



Early Intervention in Psychiatry 2015; 9: 234-241

doi:10.1111/eip.12123

# Original Article

# Mental health literacy about schizophrenia: a survey of Portuguese youth

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## **Abstract**

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Received 11 February 2013; accepted 7 December 2013

Declaration of conflict of interest We wish to confirm that there are no known conflicts of interest associated with this publication. The financial support has no influence on the outcomes of the research. We confirm that the manuscript has been read and approved by all named authors. We confirm that the order of authors listed in the manuscript has been approved by all of us.

Aim: Mental health literacy about psychotic disorders, specifically schizophrenia, may assist in appropriate help seeking and early intervention, preventing the exacerbation of symptoms and improving health outcomes in the medium and long term. The aim of this study was to characterize the level of mental health literacy of Portuguese youth concerning schizophrenia.

Methods: A mental health literacy questionnaire was administered to a random sample of Portuguese youth aged 14–24 years. This questionnaire evaluated the following components: recognition of disorders, knowledge about professionals and treatments available, knowledge about the effectiveness of self-help strategies, knowledge and skills to support and provide first aid to others, and knowledge of how to prevent mental disorders.

**Results:** There were 4938 adolescents and young adults who participated in

the study. Schizophrenia or psychosis was recognized by 42.17% and 22.21%, respectively. Most young people recognized the potential helpfulness of family doctors, psychologists, psychiatrists and mental health services. There was also widespread belief in the potential helpfulness of family and friends, and lifestyle changes. However, teachers were not generally seen as a source of help. Appropriate mental health first-aid strategies were commonly endorsed, but there was a reluctance to ask about suicidal feelings and many endorsed speaking to the person firmly. Lifestyle factors were also commonly believed to be preventative.

Conclusions: Although many Portuguese youth have beliefs that may assist early intervention, there was a substantial minority who did not. Given the central role of teachers in the lives of young people, it is notable that they were not seen as a potential source of help. Mental health first-aid skills of young people also need improvement.

Key words: adolescents, mental health literacy, psychosis, schizophrenia, youth.

#### INTRODUCTION

Mental health literacy involves knowledge and beliefs about mental disorders that aid their recognition, prevention or management. Such knowledge allows a person to take action to improve his or her own or others mental health. This concept involves a set of interrelated components that are the ability to recognize disorders to facilitate help seeking, knowledge of professional help and treatments

available, knowledge of effective self-help strategies, knowledge and skills to give first aid and support to others, and knowledge of how to prevent mental disorders. It is an important concept for the planning of community interventions that aim to promote early intervention and prevention of mental disorders, especially among youth. <sup>2,3</sup>

Adolescents and young people have a high prevalence of mental disorders, estimated between 15% and 20%. In the case of psychosis such as

schizophrenia, it is estimated to be 0.1% between 9 and 13 years, increasing to 1% by the end of adolescence. Adolescence is also the peak age of onset of mental disorders, with half of the people who will suffer from mental disorder evidencing the first signs before 18 years. For psychosis, about 1 in 3 have their first episode by the age of 19 years. Moreover, adolescence and youth are periods of transition and significant change in the lives of young people, and in this context the onset of a mental disorder may compromise their personal and professional future. Adolescence 1.3

It is also notable that young people have less contact with health services.<sup>8</sup> In the case of psychosis, it is important to minimize the duration of untreated illness because this is associated with better outcome.<sup>9</sup> Minimizing the duration of untreated psychosis requires that early recognition of the signs of disorder is essential to give first aid and support to others and to seek professional help.<sup>1,4,10</sup>

From the many studies in this area, we highlight several consistent findings. Firstly, public recognition of schizophrenia/psychosis is low, ranging between 25% and 33%. Secondly, public beliefs about what are appropriate treatments often diverge from professional views.<sup>10,11</sup> Finally, schizophrenia/psychosis is often stigmatized and the subject of myths and stereotypes.<sup>12,13</sup> Such stereotypes include dangerousness, unpredictability and incurability, and are associated with discrimination and social exclusion of people affected.<sup>14,15</sup> Naturally, these views can potentially delay early intervention.

In Portugal the data on the mental health literacy of young people are limited, specifically concerning schizophrenia.<sup>3</sup> Recently, the need for studies in this area has been pointed out because the data are particularly useful in the design of intervention programmes aimed at young people.<sup>16</sup> The aim of the current study was to investigate mental health literacy about schizophrenia in a sample of Portuguese youth. We sought specifically to evaluate the different components of the concept of mental health literacy: (i) recognition of schizophrenia; (ii) knowledge of professional help and treatments available; (iii) knowledge of effective self-help strategies; (iv) knowledge and skills to give first aid and support to others; and (v) knowledge of how to prevent schizophrenia.

