experience of alcoholism than schizophrenia, owing to its far higher prevalence.[18] Also, Crisp *et al*[4] showed that, unlike schizophrenia, alcoholism is regarded as self-inflicted by many people.

Conclusions

Motivational interviewing produced a modest improvement in stigmatised attitudes of members of the public towards people with alcohol dependence. Although it is unlikely that personal interviews could be performed on large population samples, the technique could be targeted to key personnel such as employers, landlords or family members (e.g. to reduce hostility and high expressed emotion within family households). This would justify further research and refinement of this brief intervention, as it can be delivered with minimal training on a large scale.

Acknowledgements

The research was supported by British Academy Grant no. SG-35479.

Declaration of interest

None.

References

1 Biernat M, Dovidio JF. Stigma and stereotypes. In *The Social Psychology of Stigma* (eds TF Heatherton, RE Kleck & MR Hebl): 88–125. Guilford Press, 2000.

2 Corrigan P, Markowitz FE, Watson A, Rowan D, Kubiak MA. An attribution model of public discrimination towards people with mental illness. *J Health Soc Behav* 2003; **44**: 162–79.

3 Appleby L. *Safer Services*. Department of Health, 1999.

4 Crisp AH, Gelder MG, Rix S, Meltzer HI, Rowlands OJ. Stigmatisation of people with mental illnesses. *Br J Psychiatry* 2000; **177**: 4–7.

5 Crisp AH, Gelder MG, Goddard E, Meltzer H. Stigmatization of people with mental illness: a follow-up study within the Changing Minds campaign of the Royal College of Psychiatrists. *World Psychiatr* 2005; **4**, 106–113.

6 Miller WR, Rollnick S. *Motivational Interviewing* (2nd edn): 79–80. Guilford Press, 2002.

7 Cunningham JA, Sobell LC, Chow VMC. What's in a label? The effects of substance types and labels on treatment considerations and stigma. *J Studies Alcohol* 1993; **54**, 693–9.

8 Luty J, Fekadu D, Umoh O, Gallagher J. Validation of a short instrument to measure stigmatised attitudes towards mental illness. *Psychiatr Bull* 2006; **30**: 257–60.

9 Ritsher JB, Otilingam PG, Grajales M. Internalized stigma of mental illness: psychometric properties of a new measure. *Psychiatry Res* 2003; **121**: 31–49.

10 Mayville E, Penn DL. Changing societal attitudes towards persons with severe mental illness. *Cogn Behav Pract* 1998; **5**: 241–53.

11 Penn DL, Martin J. The stigma of severe mental illness. Some potential solutions for a recalcitrant problem. *Psychiatr Q* 1998; **69**: 235–47.

12 Holmes P, River LP. Individual strategies for coping with the stigma of severe mental illness. *Cogn Behav Pract* 1998; **5**: 231–9.

13 Wolff G, Pathare S, Craig T, Leff J. Public education for community care. A new approach. *Br J Psychiatry* 1996; **168**: 441–7.

14 Cummings E, Cummings J. *Closed Ranks: an Experiment in Mental Health Education*. Harvard University Press, 1957.

15 Gatherer A, Reid JJA. *Public Attitudes and Mental Health Education*. Northamptonshire Mental Health Project, 1963.

16 Project MATCH Research Group. Matching alcoholism treatments to client heterogeneity: Project MATCH three-year drinking outcomes. *Alcohol Clin Exp Res* 1998; **22**: 1300–11.

17 UKATT Research Team. Effectiveness of treatment for alcohol problems: findings of the randomised UK alcohol treatment trial (UKATT). *BMJ* 2005; **331**: 541–50.

18 Office of National Statistics. *Mental health among adults*. ONS, 2001 (http://www.statistics.gov.uk/pdfdir/nihaa1201.pdf).

***Jason Luty** Consultant in Addictions Psychiatry, South Essex Partnership NHS Trust, and Honorary Consultant in Addictions Psychiatry, Cambridge and Peterborough Mental Health NHS Trust, Taylor Centre, Queensway House, Essex Street, Southend-on-Sea, Essex SS1 2RB, email: sl006h3607@blueyonder.co.uk **Okon Umoh** Locum Consultant in Child and Adolescent Psychiatry, Child and Family Service, Southend-on-Sea, **Francis Nuamah** Consultant Psychiatrist, North East London NHS Foundation Trust

https://doi.org/10.1192/pb.bp.108.020925 Published online by Cambridge University Press