Attitudes towards mental disorders and emotional empathy in mental health and other healthcare professionals

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Aims and method To compare attitudes towards mental disorders in professionals working in mental health and professionals working in different areas of medicine. Levels of emotional empathy in both groups were also investigated. In total, 58 mental healthcare professionals and 60 non-mental healthcare professionals completed our attitudes towards mental disorders questionnaire and Balanced Emotional Empathy Scale.

Results The results reveal generally positive attitudes towards people with mental disorders in both groups. Non-mental healthcare professionals regarded people with a mental disorder as significantly more dangerous and unpredictable than did mental healthcare professionals. There was no statistically significant difference in emotional empathy between the two groups. Both groups cited illicit drug use as one of the most significant causes of mental disorder.

Clinical implications Mental healthcare professionals and non-mental healthcare professionals show broadly similar attitudes and a similar degree of empathy towards people with a mental disorder. However, non-mental healthcare professionals regard people with mental health problems as significantly more dangerous and unpredictable. There is scope for further research including examining the effects of educational interventions.

Declaration of interest None.

Although mental health problems are extremely common in our society, there has historically been a negative attitude towards people with mental disorders. A study found that public attitudes towards people with mental illness in England and Scotland became less positive between 1994 and 2003.[1] Stigma is thought to stop those with mental health problems seeking appropriate medical help.[2,3] Stigmatising attitudes towards mental disorders may be influenced by lack of knowledge of psychiatric illness,[4,5] and contact with people with mental disorders may lead to more positive attitudes and enlightened views.[6,7]

Healthcare professionals have crucial contact with people with mental disorders. The aim of this study was to assess whether the attitudes towards mental health problems of professionals working in mental health differed from those of professionals working in other areas of medicine. Several studies have shown that doctors and nursing staff working in psychiatry had more positive attitudes towards people with mental disorders than those working in somatic medicine.[8–10] In this study, we also looked specifically at attitudes towards eating disorders, as previous research has shown stigmatising attitudes from healthcare professionals, which may restrict opportunities for effective treatment.[11]

We also investigated the level of empathy in professionals working in mental health and non-mental health settings, to determine whether there was any difference in emotional empathy between the groups. In a study of adolescents it was found that increased knowledge of mental disorders led to increased empathy and sensitivity towards those with mental health difficulties.[12] Increased empathy among healthcare professionals towards patients with eating disorders has also been suggested as an approach to help reduce stigma.[11]

Method

Participants

A total of 58 mental healthcare professionals and 60 non-mental healthcare professionals working in primary and secondary care in the Lincolnshire area were recruited via advertisement and word of mouth to take part in the study. Data were collected between December 2008 and May 2009. The mental health group comprised approximately 50%

doctors (including consultant psychiatrists and junior doctors), 35% mental health nurses (in both out-patient and in-patient settings) and 15% approved social workers. The non-mental health group comprised approximately 65% doctors (including general practitioners and junior and middle-grade hospital doctors) and 45% nurses (working in primary and secondary care).

Prior to participation, healthcare professionals were given an information sheet, which outlined the aims of the study. They were then asked to complete two questionnaires, which assessed their attitudes towards mental disorders and their emotional empathy. The research was reviewed and approved through North East Lincolnshire Care Trust Plus research governance procedures.

Two mental healthcare professionals declined to take part in the study. Approximately 15 sets of questionnaires which were distributed to professionals who expressed an interest in taking part were not returned.

Questionnaire 1: attitudes towards mental disorders

The questionnaire used to assess attitudes towards mental disorders was adapted from a questionnaire used previously in a cross-cultural study (details available from the authors on request). Information was obtained regarding:

- gender and age of the participant, previous contact with people with mental disorders and the participant's belief of the prevalence of different mental disorders
- attitudes towards people with mental disorders in the form of nine multiple-choice questions
- perception of the most significant causes of mental disorders, chosen from a prepared list: 18 causes were listed covering a range of biological and psychosocial issues.