# **METHODS**

#### Sample

This descriptive study is based on a questionnaire administered to a representative sample of 4938

adolescents and young adults, aged between 14 and 24 years with a mean age of 16.75 years and standard deviation of 1.62 years, who were residing in the central region of mainland Portugal and were attending schools between 7th and 12th degree and which are circumscribed in the Regional Direction of Education – Center (DREC), belonging to NUTS III – Center of Territorial Statistics Units of Portugal.

The sample size was calculated from the population of resident youth, according to the statistics of residents in the NUTS III – Center (Territorial Statistics Units of Portugal, in 2010 in the region covered by the study).<sup>17</sup>

Multistage clustered-stratified sampling was used. From the list of all 271 management units in the DREC, 50 schools were randomly selected using the Research Randomizer Software and IBM SPSS 20.0 (IBM, Chicago, IL, USA), and respecting the strata. From each selected school, three or four classes were randomly selected from the existing classes using the software mentioned earlier, and in each class all students were selected.

# **Procedures**

The survey questionnaire was approved by the General Directorate for Innovation and Curriculum Development of the Ministry of Education of the Portuguese Government and the Committee of Ethics of UICISA-E of ESEnfC. The questionnaire was accompanied by a consent form to be signed by parents/guardians where the participants were minors, or, in cases where the participants were aged 18 years or more, they signed their own consent.

# Measures

To assess mental health literacy about schizophrenia, the Questionnaire of Assessment of Mental Health Literacy – QuALiSMental was used after being translated, adapted and validated for the Portuguese population.<sup>18</sup>

This questionnaire is composed of different sections, each one consisting of several questions concerning the evaluation of a component of mental health literacy. The questionnaire begins with instructions for completion and sociodemographic questions (gender, age, residence, district and parents' qualifications). Then there is a vignette (Table 1) describing a case of schizophrenia in a 16-year-old boy named Miguel, which serves as the target for all the questions in the sections that follow. The case satisfies the diagnostic criteria for schizophrenia in Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision.<sup>19</sup>

Miguel is a 16-year-old boy who lives with his parents. He has attended school irregularly over the last year and recently dropped out. In the last 6 months, he pulled away his friends, and at home, he locks himself in his room, does not want to eat with his family and does not care for his hygiene (stopped showering). His parents hear him wandering in the room all night. Even though he is alone, they hear him shouting and arguing as if someone else was in his room. When they try to encourage him to do other things, he whispers that he will not leave home because he is being spied by the neighbour. They know that he does not consume drugs because he never sees anyone or exits the house.

To assess recognition of schizophrenia from the vignette presented, the following question was asked: 'In your opinion, what is going on with Miguel?'. The response format was multiple choice and the possible answers were 'I do not know', 'There is nothing wrong with him', 'He has a problem', 'Depression', 'Schizophrenia', 'Psychosis', 'Mental Illness', 'Bulimia', 'Stress', 'Nervous Breakdown', 'Substance Abuse (e.g. alcohol)', 'Age crisis', 'Psychological/Mental/Emotional Problems', 'Anorexia', 'Alcoholism', 'Cancer' and 'Other (specify which)'.

The answers were considered correct if the participant marked schizophrenia or psychosis, either alone or in combination with one of the following options: mental illness, psychological/mental/emotional problems or has a problem.

To assess the knowledge of professional help and treatments available, the respondents were asked: 'There are different people and health professionals who can help Miguel', respectively: general practitioner (GP), teacher, psychologist, nurse, social worker, psychiatrist, telephone helpline, close family member and close friend. For each item, participants could check one of the following response options: helpful, harmful and neither or do not know. Concerning treatments/products available, the following were listed: vitamins, tea, tranquillizers, antidepressants, antipsychotics and sleeping pills. Again, participants could choose from the options: helpful, harmful and neither or do not know.

To assess knowledge of interventions, the following statement was presented: 'There are different activities that could help Miguel. Point out for each of them your opinion' and then the following list: becoming more physically active, getting relaxation training, practicing meditation, getting acupuncture, getting up early each morning and getting out in the sunlight, receiving therapy with a specialized professional, looking up a website giving information about his problem, reading a self-help book on his problem, joining a support group of people with similar problems, going to a specialized mental health service, using alcohol to relax and smoking cigarettes to relax. For each option, the participants

had to mark one of the following choices: helpful, harmful and neither or don't know.

