Abstract  Background  The belief that mental disorders involve a high risk of unpredictable behaviours is a factor which influences negatively the social acceptance of the mentally ill. In this paper, we compare the beliefs about the causes and psychosocial consequences of schizophrenia expressed by 536 respondents who had the firm conviction that patients with schizophrenia are unpredictable and by 457 respondents who firmly believed that they are not.  Methods  The survey was conducted in 30 Italian geographic areas, randomly selected taking into account their location and population density. The data were collected by the Questionnaire about Opinions on Mental Illness (QO).  Results  Respondents who believed that patients with schizophrenia are unpredictable reported more frequently factors such as use of alcohol and drugs and frequenting bad company as being involved in the development of the disorder. In addition, this group showed more restrictive opinions about patients’ civil and affective rights. Low education was found to be significantly associated with perception of “unpredictability” in schizophrenia.  Conclusions  These results suggest the need to: a) inform the general public on the main clinical characteristics of schizophrenia and on the risk of unpredictable behaviours in the acute phases of this mental disorder; b) carry out sensitisation campaigns against discrimination toward people with schizophrenia emphasising successful experiences of social integration.

Key words  schizophrenia – unpredictability – beliefs

Introduction  The belief that mental disorders involve a high risk of social danger and unpredictable behaviours is a factor which influences negatively the social acceptance of the mentally ill [1–7]. This belief, although not supported by scientific evidence [8], limits the implementation of community mental health care on a large scale.

In Japan, the public fear of assault by the mentally ill was expressed in the community opposition to the opening of psychiatric institutions [9]. In the UK and Italy, the persistence of these fears among the public supports proposals to modify current psychiatric laws in favour of more restrictive treatment of mental disorders [10, 11].

A recent survey carried out in the UK [12–14] found that 80 % of the general public thought that psychiatric patients are unpredictable, and 70 % stated that they are dangerous to others. In a study carried out by Angermeyer and Matschinger in Germany [15], 68 % of respondents did not accept the idea that one of their relatives could marry a psychiatric patient, and 77 % stated that they would not grant the custody of a child to a person suffering from a mental disorder.

The acceptance of the mentally ill in the community has been found to be significantly associated with previous contacts with these patients, a high level of education and cultural factors [12, 16–18]. On the other hand, social exclusion was found to be significantly higher among parents of young children, among people who had limited information on mental disorders, and among those belonging to the middle class and sharing conservative ideas [15].

In Italy, one of the countries with the longest experience of community treatment in psychiatry, a study carried out 10 years after the promulgation of the 1978 psy-
chiatric reform law found fearful attitudes in most of the general population toward mentally ill people [19]. Attitudes were especially critical in Southern Italy, and in relation to patients’ civil rights. Prejudices were detected concerning patients’ right to vote and their ability to hold a job, although the acceptance of patients as job-mates or neighbours was relatively good. Moreover, 65 % of respondents reported to be greatly or moderately frightened by patients’ unpredictability. This fear was significantly higher in respondents living in areas with low population density and among females.

In the last 10 years, community mental health facilities have been largely implemented all over the country, in parallel with the completion of the closure of psychiatric hospitals [20, 21]. This process is likely to have changed the attitudes of Italians about mental disorders, in particular schizophrenia.

In 1998, a national study was carried out in Italy to specifically explore the opinions about schizophrenia of the patients’ relatives, mental health professionals and the general public [22–24]. Results from this study highlighted that the general public and professionals had similar opinions about schizophrenia and that both these groups were more tolerant than patients’ relatives concerning patients’ social competence and civil rights. However, 85 % of the public, 74 % of professionals and 65 % of relatives were partially or totally convinced that patients with this mental disorder are unpredictable.

It is likely that, as proposed by Link et al. [3], the beliefs about unpredictability of patients with schizophrenia are related to causal explanations of this mental disorder and significantly influence people’s acknowledgement of patients’ social competence and civil rights.