Questionnaire 2: Balanced Emotional Empathy Scale

The full-length (30-item) Balanced Emotional Empathy Scale (BEES)[13] was used to assess levels of empathy in participants. This is an updated version of the original Emotional Empathic Tendency Scale (EETS).[14] Reviews have shown strong evidence for the validity of this scale.[14–16] The BEES has a high positive correlation with the original EETS,[17] which suggests that much of the validity of the 1972 EETS can also be attributed to the new BEES. Further additional validation of the BEES and abbreviated BEES has also been published.[17,18]

When completing the scale, participants were asked to state the extent to which they agreed or disagreed with 30 statements. The scale points used in the BEES were: +4, very strong agreement; +3, strong agreement; +2, moderate agreement; +1, slight agreement; 0, neither; −1, slight disagreement; −2, moderate disagreement; −3, strong disagreement; −4, very strong disagreement. Each participant's raw score was then converted into a z score, by subtracting the norm mean score and dividing by the norm standard deviation. The z score was then applied to a statistical table, from which a percentile score and hence interpretation of the score could be drawn. Interpretation of the score allocated an empathy level on an 11-point scale ranging from very extremely high to very extremely low.

Analysis of data

Statistical analysis was performed using SPSS version 16.0 for Windows XP. Categorical data obtained from the attitudes towards mental disorders questionnaire were analysed using the chi-squared test ($P<0.05$) to determine whether there was any statistically significant differences between the groups. Differences in empathy between the two groups were compared using the Mann–Whitney U-test.

Power analysis

The sample sizes of 30 participants in each arm should be sufficient to detect significant differences in emotional empathy task performance. In a previous study of emotional processing,[19] large effect sizes of 0.87–1.46 were obtained with 27 individuals with depression and 29 healthy controls. A power analysis performed using NQuery suggested that, at 90% power, a minimum sample size of $n=30$ would be sufficient to detect the differences observed previously. We therefore aimed to sample 50 in each group to allow for wastage. Furthermore, a similar multicultural study on attitudes towards mental disorders using very similar questionnaires and a comparable number of participants was performed and published previously (details available from the authors on request).

Table 1 Estimation of prevalence of mental disorders by mental health and non-mental health professionals

Question	Non-mental health group *n* (%)	Mental health group *n* (%)	χ^2	*P*
What is the prevalence of psychosis in the population?			0.041	0.980
0–5%	20 (33.3)	19 (33.3)		
6–30%	33 (55.0)	32 (56.2)		
>30%	7 (11.7)	6 (10.5)		
What is the prevalence of depression and anxiety disorders in the population?			0.053	0.974
0–5%	1 (1.7)	1 (1.7)		
6–30%	24 (40)	22 (37.9)		
>30%	35 (58.3)	35 (60.4)		
What is the prevalence of eating disorders in the population?			6.762	0.034
0–5%	17 (28.3)	30 (51.7)		
6–30%	36 (60.0)	23 (39.7)		
>30%	7 (11.7)	5 (8.6)		

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Results

Demographics

There were no differences between the two groups studied in terms of gender. However, there was a significant difference of age between the two groups ($\chi^2 = 8.38$, $P = 0.025$). The majority of responders in the non-mental health group were within the 26–35 age bracket; the majority in the mental health group were in the 36–45 age bracket.

Prevalence of mental disorders

Participants' beliefs of the prevalence of mental disorders are summarised in Table 1. There were no significant differences between professionals in mental health and non-mental health as to the prevalence of depression/anxiety disorders and psychosis, although it is interesting to note that the majority in both groups overestimated the prevalence of psychosis (believing that 6–30% of the population was affected). Mental health professionals estimated the prevalence of eating disorders as significantly lower than the non-mental health group ($\chi^2 = 6.76$, $P = 0.034$).

