## JOURNAL OF PSYCHIATRIC NURSING

DOI: 10.14744/phd.2025.84770
J Psychiatric Nurs 2025;16(3):272-280

### **Original Article**



# Portuguese nurses' mental health literacy about depression: A descriptive cross-sectional study

Luís Loureiro, 1 D Ana Pedreiro, 2 D Amorim Rosa, 1 D Mónica Carnide, 3 D Lisa Neves

#### **Abstract**

**Objectives:** Over the past decade, extensive evidence has pointed to a high prevalence of mental health issues among nurses, particularly stress, anxiety, depression, and burnout. At the same time, there has been a call to assess nurses' mental health literacy (MHL) and prioritize initiatives that promote MHL, which could improve their mental health. To evaluate the mental health literacy regarding depression of Portuguese nurses working in a hospital setting.

**Methods:** A descriptive cross-sectional study was conducted with nurses in Portugal. Mental health literacy was evaluated using QuALiSMental for depression. Summary statistics (e.g., percentage distributions) were calculated using SPSS 28. A point estimate and confidence interval for the proportion were used for inference. STROBE guidelines were used to report the study.

**Results:** A total of 483 nurses completed the Questionnaire for Assessment of Mental Health Literacy (QuALiSMental). The results show good MHL, with a particular emphasis on recognizing depression (95% CI: 78.77–85.62). However, these values are not extendable to all components of MHL, with notable gaps in knowledge regarding some mental health first-aid strategies.

**Conclusion:** The results observed in this study, although still distant from what is considered optimal, show—compared to other studies conducted in different contexts using similar methodologies—that nurses' MHL levels are generally positive. Adequate levels of MHL can contribute to using this knowledge to benefit one's mental health and that of others with whom they interact in their personal and professional daily lives. In the case of depression, adequate levels of MHL can help reduce the time between the onset of the first signs and symptoms and the provision of specialized help, potentially preventing the worsening of suffering and the progression to chronic situations.

**Keywords:** Depression; health literacy; mental health; nursing; survey

Over the last decade, and especially as a result of the COVID-19 pandemic and the post-pandemic period, the literature has shown a substantial increase in the prevalence of mental health problems and mental disorders among health professionals, especially nurses.<sup>[1-3]</sup>

Nursing professionals account for more than half of the healthcare workforce worldwide, and they are considered the professional group most affected by these problems.<sup>[4,5]</sup> Simultaneously, they are also the group most vulnerable to developing mental health problems and psychopathology.<sup>[6]</sup>

Moreover, while they are trained to look after the mental health of others, in many cases, they do not invest in or look after their own mental health. <sup>[7]</sup> This is due, among other things, to the fact that nursing work is carried out in increasingly complex and de-

**Address for correspondence:** Luís Loureiro, Department of Mental Health Nursing, Health Sciences Research Unit Nursing, Nursing School of Coimbra University, Coimbra, Portugal

**Phone:** +351 239802850 **E-mail:** luisloureiro@esenfc.pt **ORCID:** 0000-0002-2384-6266

**Submitted Date:** February 17, 2025 **Revised Date:** June 02, 2025 **Accepted Date:** July 28, 2025 **Available Online Date:** October 07, 2025 Journal of Psychiatric Nursing - Available online at www.phdergi.org



<sup>&</sup>lt;sup>1</sup>Department of Mental Health Nursing, Health Sciences Research Unit Nursing, Nursing School of Coimbra University, Coimbra, Portugal

<sup>&</sup>lt;sup>2</sup>School of Economics, Management and Political Science, University of Minho, Minho, Portugal

<sup>&</sup>lt;sup>3</sup>Psychiatry Service of Coimbra Local Health Unit (LHU), Coimbra, Portugal

<sup>&</sup>lt;sup>4</sup>Psychiatry Service of Leiria Local Health Unit (LHU), Leiria, Portugal

manding environments, and nurses are subject to high physical and psychological pressure, which means an increased risk and susceptibility to developing mental health problems. High levels of stress at work, long and exhausting shifts, working hours that hinder adequate sleep hygiene, repeated exposure to patients' suffering, and lack of support from teams are some of the causes that can contribute to the increase in these problems.<sup>[8]</sup>