To assess knowledge and skills to give first aid and support to others, the following actions were presented: listen to his problems in an understanding way; talk to him firmly about getting his act together; suggest he seek professional help; make an appointment for him to see a GP with his knowledge; ask him whether he is feeling suicidal; suggest he have a few drinks to forget his troubles; rally friends to cheer him up; not acknowledge his problem, ignoring him until he gets over it; keep him busy to keep his mind off problems; and encourage him to become more physically active. The response format was helpful, harmful and neither or don't know.

Finally, to assess knowledge of how to prevent mental disorders, the following items were presented: keeping physically active, avoiding situations that might be stressful, keeping regular contact with friends, keeping regular contact with family, not using drugs, never drinking alcohol, making regular time for relaxing activities, and having a religious or spiritual belief. The response options were yes, no and I don't know.

# Statistical analysis

Data were analysed using the software IBM-SPSS 20.0. Because this is a descriptive exploratory study, we calculated the appropriated summary statistics and the absolute and percentage frequencies to meet the objectives of the study, using the procedure multiple response table.

#### **RESULTS**

# Recognition of schizophrenia

Table 2 shows the responses marked by participants to the question 'In your opinion, what is going on with Miguel?'. The most frequently mentioned responses were psychological/mental/emotional problems (57.91%), mental illness (57.15%), schizophrenia (42.17%), nervous breakdown (28.97%) and psychosis (22.21%). On the other hand, 6.84% stated

TABLE 2. Frequency and percentage of respondents endorsing each category to describe the problem shown in the vignette (n = 4938)

	n	%
Psychological/mental/emotional problems	2811	57.91
Mental illness	2774	57.15
Schizophrenia	2047	42.17
Nervous breakdown	1406	28.97
Has a problem	1368	28.18
Depression	1312	27.03
Psychosis	1078	22.21
Stress	720	14.83
I don't know	332	6.84
Substance abuse	249	5.13
Age crisis	191	3.93
Alcoholism	95	1.96
Bulimia	53	1.09
Nothing	29	0.60
Cancer	27	0.56
Anorexia	23	0.47

that they did not know what is going on with Miguel and 0.6% stated that nothing is going on.

Although 6.70% marked only schizophrenia, 0.90% marked only psychosis and 0.60% marked schizophrenia and psychosis; this indicates a correct recognition of the problem.

However, the 26.16% that were considered correct correspond to the sum of (psychosis and/or schizophrenia or has a problem or mental illness or psychological/mental/emotional problems).

# Knowledge about professional help and treatments available

Table 3 shows the findings on beliefs about the different people, including professionals, who could help Miguel. Young people generally considered psychologists (88.10%), psychiatrists (78.10%) and GPs (71.40%) as likely to be helpful. Furthermore, informal sources of help, such as friends (72.70%) and family members (68.80%), were frequently rated as likely to be helpful.

A considerable majority of the respondents either did not know or did not consider teachers (66.80%), social workers (68.30%) or a telephone helpline (62.30%) as likely to be helpful.

Concerning medications and other products that might help, the ones most frequently rated as likely to be helpful were tranquilizers (54.00%), followed by antipsychotics (47.10%), antidepressants (40.80%) and also teas (39.90%).

# Knowledge of effective interventions

When asked about the likely helpfulness of interventions, the participants gave the highest endorsement to receiving therapy with a specialized professional (81.30%), followed by going to a specialized mental health service (79.30%), getting relaxation training (73.10%) and becoming more physically active (67.00%). Practicing meditation was also considered potentially helpful (59.80%), as was joining a support group of people with similar problems (56.50%). On the other hand, many respondents were uncertain about getting acupuncture (67.20%), reading a self-help book on his problem (45.80%) and looking up a website giving information about his problem (44.40%).

# Knowledge and skills to give first aid and support to others

The behaviour that respondents most frequently considered useful was *listen to his problems in an understanding way* (90.80%), followed by *suggest he seek professional help* (79.70%) and *rally friends to cheer him up* (64.50%) or *make an appointment for him to see a GP with his knowledge* (63.90%). *Keep him busy to keep his mind of problems* and *encourage him to become more physically active* were seen as potentially helpful by around 60.00% of the participants, whereas 44.3% thought that is would be helpful to *talk to him firmly about getting his act together*. With the action *ask him whether he is feeling suicidal*, 47.30% of the sample thought this would be harmful.

# Knowledge about prevention of mental disorders

Table 4 shows the beliefs about prevention. Most participants considered that the activities presented would reduce the risk of suffering from a problem like Miguel's, except for the item on having a religious belief (36.60%).