Attitudes towards mental disorders

The results are summarised in Table 2. The results revealed generally positive attitudes towards people with mental disorders in both groups. The majority of both non-mental

Table 2 Attitudes of non-mental health professionals and mental health professionals towards people with mental disorders

Question	Non-mental health group *n* (%)	Mental health group *n* (%)	χ^2	*P*
What do you feel when you hear someone has a mental disorder?			2.528	0.470
Sadness	15 (25.0)	10 (17.3)		
Sympathy	37 (61.7)	43 (74.1)		
Relief it's not me	3 (5.0)	1 (1.7)		
Nothing	5 (8.3)	4 (6.9)		
What do you feel when someone is acting in a way that suggests they have a mental disorder?			7.939	0.160
Sadness	16 (26.7)	8 (13.8)		
Sympathy	30 (50.0)	41 (70.7)		
Anger	0	1 (1.7)		
Relief it's not me	3 (5.0)	1 (1.7)		
Nothing	4 (6.6)	4 (6.9)		
Threatened	7 (11.7)	3 (5.2)		
How do you behave when you come into contact with someone with a mental disorder?			9.691	0.021
Get away	4 (6.7)	0		
Want to help	28 (46.7)	41 (70.7)		
Same as usual	27 (45.0)	17 (29.3)		
Challenge them	1 (1.6)	0		
How do you think people with a mental disorder should be treated?			0.001	0.609
Locked up	1 (1.7)	1 (1.8)		
Isolated	1 (1.7)	0		
Treated in the community	56 (96.6)	56 (98.2)		
Should insurance cover the treatment of mental disorders?			8.159	0.017
Yes	31 (51.7)	44 (75.9)		
No	5 (8.3)	1 (1.7)		
Don't know	24 (40.0)	13 (22.4)		
What should be done if someone with a mental disorder commits a crime?			2.388	0.122
Put in jail	15 (27.3)	8 (15.1)		
Treatment	40 (72.7)	45 (84.9)		
Are people with a mental disorder unpredictable or dangerous?			14.008	0.001
Yes	21 (36.2)	10 (17.8)		
No	18 (31.0)	37 (66.1)		
Don't know	19 (32.8)	9 (16.1)		
What do you feel when you hear someone has an eating disorder?			5.387	0.371
Sadness	11 (18.3)	17 (29.3)		
Sympathy	33 (55.0)	33 (56.9)		
Anger	2 (3.3)	1 (1.7)		
Think it's their own fault	6 (10.0)	2 (3.5)		
Relief it's not me	4 (6.7)	1 (1.7)		
Nothing	4 (6.7)	4 (6.9)		
Do you think an eating disorder is a self-inflicted problem?			3.574	0.167
Yes	16 (26.7)	9 (15.8)		
No	32 (53.3)	40 (70.2)		
Don't know	12 (20.0)	8 (14.0)		

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health and mental health professionals felt sympathy towards people with mental disorders, and were in favour of treatment in the community. Behaviour when in contact with people with mental disorders was significantly different between the groups ($\chi^2 = 9.69$, $P = 0.021$) – over 70% of mental healthcare professionals stated that they would want to help someone with a mental disorder (the remaining 30% would treat such individuals 'as usual'), compared with 46% of non-mental healthcare professionals. Attitudes also differed significantly regarding whether people should have insurance cover for mental health problems ($\chi^2 = 8.16$, $P = 0.017$) – mental health professionals were mainly in favour of this (75.9%), whereas non-mental health professionals had a more ambivalent attitude (51.7% responded in favour of insurance covering mental disorders; 40% did not know). The non-mental health group also regarded people with mental health disorders as significantly more dangerous and unpredictable than did the mental health group ($\chi^2 = 14.01$, $P = 0.001$).

Attitudes towards individuals with eating disorders were positive in both groups, with the majority feeling sympathy towards those with an eating disorder. However, it is interesting to note that over 25% of non-mental healthcare professionals and over 15% of mental healthcare professionals believed an eating disorder to be a self-inflicted problem.

Causes of mental disorders

The most significant causes of mental illness as listed by responders are shown in Table 3. The causes most frequently listed by non-mental health professionals were alcohol (46.2%), illicit drug use (38.5%) and dysfunction of the brain (32.7%). Mental healthcare professionals cited drugs (52.2%), sexual abuse (37.0%), stress in a relationship (34.8%) and vulnerability to mental disorders (34.8%). Although the results were not amenable to statistical treatment, due to the limited probability of drawing any valid conclusions at this stage of the research, we present the findings as items of interest, which could be the grounds for further research designed to yield more robust conclusions.