In this scenario, depression, along with anxiety, stress, and burnout, takes center stage. <sup>[9]</sup> In the specific case of depression, studies carried out prior to the pandemic period already indicated worrying figures, with the rate of depression being twice as high in nurses compared to the general population and other professionals. <sup>[10,11]</sup> More recently, during the pandemic and post-pandemic periods, incidences have been higher than 20%. <sup>[12]</sup>

The severe consequences of depression at an individual, family, and professional level point, among other things, to a reduction in quality of life and well-being, since the suffering and incapacity generated jeopardize personal and family life, as well as affect the ability to provide safe, quality healthcare, influencing relationships with patients and families, and even the functioning of healthcare teams.<sup>[13]</sup>

In this context, mental health literacy (MHL)—the beliefs and knowledge that help recognize, manage, or prevent mental health problems in everyday life<sup>[14,15]</sup>—is considered a critical determinant impacting nurses' mental health at different levels. It is understood in the field of preventive mental health, where it is a prerequisite for recognizing mental health problems, favoring early intervention, and consequently having a positive effect on prognosis and treatment success, or in the field of mental health promotion, since it is also considered a condition for the adoption of healthy behaviors and lifestyles conducive to the quality of life and well-being of individuals. In the latter case, a revision of the MHL concept is pointed out. However, the nuances introduced do not change the concept's initial proposal, including its measurement.

In MHL, nurses play a dual role: both as the target of interventions aimed at improving their mental health and, through this, as carers who can facilitate and enhance the mental health of those with whom they interact daily. [18] However, although MHL is considered a key concept for nursing, there is little evidence of studies evaluating nurses' MHL, specifically regarding depression. [19,20]

Consistent with this information and with the way of looking at mental health problems and the interventions to be developed, this study aims to characterize mental health literacy about depression based on a sample of nurses working in hospitals in the central region of mainland Portugal. This study enables the concurrent assessment of various MHL components, thereby facilitating the identification of specific intervention areas and domains.

#### What is presently known on this subject?

 Mental health literacy (MHL) is a key concept for mental health promotion and is related to mental health help-seeking behaviors. MHL among health professionals, particularly nurses, tends to be slightly higher than that of the general population but still falls short of optimal values.

#### What does this article add to the existing knowledge?

Although there is a satisfactory level of literacy regarding depression, it
is not extendable to all components. The deficits found in some areas
may constitute obstacles to seeking mental health help and may also
reduce the ability to provide mental health first aid to those with whom
nurses interact daily.

#### What are the implications for practice?

 Programs aimed at improving mental health literacy for nurses should be designed based on evidence highlighting the knowledge and beliefs they use to manage their mental health in daily life. Different stakeholders can use these results to develop mental health literacy programs. They represent valuable evidence that can be used to improve nurses' mental health.

To evaluate the mental health literacy regarding depression of Portuguese nurses working in a hospital setting.

#### **Materials and Method**

#### **Research Question**

What is the extent of nurses' mental health literacy regarding depression, specifically in relation to:

- a) Ability to recognize signs and symptoms of depression;
- b) Knowledge about appropriate help-seeking pathways and evidence-based treatment options;
- c) Understanding self-help strategies for managing depressive symptoms;
- d) Knowledge to give mental health first aid to others; and
- e) Knowledge of preventive strategies?

#### **Study Design**

We conducted a descriptive cross-sectional study using a quantitative approach and an online survey. In this study, we followed the STROBE recommendations.<sup>[21]</sup>

#### **Participants**

The sample size, with a confidence level of 95% and a margin of error of 4.25%, was n=481 nurses. Given that the refusal rate for this type of study is close to 20%, the questionnaire was sent to a total of 587 nurses, with 483 valid responses.