#### **DISCUSSION**

The ability of young people to identify a set of signs and symptoms as a mental disorder may be a facilitator of professional help seeking and early intervention. In the case of psychotic disorders, such as schizophrenia, recognition of the disorder by others may also be important, particularly when the young person has reduced insight into his or her own condition. The results of this study suggest that many young people are able to correctly interpret the

TABLE 3. Percentage of respondents endorsing each item of mental health literacy about schizophrenia (n = 4938)

	Helpful	Harmful	Neither or don't know
Different people who could possibly help			
A family doctor	71.4	2.8	25.8
A teacher	19.4	13.8	66.8
A psychologist	88.1	2.3	9.6
A nurse	45.1	6.1	48.8
A social worker	16.9	14.8	68.3
A psychiatrist	78.1	4.4	17.5
A telephone helpline	16.2	21.5	62.3
A close family member	68.8	3.9	27.4
A close friend	72.7	2.8	24.5
Medicines			
Vitamins	35.8	6.8	57.4
Tea	39.9	5.0	55.1
Tranquillizers	54.0	12.4	33.6
Antidepressants	40.8	17.5	41.7
Antipsychotics	47.1	15.5	37.4
Sleeping pills	31.1	19.5	49.5
Interventions	<b>5</b>		.5.5
Becoming more physically active	67.0	2.0	31.0
Getting relaxation training	73.1	1.8	25.1
Practicing meditation	59.8	3.2	37.0
Getting acupuncture	25.9	7.0	67.2
Getting up early each morning and getting out in the sunlight	35.3	6.7	58.0
Receiving therapy from a specialized professional	81.3	2.6	16.1
Looking up a website giving information about his problem	43.3	12.3	44.4
Reading a self-help book on his problem	45.3	8.8	45.8
Joining a support group of people with similar problems	56.5	8.3	35.2
Going to a specialized mental health service	79.3	3.3	17.4
Using alcohol to relax	3.3	83.1	13.6
Smoking cigarettes to relax	4.4	82.0	13.7
Knowledge and skills to give first aid and support to others	4.4	62.0	15.7
Listen to his problems in an understanding way	90.8	1.0	8.2
	90.8 44.3	20.3	35.4
Talk to him firmly about getting his act together	44.3 79.7	6.0	35.4 14.3
Suggest he seek professional help			
Make an appointment for him to see a GP with his knowledge	63.9	7.5	28.5
Ask him whether he is feeling suicidal	22.7	47.3	30.0
Suggest she have a few drinks to forget her troubles	4.4	82.2	13.4
Rally friends to cheer him up	64.5	9.1	26.4
Not acknowledge his problem, ignore him until he gets over it	4.6	81.7	13.7
Keep him busy to keep his mind of problems	60.1	10.4	29.4
Encourage him to become more physically active	59.4	4.0	36.6

GP, general practitioner.

signs and symptoms described in a vignette, although there is room for improvement, in line with other studies. 10,13 However, some young people use more general terms to label the disorder, such as *mental illness* or *mental/psychological/emotional problems*. There were also frequent mentions of *depression* and *nervous breakdown*. If the use of these labels results in appropriate help seeking, then they may be useful. However, the use of *depression* suggests a less severe disorder and may be less likely to result in help from specialist mental health services. The use of the term *nervous breakdown* 

indicates a lack of knowledge, as this is an imprecise lay term that is used to characterize any type of changes in mental health. Some recent research has indicated that help seeking is more likely when young people use the correct psychiatric label, rather than more general labels, so there is a case for promoting more specific and accurate labelling of mental disorders by youth.<sup>20</sup>

It is reassuring that most Portuguese young people recognize that the problem is serious, as shown by the high endorsement of appropriate health professionals, such as psychologists, psychiatrists and GPs,

TABLE 4. Percentage of respondents endorsing each item of beliefs about prevention (n = 4938)

Beliefs about prevention	Yes	No	I don't know
Keeping physically active	61.2	14.3	24.5
Avoiding situations that might be stressful	79.2	7.9	12.9
Keeping regular contact with friends	85.0	4.8	10.2
Keeping regular contact with family	85.1	4.8	10.2
Not using drugs	78.5	9.9	11.5
Never drinking alcohol	73.4	12.5	14.1
Making regular time for relaxing activities	68.2	8.5	23.2
Having a religious or spiritual belief	19.3	36.6	44.1

compared with other professionals. In Portugal, a specialized medical evaluation is recommended for psychosis. For example, in the central region where the study was carried out, an expert team that includes psychiatrists and mental health nurses manages the first psychotic episode.<sup>21</sup>

Informal help, such as provided by close relatives and friends, is also valued by young people with percentage endorsements only slightly below those of the professionals. Such endorsement indicates that young people affected by psychosis may look to family and friends for help. Where family and friends are the first to identify changes, they might be conduits to seeking appropriate health care.