Table 3 Beliefs of the most significant causes of mental disorders in non-mental healthcare professionals and mental healthcare professionals[a]

Significant cause of mental disorder[b]	Non-mental health group *n* (%)	Mental health group *n* (%)
Head trauma	9 (17.3)	4 (8.7)
Unemployment	3 (5.8)	5 (10.9)
Stress in relationship	12 (23.1)	16 (34.8)
Stress at work	7 (13.5)	4 (8.7)
Family conflicts	4 (7.7)	3 (6.5)
Vulnerability to mental disorders	10 (19.2)	16 (34.8)
Alcohol misuse	24 (46.2)	11 (23.9)
Modern lifestyle	4 (7.7)	0
Subconscious conflicts	3 (5.8)	4 (8.7)
Dysfunction of brain	17 (32.7)	12 (26.1)
Genetics	12 (23.1)	11 (23.9)
Sexual abuse	14 (26.9)	17 (37.0)
Birth complications	4 (7.7)	0
Financial problems	3 (5.8)	5 (10.9)
Illicit drug use	20 (38.5)	24 (52.2)
Loneliness	5 (9.6)	4 (8.7)

a. None of the responders in either group cited radiation or God's will as significant causes of mental disorder.
b. Participants were allowed to pick up to three causes they felt were the most significant.

Emotional empathy

There was no statistically significant difference in emotional empathy between the two groups ($z = -0.332$, $P = 0.740$).

Discussion

Some studies have shown that attitudes of healthcare professionals towards mental disorders are actually more negative compared with the general public,[20,21] and that healthcare professionals have stigmatising attitudes towards mental illnesses such as schizophrenia.[22] However, the results of our study have shown positive attitudes towards people with mental disorders, with the majority of responders in both groups feeling sympathy for those with mental disorders, wanting to help them and favouring their treatment in the community. Although previous research has suggested particularly negative attitudes towards eating disorders, again this was not supported by the findings of this study. In 1992, Fleming & Szmukler assessed the attitudes of 352 medical and nursing staff in a general hospital. They found that patients with eating disorders were less liked than patients with schizophrenia and were thought to 'self-induce' their illness.[23] Our study has shown that most healthcare professionals studied feel sympathy towards people with an eating disorder, and the majority do not believe it to be a self-inflicted problem.

Mental healthcare professionals showed more positive attitudes than the non-mental health group; the majority did not perceive people with mental disorders as a danger and expressed a desire to help those with a mental disorder, which is in line with previous research.[8–10] This could be related to the increased contact they have with people with mental disorders and, of course, to the fact that helping people with mental health problems is their main work. Professionals in non-mental health settings regarded people with mental health disorders as significantly more dangerous and unpredictable than did the mental health group.

Mental healthcare professionals were also more in favour of insurance cover for mental health problems. The difference in attitudes towards insurance cover is hard to interpret in the UK setting where most people rely on the National Health Service for their healthcare. However, it may perhaps be regarded as a surrogate indicator of how important people consider mental health problems to be, even in this context.

It is interesting that both groups cited illicit drug use as one of the most significant causes of mental disorder. The

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non-mental health group also cited alcohol misuse and dysfunction of the brain as the most significant causes, whereas the mental health group placed more emphasis on vulnerability to mental disorder and traumatic events such as sexual abuse or relationship problems. Both mental health and non-mental health groups were similar in the extent of their emotional empathy.

Limitations

The questionnaire used to assess attitudes towards mental disorders was not standardised; however, it had been used in previously published research (details available from the authors on request). The two groups were matched according to gender, although the level of education and IQ was not collected for the participants in each group, and could not be compared. The two groups differed significantly in age. Although participants in the non-mental health group were not currently working in mental health, they had a varying degree of mental health experience – this was particularly true of junior doctors rotating through different specialties. Participants were not selected randomly, but volunteered to participate in the study. It is possible that healthcare professionals willing to volunteer were those with more positive attitudes to mental disorders.

Strengths

Strengths of the study include the high reliability of the data collected. As participants submitted the data anonymously, we are confident that the results reflect their true attitudes and beliefs. The study is also novel in its use of standardised scales to compare the levels of emotional empathy between groups of healthcare professionals. The fact that the study looked beyond attitudes towards mental disorder to include participants' knowledge and beliefs about the causes of mental disorder was another strength.

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