The sample size was determined based on the following formula:

$$n = \frac{\frac{z^{2}*(pq)}{e^{2}}}{1 + (\frac{z^{2}*(pq)}{e^{2}N})} = \frac{\frac{1.96^{2}*(0.5*0.5)}{0.0425^{2}}}{1 + (\frac{1.96^{2}*(0.5*0.5)}{0.0425^{2}(5000)})} \approx 481 \text{ nurses}$$

Where:

z=1.96

p=0.5

q=1-p

e=0.0425

N=5000

#### **Data Collection Tools**

### Questionnaire for Assessment of Mental Health Literacy (QuaLiSMental)

The data collection instrument,<sup>[22]</sup> based on the Survey of Mental Health Literacy – Interview Version,<sup>[23]</sup> consists of a set of items aimed at assessing the five components of mental health literacy, using different response formats.

The first part of the questionnaire includes instructions for completion and questions on nurses' sociodemographic information and professional categories.

This is followed by a vignette describing a case of depression (according to the criteria for Major Depressive Episode in DSM-V<sup>[24]</sup>) in a 33-year-old woman named Sophia, which serves as the target for all the questions in the subsequent sections.

#### Case vignette

Sophia is 33, married, and has a 6-year-old son. She has felt unwell for the last two months without any reason to justify it. She wakes up in the morning with a sense of heaviness that persists throughout the day. She does not enjoy the things she usually would, like playing with her son. In fact, nothing gives her pleasure, and even when good things happen, they do not seem to make her happy. Her days go on, but it has not been easy. Even the smallest tasks have been challenging to accomplish. She says it is hard for her to concentrate on anything. She feels drained of energy and strength. Even though she feels tired, she cannot fall asleep at night. She feels worthless and lacks the courage to face challenges. Her family has noticed that over the last two

Table 1. Distribution of respondents endorsing each category to describe the problem shown in the vignette (n=483)

n	%
435	90.13
168	34.87
103	21.27
91	18.86
65	13.38
	435 168 103 91

months she has changed and no longer seems the same, to the point where she has withdrawn.

#### **Components of QuaLiSMental**

Recognizing depression: Several labels were used for nurses to choose from in a multiple-choice format, including depression, stress, anxiety, and nervous breakdown (items are presented in Table 1).

- Eight items constitute knowledge of professional help, and six items cover knowledge of treatments available. For each item, participants could select one of the following response options: helpful, harmful, neither, or don't know. Content items are presented in Table 2.
- Knowledge of interventions is constituted by 12 items (content items in Table 3). For each item, participants could select one of the following response options: helpful, harmful, neither, or don't know.
- Knowledge and skills to give first aid and support to others are constituted by ten actions/items (Table 3). The

	Helpful		Harmful		Neither		Don't know	
	n	%	n	%	n	%	n	%
Different people who could possibly help								
A general practitioner	362	75.00	7	1.46	63	13.04	50	10.42
A psychologist	469	97.08	3	0.63	4	0.83	7	1.46
A nurse	403	83.33	0	0.00	43	8.96	37	7.71
A social worker	61	12.71	16	3.33	282	58.33	124	25.62
A psychiatrist	424	87.71	4	0.83	18	3.75	37	7.71
A telephonic helpline	235	48.54	30	6.25	108	22.29	111	22.92
A close family member	338	70.00	10	2.08	57	11.88	78	16.04
A close friend	422	87.29	4	0.83	22	4.58	35	7.29
Medicines								
Vitamins	166	34.38	6	1.25	220	45.63	90	18.75
Tea	137	28.33	6	1.25	243	50.42	97	20.00
Tranquillizers	130	26.88	79	16.46	116	23.96	158	32.71
Antidepressants	326	67.50	16	3.33	26	5.42	115	23.75
Antipsychotics	19	3.96	164	33.96	101	20.83	199	41.25
Sleeping pills	246	50.83	30	6.25	67	13.96	140	28.96