Although school is the place where young people spend most of their time, it is notable that teachers and nurses are not generally seen as potential sources of help, even though in Portugal it is proposed that schools should coordinate with other sources of intervention. These findings may reflect some concern on the part of young people that help seeking for mental health problems may affect their relationship with teachers, with possible implications for their academic success. The school in this case could be seen as an obstacle rather than a facilitator of recovery, along with the family.<sup>21</sup>

In most mental health literacy studies, psychopharmacological treatments are seen as negative by many young people. In the present study, although there was a considerable percentage stating that antipsychotics are likely to be helpful, it appears that many do not know about the medicines/products mentioned. The reasons are unknown but may relate to the public perception of the side effects of medications or may be related to the modest ability to recognize schizophrenia.

Complementary products such as tea and vitamins are considered useful by some young people, although less so than for other disorders such as depression and alcohol abuse.<sup>22</sup> In general, studies of mental health literacy show that both the general population and youth tend to have a positive view of such products, which might be explained by their accessibility, the fact that they do not require a prescription, do not develop dependence, and also because they are recommended by most adults. However, given that schizophrenia is a serious disorder for which such products are not effective, this tendency of the public could delay appropriate help seeking and treatment.

In terms of self-help strategies and interventions, young people consider that both alcohol and tobacco are harmful, which is a good indicator in terms of adoption of healthy lifestyles. It was also found that young people give emphasis to relaxation training and physical activity, which are not evidence-based treatments for schizophrenia. Such beliefs are consistent with the perceived utility attributed to other lifestyle changes, such as vitamins and teas.

Internet and self-help books are considered useful strategies by some young people, but others did not know or were uncertain. However, these findings do suggest that the Web may be a way to reach some young people, but requires the development of websites with good quality information targeted at youth, which are less available in Portuguese than in English.

On knowledge and skills to provide first aid to others, the results suggest that young people are predisposed to listen to peers and see this as useful. Similarly, professional help seeking, rallying friends to cheer the person up and making an appointment with a GP are considered useful by more than 60% of young people, which is positive. However, the finding that 60% thought it would be helpful to keep the person busy to keep his mind off problem is of concern, because this could lead a delay in help seeking. A survey of mental health professionals found that they do not see this strategy as useful.<sup>23</sup>

Of particular concern are the findings on questioning the person about suicidal thoughts. As in other studies involving, for example, depression, this strategy is considered harmful by about half of young people.<sup>24</sup> By contrast, this strategy is widely endorsed by mental health professionals as likely to be helpful, even for adolescents to ask their peers.<sup>24,25</sup> Contrary to lay beliefs, the expert consensus is that asking the question does not 'put the idea in their head' or trigger suicidal actions.<sup>26</sup> On the contrary, it may be a relief for the person to be

able to talk about their feelings, and allows the person to get support from others and professional help.

On beliefs about prevention of schizophrenia, except for the item on having a religious belief, all the activities were considered appropriate by above 60% of young people. These results are very similar to what has been reported in a survey of Australian youth.<sup>27</sup> However, this is one of the most complex areas of mental health literacy, as the causes of schizophrenia are complex and little is firmly known about how to reduce risk. A survey of Australian mental health professionals found that more than 70% endorsed the following as likely to be helpful for the prevention of psychosis: never drinking alcohol in excess, not using marijuana, keeping regular contact with friends and family, and making time for relaxing activities.<sup>23,24</sup>

The results from this study suggest the need to develop programmes with the aim of increasing mental health literacy about schizophrenia in all its components among Portuguese youth. Beside explaining and teaching the first signs of a mental disorder, these programmes should focus the importance of seeking help for friends and family when they show the signs of the onset of a mental disorder. These programmes should also approach the importance of teachers as a first-aid resource with whom young people can talk. The programmes should teach about all the community resources in which young people can seek help. Increasing literacy levels about schizophrenia may contribute to increases in appropriate help seeking, support from others in the young person's social network and efforts to reduce risk.

The limitations of this study are related to the use of a questionnaire to indicate behavioural intentions. We have no guarantee that young people will adopt the behaviours and the attitudes they marked in the questionnaire. Also, there are no studies that use the vignette methodology and that analyse only schizophrenia or psychosis, and so it is hard to compare the Portuguese results with results from other countries.

### **ACKNOWLEDGEMENTS**

This study is part of a programme denominated Mental Health Education and Sensitization: A School-based Intervention Program for Adolescents and Young (PTDC/CPE-CED/112546/2009), funded by the Portuguese government and the European Union.

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