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Effect of diagnostic labeling and causal explanations on medical students' views about treatments for psychosis and the need to share information with service users

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ABSTRACT

This study examines whether medical students' views of treatments for 'schizophrenia' and of patients' rights to be informed about their condition and their medication were influenced by diagnostic labeling and causal explanations and whether they differed over medical training. Three hundred and eighty-one Italian students attending their first or fifth/sixth year of medical studies read a vignette portraying someone who met diagnostic criteria for 'schizophrenia' and completed a self-report questionnaire. The study found that labeling the case as 'schizophrenia' and naming heredity among its causes were associated with confidence in psychiatrists and psychiatric drugs. Naming psychological traumas among the causes was associated with confidence in psychologists and greater acknowledgment of users' right to be informed about drugs. Compared to first year students, those at their fifth/sixth-year of studies more strongly endorsed drugs, had less confidence in psychologists and family support, and were less keen to share information on drugs with patients. These findings highlight that students' beliefs vary during training and are significantly related to diagnostic labeling and belief in a biogenetic causal model. Psychiatric curricula for medical students should include greater integration of psychological and medical aspects in clinical management of 'schizophrenia'; more information on the psychosocial causes of mental health problems.

1. Introduction

An overemphasis on the biology of mental illnesses and the influence of drug companies on medical practice have had a marked effect on psychiatric care and the way the public and health professionals view both psychiatrists and people with mental health problems (Phelan et al., 2006; Read et al., 2006; Moncrieff, 2007; Read, 2008; Sartorius et al., 2010; Angermeyer et al., 2011). In clinical practice, management of severe mental disorders is mainly focused on long-term drug treatments, and less attention is given to evidence-based psychosocial interventions (Phelan et al., 2006; Magliano et al., 2002; Dixon et al., 2010; Hutton et al., in press).

Interestingly, the adoption of a biogenetic model of mental illness has not improved the image of psychiatrists, who are still often perceived as emotionally instable and as specialists for incurable diseases (Sartorius et al., 2010; Katschnig, 2010). Moreover, stereotypes about psychiatrists still lead some people to refer to neurologists for mental health problems (Stone et al., 2010). These negative attitudes toward psychiatrists may have contributed to the decreased interest in psychiatry as a career choice among junior doctors (Katschnig, 2010).

With regard to people with serious mental disorders, the biogenetic model has been consistently found to be associated with increased fear, prejudice and desire for social distance (Read et al., 2006; Angermeyer et al., 2011). Often, these persons are perceived as unable to control their behavior, and as dangerous and unpredictable (Magliano et al., 2004; Phelan et al., 2006; Angermeyer et al., 2011). This situation is even more serious in cases of persons diagnosed with 'schizophrenia' (PWS), which seems to be the most stigmatized mental disorder of all (Angermeyer and Matschinger, 2005; Thornicroft et al., 2009; Henry et al., 2010; Read and Dillon, 2013).

Prejudice and discrimination towards PWS are common, even in medical services (Patel, 2004; Schulze, 2007), causing delays in treatments and substandard care (Lawrence and Coghlan, 2002;

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Corrigan, 2004). Although long-term follow up studies confirm a recovery rate of around 50% (Bellack, 2006; Levine et al., 2010), prognostic pessimism is deep-rooted among health professionals and the public (Read et al., 2006). Psychiatrists are reluctant to inform PSW of their diagnosis, and to talk with them about recovery so as not to foster 'false' hopes. This situation may lead to an increase of users' self-stigma and to unsatisfactory therapeutic alliance with them (Magliano et al., 2002; Paccaloni et al., 2005; Gümüş, 2008). Despite the fact that most PWS and their relatives would be very interested in receiving information on 'schizophrenia' and available treatments, this often does not happen (Magliano et al., 2002, 2004; Gümüş, 2008; Magliano et al., 2008). For example, in an Italian study of 241 PWS (Magliano et al., 2008), 76% stated that persons with this disorder should have been informed by mental health professionals on their diagnosis, while only 30% of them had been previously informed of it by their psychiatrist. This situation may have a very demoralizing effect on PSW and their relatives, reducing their hope of recovery and the search for an effective treatment. In non-psychiatric medical contexts, stigma against PWS can lead to discrimination with regard to diagnostic efforts and treatments (Thornicroft et al., 2007). In particular, the belief that PWS are unable to make reasonable decisions on their life (Read and Dillon, in press; Economou et al., 2012) may lead health professionals to not provide these users with medical information, and to have poor contacts with them. Health professionals' difficulties in communicating with PWS can also contribute to poorer physical health of these persons (Lawrence and Coghlan, 2002; Corrigan, 2004).