	Helpful		Harmful		Neither		Don't know	
	n	%	n	%	n	%	n	%
Interventions								
Becoming more physically active	448	92.71	1	0.21	18	3.75	16	3.33
Getting relaxation training	440	91.04	1	0.21	20	4.17	22	4.58
Practicing meditation	390	80.63	5	1.04	30	6.25	58	12.08
Getting acupuncture	197	40.83	3	0.63	95	19.79	187	38.75
Getting up early	248	51.25	5	1.04	124	25.62	107	22.08
Receiving therapy	471	97.50	2	0.42	1	0.21	9	1.88
Looking up a web site	100	20.63	188	38.96	109	22.50	87	17.92
Reading a self-help	209	43.33	28	5.83	133	27.50	113	23.33
Joining a support group	280	57.92	7	1.46	64	13.33	132	27.29
Going to a specialized	465	96.25	2	0.42	3	0.63	13	2.71
Using alcohol to relax	4	0.83	452	93.54	19	3.96	8	1.67
Smoking	1	0.21	444	91.88	21	4.38	17	3.54
Knowledge and skills to give first aid and support to others								
Listen to her problems .	477	98.75	2	0.42	3	0.63	1	0.21
Talk to her firmly about	135	27.92	160	33.13	132	27.29	56	11.67
Suggest she seek	470	97.29	1	0.21	5	1.04	7	1.46
Make an appointment for	314	65.00	20	4.17	79	16.25	70	14.58
Ask her whether she is	212	43.96	95	19.58	69	14.37	107	22.08
Suggest she have a few drinks	7	1.46	441	91.25	24	5.00	11	2.29
Rally friends to cheer	217	45.00	56	11.67	103	21.25	107	22.08
Not acknowledging	3	0.63	468	96.88	9	1.88	3	0.63
Keep her busy to	184	38.13	93	19.17	139	28.75	67	13.96
Encourage her to	401	82.92	3	0.63	43	8.96	36	7.50

Beliefs about prevention	Yes			No	Don't know		
	n	%	n	%	n	%	
Keeping physically active	408	84.58	25	5.21	49	10.21	
Avoiding situations that	370	76.67	68	14.17	44	9.17	
Keeping regular contact	415	85.83	26	5.42	42	8.75	
Keeping regular contact	404	83.54	24	5.00	55	11.46	
Not using drugs	374	77.50	63	13.13	45	9.38	
Never drinking alcohol	335	69.38	80	16.46	68	14.17	
Making regular time for	430	89.17	10	2.08	42	8.75	
Having a religious or spiritual	172	35.63	78	16.04	233	48.33	

response format was: helpful, harmful, neither, or don't know.

 Knowledge of how to prevent mental disorders is constituted by eight items (Table 4). The response options were yes or no.

The reliability and validity studies conducted in the Portuguese context indicate that QuaLiSMental demonstrates good psychometric properties.<sup>[22]</sup>

#### **Data Collection**

This study was conducted in hospitals in the Centre Region of mainland Portugal, with data collected between September and October 2022. Data were collected using the online platform Encuesta Fácil (https://www.encuestafacil.com). Participants were randomly selected from the list of emails, which were extracted using the random.org software (https://www.random.org/).

#### **Ethics Approval**

Authorization to proceed with data collection was requested from the nursing directors of the hospitals. The opinion was positive, and conditions were created for data collection to be carried out via email. This research was conducted according to the Declaration of Helsinki for medical research involving human participants, and the study and survey questionnaire were previously approved by the Ethics Committee of UICISA-E of the Nursing School of Coimbra (No. P867/04-2022). The data collection instrument was accompanied by an informed consent form, ensuring anonymity and guaranteeing confidentiality.

#### **Data Analysis**

Data were analyzed using IBM-SPSS 28.0 software. As this is a descriptive exploratory study, we calculated appropriate summary statistics, such as percentage frequencies, to meet the study's objectives. A 95% confidence interval for proportion was calculated for correct recognition of depression.