In order to test this model, we have performed a secondary analysis on data from the above-mentioned Italian study. In particular, we have compared the beliefs about causes and psychosocial consequences of schizophrenia expressed by respondents who had the firm conviction that patients with schizophrenia are unpredictable and by those who firmly believed that they are not. In particular, we tested whether the respondents’ conviction that persons with schizophrenia are unpredictable was associated with: 1) attribution of the disease to factors related to patients’ intentional behaviours; b) conviction that these patients should be admitted to asylums; c) low acknowledgement of patients’ social competence and civil rights.

### Subjects and methods

The study was carried out in 30 Italian geographic areas, randomly selected taking into account the demographic distribution of the Italian population, as reported in the 1991 national census [25]: 10 in Northern Italy (3 in areas with more than 100,000 inhabitants, 3 in areas with 25,000–100,000 inhabitants, and 4 in areas with less than 100,000 inhabitants), 10 in Central Italy (with the same distribution as the Northern area), and 10 in Southern Italy (with the same distribution).

In each area, the study population included:

- a) Twenty-five persons consecutively recruited in a local GP unit randomly selected among those with at least 500 clients. Persons were invited to take part in the study if they: a) were aged between 18 and 70 years; b) had lived in the selected area for at least 2 years; c) were not relatives of another client recruited in the study; d) did not suffer from a long-term physical or mental illness; e) did not live with a relative suffering from a long-term physical or mental illness;
- b) all the professionals who had been working in the local mental health centre for at least 1 year at the time of the assessment;
- c) the key relatives (i.e. the relatives spending the highest number of hours in contact with the patients during the last year) of the first consecutive 25 subjects with a DSM-IV diagnosis of schizophrenia, who had attended the local mental health centre for at least 6 months. Key relatives were asked to participate in the project if they: a) were aged between 18 and 70 years old; b) had no history of psychosis or other major mental disorder requiring treatment; c) did not live with other persons suffering from chronic physical or psychiatric illness in addition to the patient.

In one area, it was possible to collect data only on patients’ key relatives due to drop out from the study of the participating mental health department.

Six GPs (21 %) refused to participate, and were replaced with other GPs randomly selected in the same area. A total of 11 lay respondents out of 725 (1.5 %), 24 professionals out of 489 (5 %) and 41 families out of 750 (5.5 %) did not agree to participate in the study.

From the global sample of 1,888 respondents (709 patients’ relatives, 714 lay respondents and 465 professionals), we selected only those who firmly believed that patients with schizophrenia are unpredictable or predictable, as explored by the item “These patients are unpredictable, it is not possible to foresee what they will do” of the Questionnaire on Opinions about Mental Illness (see “Instrument description” section).

#### Assessment procedures

Information on respondents’ socio-demographic characteristics was collected by an ad-hoc schedule. Each respondent was asked to fill in the self-reported Questionnaire on the Opinions about Mental Illness in the appropriate version. In filling in the questionnaire, professionals and lay respondents were asked to refer to a case vignette describing a patient who met the ICD-10 criteria for schizophrenia, and key relatives were asked to refer to patients with problems like those of their own family member.

#### Instrument description

The Questionnaire on the Opinions about Mental Illness [26] is a self-reported instrument exploring beliefs about: a) the causes of schizophrenia; b) the effectiveness of available treatments for this disorder and patients’ rights to be informed; c and d) the political, social and affective rights of patients with schizophrenia and their ability to perform social and occupational roles. Items of the subscales b–d are rated on a 3-point scale, from 1 “Not true” to 3 “Completely true”.

The questionnaire is available in a General Public, a Professional, and a Family version. It consists of 26 common items; in the General Public version there are 5 additional items exploring the general public’s beliefs on psychiatric treatments and professionals involved in mental health care; in the Professional version there are 14 additional items on knowledge about clinical, epidemiological and psychosocial aspects of schizophrenia; in the Family version there are 5 additional items on the specific condition of the mentally ill relative.

Psychometric properties of the Questionnaire on the Opinions about Mental Illness have been formally tested (intra-rater reliability: Cohen’s kappa coefficient from 0.50 to 1 for 74 % of the items; Cronbach alpha coefficient performed on the four subscales ranged between 0.42 and 0.72; factor analysis accounting for 73 % of total variance) [26].