As members of society, medical students are not free of stereotypes about, and prejudices toward, PWS (Baxter et al., 2001; Llerena et al., 2002; Ay et al., 2006; Dixon et al., 2008; Fischel et al., 2008; Fernando et al., 2010; Magliano et al., 2011; Economou et al., 2012). It has been found that 71–85% of medical students believe that PWS are unpredictable, and 26–78% believe that they are dangerous (Magliano et al., 2011). Furthermore, 4–21% of medical students stated that schizophrenia is an incurable disorder (Llerena et al., 2002; Fernando et al., 2010; Magliano et al., 2011; Economou et al., 2012). It has also been found that 26% of medical students is unsure that PWS has insight into their condition and that these users are capable of reporting accurately the outcome of their treatment (Economou et al., 2012). Research has also found that using the diagnostic label of schizophrenia and attribution of this disorder to genetic factors are associated with an increase of perceived social distance from PWS among medical students (Baxter et al., 2001; Magliano et al., 2011). Furthermore, students tend to adhere to a biogenetic model of schizophrenia at their final, clinical stage of training, and their acquisition of diagnostic and therapeutic psychiatric skills has limited effects on their attitudes towards these persons (Ay et al., 2006; Fischel et al., 2008; Economou et al., 2012; Magliano et al., 2012).

In 2010, we explored the effect of causal explanations and the diagnostic label of schizophrenia on medical students' views of unpredictability, social distance, and the possibility of recovery (Magliano et al., 2011, 2012). The study, carried out with 381 Italian medical students in their first or fifth/sixth year of studies found that students most frequently cited psychological traumas, stress, and heredity among the causes of schizophrenia. The study also revealed that labeling a case as 'schizophrenia' and naming heredity among its causes were associated with pessimism about recovery and higher perception of social distance Finally, the study found that students in the fifth/sixth year of their studies more frequently mentioned heredity and stress as causes, and acknowledged a high level of social distance from 'schizophrenics', compared to first year students.

In the current article, we present data, from the same samples of medical students reported above, on views about treatments and the need to share information on schizophrenia and its treatments The study tested whether students' views:

- were influenced by diagnostic labeling and causal explanations. We hypothesized that, compared to students who did not, those who identified schizophrenia in a case-vignette, and those who reported heredity among its causes would more strongly endorse drug treatments and less strongly endorse psychosocial interventions; that they would recommend a psychologist less frequently; and, that they would feel less need to share information with PWS.
- Differed from the beginning to the final stage of medical training. We hypothesized that, compared to first year students, those in their fifth/sixth year of medical course would more strongly endorse drugs and less strongly endorse psychosocial interventions, be less likely to recommend a psychologist; and be less keen to share information with patients.

2. Methods

2.1. Study design

This survey was conducted among students of the Faculty of Medicine of the Second University of Naples, Italy, who were attending their first or fifth/sixth year of lessons in the period of December 2010 and April–June 2010, respectively. In Italy, medicine is a six-year academic degree and students receive their clinical training in psychiatry in their fifth year. Training in Psychiatry consists of frontal lessons on the clinical characteristics of mental disorders, biological and psychosocial treatments (i.e., principles of psychotherapies, of family interventions, and of social skills training), and on the organization of mental health care in Italy. The training also includes a tutorial clinical workshop and completion of laboratories at the clinical facilities of the Department of Psychiatry of the university hospital. Participation in the study was voluntary. The anonymity of participants was guaranteed, and informed consent was obtained. The study was authorized by the Head of the Faculty of Medicine in agreement with the local Research Ethical Board rules. Students who agreed to participate were asked to read a case-vignette describing a person who met the ICD-10 criteria for schizophrenia (without stating the diagnostic label) and to fill in the Opinions on mental illness Questionnaire (OQ; Magliano et al., 2004). In completing the questionnaire, respondents were asked to think about "*people with problems like those described in the case vignette"* (Appendix A), and to answer the question "*From your point of view, what […] might suffer from?*". Respondents' age, gender and year of studies were collected by additional items.

2.2. Questionnaire

The Opinions on Mental Illness Questionnaire (OQ; Magliano et al., 2004) is a self-report tool exploring respondents' beliefs about: a) the causes of; b) the treatments for; and c) the psychosocial consequences of, schizophrenia. Only items regarding causes and treatments were examined in the current study. Respondents' beliefs about causes are explored by a multiple-choice item and two open questions about what is the most important and the most frequent causes of the case-vignette condition. The subscale on treatments contains 7 items exploring respondents' beliefs on the usefulness of drugs and psychosocial interventions in schizophrenia and on the advisability of informing users' and relatives' about 'schizophrenia' and of informing users about the psychotropic drugs they receive and their side effects. Items are rated on a 3-point scale, from 1="not true" to 3 "completely true". The questionnaire also contains a multiple-choice item exploring respondents' beliefs about the type of professionals (psychiatrist, neurologist, psychologist, GP, etc.) that should be involved in the treatment of a person with 'schizophrenia'. The psychometric properties of the OQ have been previously tested. Cohen's *kappa* coefficient ranges from 0.50 and 1 for 74% of the items. Cronbach *alpha* coefficient of the subscales ranges between 0.42 and 0.72. Given the lower internal consistency of the treatment subscale (Cronbach's *alpha*=0.42), its items were analyzed separately.

2.3. Statistical analysis

Associations of diagnostic labeling and causal explanations with respondents' beliefs on: a) treating professionals; b) usefulness of drug and psychosocial treatments, and advisability of sharing information were explored by χ^2 and Mann–Whitney *U* test,