#### Results

The study sample comprised 483 nurses, 18.6% male and 81.4% female. The mean age was 42.43 years (SD=10.55 years), and the median was 42.30 years. In terms of marital status, the majority were married (65.5%), followed by single (24.6%), divorced (8.9%), and widowed (0.8%). Regarding the professional category, the majority (60.9%) were general nurses, followed by specialists (35.4%) and managers (3.7%).

#### **Recognition of Depression**

Table 1 shows the responses given by nurses to the question, "In your opinion, what is going on with Sophia?" Depression was the most common answer (90.13%), followed by psychological/mental/emotional problems (34.87%), stress (21.27%), nervous breakdown (18.86%), and mental illness (13.38%). The corrected categories were grouped to allow calculation of the percentage recognizing depression. It was found that 82.19% of the nurses (95% CI: 78.77–85.62) recognized Sophia's situation as depression.

When asked if they would seek help in a situation similar to the one described in the vignette, 372 (77.02%) said they would without reservation, 11 (2.28%) said they would not, and 100 (20.70%) were reluctant to ask for help, saying they did not know.

### Knowledge of Professional Help and Available Treatments

Concerning the different people (and professionals) who could help Sophia, Table 2 shows that the health professionals most often considered helpful were psychologists (97.08%), followed by psychiatrists (87.71%), nurses (83.33%), and gen-

eral practitioners (75.00%). Friends (87.29%) or family members (70.00%), as informal supportive people, were frequently rated as helpful. The telephone helpline was only perceived as valuable by around half of the nurses (48.54%). Notably, 58.33% of the participants did not know whether the social worker was helpful or harmful, and 22.29% thought the same about the telephone helpline. Additionally, 22.92% even stated they had no opinion about the helpline.

Regarding products, vitamins were considered helpful by 34.38% of nurses, but 64.38% considered them neither beneficial nor harmful (45.63%) or did not know (18.75%). Although 28.33% considered teas beneficial, 50.42% thought they were neither helpful nor harmful, and 20.0% said they had no opinion.

For tranquilizers, 26.88% considered them beneficial, 23.96% did not know if they were useful or harmful, and 32.71% had no opinion. Regarding medication, antidepressants were perceived as valuable by 67.5%, but 23.75% had no opinion. Antipsychotics were considered harmful by 33.96% of participants, 20.83% considered them neither valuable nor harmful, and 41.25% had no opinion. Sleeping pills were considered helpful by approximately half of the sample (50.83%), with a substantial proportion saying they had no opinion (28.96%).

### Knowledge of Effective Self-help Strategies and Skills to Give First Aid and Support to Others

In terms of strategies (Table 3), "receiving therapy with a specialized professional" was chosen as the most helpful strategy (97.50%), followed by "looking for a specialized mental health service" (96.25%), "doing more physical activity" (92.71%), and "practicing meditation" (80.63%). "Joining a support group of people with similar problems" and "getting up early and sunbathing in the morning" were perceived as valuable by 57.92% and 51.26%, respectively.

Among the strategies considered harmful, "using alcohol to relax" (93.54%) and "smoking to relax" (91.88%) were perceived as harmful by the vast majority of the sample (>90%). "Reading a self-help book about the problem" and "getting acupuncture" were perceived as valuable by around two-fifths of the participants, namely 43.33% and 40.83%. It should be noted that 38.96% considered that "looking for information on the website about the problem" could be harmful.

In terms of knowledge and skills for providing first aid (Table 3), the strategies chosen by the nurses as being the most useful were "listening to her problems in an understanding way" (98.75%), "suggesting that she seek professional help" (97.29%), "encouraging her to maintain more physical activity" (82.91%), and "making an appointment with her family doctor with her knowledge" (65.00%). Other strategies included "rallying friends to cheer her up" (45.00%) and "asking her whether she is feeling suicidal" (43.96%).

Two strategies perceived as harmful by almost all the nurses were "not acknowledging her problem, ignoring her until she gets better" (96.88%) and "suggesting she have a few drinks to forget her troubles" (91.25%). Regarding the strategy "ask the person if they have suicidal thoughts," the results also indicated that 19.58% of nurses thought it was harmful, 14.37% said it was neither helpful nor harmful, and 22.08% stated they had no opinion.

#### **Discussion**

This study was the first to be carried out in the Portuguese context to precisely evaluate MHL on depression in nurses working in hospital settings. It is also the first to use QuaLiSMental with vignettes, as initially proposed by Jorm and colleagues in Australia.<sup>[24]</sup>

It should be emphasized that there is still little evidence on this subject for nurses, and it has been produced mainly on the Asian continent.<sup>[19]</sup> This becomes problematic when more recent studies use other measuring instruments that do not allow comparative analyses, either because they do not assess the same dimensions/components or because they use classification systems that do not allow comparison of results.<sup>[17]</sup>

#### **Recognition of Depression**

Regarding the recognition of depression, it was observed that Portuguese nurses have a good level of recognition, as 82.19% correctly identified the case described in the vignette as a situation of depression. These figures are higher than those obtained in other studies in different cultural and economic contexts. [25,26] However, these figures, including that of the study carried out in the Portuguese context, represent an increase compared with the results found in 2000<sup>[27]</sup> and 2010. [28]

One fact that may help explain this increase in recognition of depression by Portuguese nurses is that data collection was carried out during the pandemic period. This period corresponded to the proliferation of mental health education and awareness initiatives in the mass media, including initiatives by the Portuguese Nursing Association (https://www.ordemenfermeiros.pt/) through its Specialty College of Mental Health and Psychiatric Nursing, which presented mental health promotion and mental illness prevention strategies for nurses during the pandemic.

It is worth noting that the nurses selected a few labels from the list available in the questionnaire, most of which were appropriate, but the use of the "nervous breakdown" label requires correction (18.96%). As this is a non-specific label used indiscriminately to indicate any alteration in mental health, it could mean that approximately one-fifth of the nurses did not correctly identify the signs and symptoms described in the vignette, which could have implications for help-seeking.

An adequate MHL level in terms of recognition increases the possibility of early identification of the problem and consequent help-seeking, with referral to mental health professionals. [13,22,29] In this sense, the intention to seek mental health help for depression is satisfactory, as 77.02% said they would ask for help, while 20.70% were undecided. These figures differ from those presented in other contexts, [25-27] mainly because they reported a higher percentage of undecided responses.

These results may stem either from the stigma associated with mental disorders, which is a substantial barrier to seeking specialized mental health help and may contribute to a considerable number of nurses feeling indecisive about asking for help,<sup>[30–32]</sup> or from the failure to recognize the signs and symptoms associated with depression, not believing that treating the symptoms may require specialized mental health intervention.<sup>[13,14]</sup>

### **Knowledge of Professional Help and Available Treatments**

Regarding knowledge of professional help and treatments available, a significant proportion (>90.0%) of nurses perceived psychologists, psychiatrists, mental health nurses, and family doctors as helpful. Informal help from friends and family was also rated highly.

Regarding products, nurses viewed vitamins and teas—where there is no evidence of effectiveness—with skepticism, not knowing whether they were helpful or harmful. Nevertheless, around 30.0% considered these products helpful. For prescription medication, a substantial margin considered antidepressants helpful, yet many nurses were unaware of their usefulness, which can be problematic, namely not using the prescribed medication or discontinuing treatment.<sup>[13,14]</sup> These results are consistent with those of other studies using similar methodologies.<sup>[25–28]</sup>

For health professionals such as nurses, these results deserve attention because nursing training involves learning about the principles and suitability of psychotropic drugs. It is therefore questionable how much weight scientific knowledge has compared to socially and culturally rooted beliefs.

### Knowledge of Effective Self-help Strategies and Skills to Give First Aid and Support to Others

Regarding knowledge about effective interventions, the vast majority of nurses considered physical activity, relaxation training, meditation practice, therapy with a specialized professional, and seeking a specialized mental health service to be helpful, with the perceived usefulness being >90.0% in all cases except meditation practice (80.63%). Other studies<sup>[25–27]</sup> indicate much lower percentages in these items, but these differences may reflect cultural differences in the way self-help associated with mental illness is perceived.

The results suggest that nurses, on the one hand, value selfhelp strategies such as relaxation training, physical exercise, and the practice of meditation, which are helpful for depression,<sup>[13,33]</sup> but on the other hand, they see the need for specialized professional help.

In terms of knowledge about providing first aid in mental health, it is favorable to note that for depression, nurses consider listening to be a fundamental strategy and suggest seeking professional help. They also consider ignoring the problem and the person as harmful, as well as suggesting alcohol consumption.

The item "ask her if she is feeling suicidal" is noteworthy. The majority of nurses do not consider this strategy. In fact, those who considered it "harmful," "do not know if it is helpful or harmful," or "don't know" accounted for more than 56.04% of the responses. This raises questions, mainly because it could mean that nurses believe questioning the person might aggravate the problem or trigger behavior. However, training and existing guidelines present this strategy as appropriate, outlined in good nursing practice. This result justifies why the Order of Nurses developed a guideline for good practice in promoting mental health literacy. [34]

The lack of knowledge can also be seen in inadequate first aid strategies such as "talk to her firmly about getting her act together" and "keep her busy to keep her mind off problems." Even so, the results obtained in the study suggest a higher level of MHL in this component compared to those observed in other studies. [26]

#### **Beliefs About Prevention**

Regarding the last component of MHL (knowledge about how to prevent mental disorders), nurses believe in preventive mental health, i.e., it is possible to prevent mental illnesses such as depression, which is evidenced in many studies, both in the general population<sup>[31]</sup> and among nurses and other health professionals.<sup>[25–28]</sup>

All the strategies were assessed as capable of preventing health problems, with the exception of alcohol consumption. A total of 30.63% of nurses stated that avoiding alcohol does not prevent depression or that they did not know whether not drinking helps prevent it. This finding also appears in Portuguese studies, including samples of adolescents and young people. [35,36] Alcohol consumption is socially accepted and culturally justified, and the tendency is for it not to be seen as harmful to mental health.

Religious beliefs, which have traditionally been seen as protective factors for mental health,<sup>[37]</sup> are here perceived as having no such effect. A total of 48.33% of nurses reported that they did not know whether religion could help prevent mental health problems.

These results, combined with the mental health panorama of nurses in the post-pandemic period,<sup>[38]</sup> imply the inclusion of a national strategy for the promotion of MHL that is comprehensive and inclusive.<sup>[39]</sup> It is therefore necessary to move on to action to make a practical contribution to changing the mental health of individuals and communities.<sup>[40]</sup>

#### Limitations

The first limitation relates to the representativeness of the sample. Considering the total number of nurses working in Portugal, the sample size limits the extent to which the findings can be generalized to all hospital-based Portuguese nurses. Therefore, any generalization of the findings should be approached with caution and is primarily applicable to nurses who share similar demographic and professional characteristics with those in the study sample.

Another limitation is the lack of differentiation regarding the nurses' specific areas of work. Some participants may have worked in psychiatry, but the data did not allow a detailed analysis of MHL across different nursing contexts.

The second limitation relates to the use of self-reported data, which may introduce response bias, as nurses might have provided socially desirable answers or may not have accurately recalled or assessed their own experiences and perceptions.

A further limitation concerns the online data collection method. This approach may have introduced selection bias, as individuals with access to and comfort using digital platforms were more likely to participate, potentially excluding those with limited internet access or less familiarity with online surveys.

Even so, this study provides a first attempt to evaluate the MHL of Portuguese nurses, allowing the identification of key areas for action in promoting MHL.

#### Conclusion

This study presents the first evaluation of mental health literacy (MHL) regarding depression among nurses working in hospital settings in Portugal, using the QuaLiSMental tool based on clinical vignettes. The findings provide valuable insights into nurses' ability to recognize depressive symptoms, their knowledge of treatment options, and their beliefs about prevention and first-aid strategies in mental health care.

Overall, Portuguese nurses demonstrated a strong ability to recognize depression, with most participants correctly identifying the condition described in the vignette. However, the occasional use of imprecise terms, such as "nervous breakdown," suggests that some misconceptions remain, indicating a disconnect between formal training and culturally influenced interpretations of mental illness. Nurses also showed a good understanding of appropriate sources of professional and in-

formal help. Nevertheless, uncertainty about the effectiveness of antidepressants, together with support for non-evidence-based treatments such as vitamins and herbal supplements, reveals gaps in psychopharmacological literacy that could benefit from targeted educational initiatives.

In terms of mental health first-aid responses, most nurses emphasized the importance of active listening and discouraging harmful behaviors. However, a significant percentage did not support directly asking about suicidal ideation, which is concerning given the recognized value of this practice in assessing and managing suicide risk. This finding highlights the need for ongoing professional development in mental health intervention skills.

Finally, the majority of nurses believed that depression can be prevented. Strengthening MHL among this professional group is essential to improve early detection, reduce stigma, and support the delivery of more effective mental health care.

**Ethics Committee Approval:** The study was approved by the UICISA-E of the Nursing School of Coimbr Ethics Committee (no: P867/04-2022, date: 20/07/2022).

**Informed Consent:** Informed consent was obtained from all participants.

**Conflict of Interest Statement:** The authors have no conflicts of interest to declare.

Funding: There wasn't any funding required for this study.

**Use of AI for Writing Assistance:** I declare that no artificial intelligence tools were employed in any aspect of this manuscript's creation, from conception to finalization.

**Authorship Contributions:** Concept – L.L., M.C., L.N., A.P., A.R.; Design – L.L., M.C., L.N., A.P., A.R.; Supervision – L.L., M.C., L.N., A.P., A.R.; Data collection and/or processing – M.C., L.N.; Data analysis and/or interpretation – L.L., A.R.; Literature search – L.L., M.C., L.N.; Writing – A.T., L.L.; Critical review – L.L., M.C., L.N., A.P., A.R.

Peer-review: Externally peer-reviewed.

#### References

- Fernandez R, Sikhosana N, Green H, Halcomb EJ, Middleton R, Alananzeh I, et al. Anxiety and depression among healthcare workers during the COVID-19 pandemic: A systematic umbrella review of the global evidence. BMJ Open 2021;11:e054528.
- 2. Hill JE, Harris C, Danielle L C, Boland P, Doherty AJ, Benedetto V, et al. The prevalence of mental health conditions in health-care workers during and after a pandemic: Systematic review and meta-analysis. J Adv Nurs 2022;78:1551–73.
- 3. World Health Organization. State of the world's nursing 2020: Investing in education, jobs and leadership. Available at: https://www.who.int/publications/i/item/9789240003279. Accessed Aug 25, 2025.

- Schimmels J, Groh C, Neft M, Wocial L, Young C, Davidson JE. American Academy of Nursing Expert Panel Consensus Statement on leveraging equity in policy to improve recognition and treatment of mental health, substance use disorders, and nurse suicide. Nurs Outlook 2023;71:101970.
- Nagel C, Nilsson K. Nurses' work-related mental health in 2017 and 2020-A comparative follow-up study before and during the COVID-19 pandemic. Int J Environ Res Public Health 2022;19:15569.
- Ren C, Zhou D, Fan Y, Li B, Zhang W, Shen Y, et al. Prevalence and influencing factors of anxiety and depression symptoms among surgical nurses during COVID-19 pandemic: A largescale cross-sectional study. Nurs Open 2022;9:752–64.
- 7. Maharaj S, Lees T, Lal S. Prevalence and risk factors of depression, anxiety, and stress in a cohort of Australian nurses. Int J Environ Res Public Health 2018;16:61.
- 8. Salvagioni DAJ, Melanda FN, Mesas AE, González AD, Gabani FL, Andrade SM. Physical, psychological and occupational consequences of job burnout: A systematic review of prospective studies. PLoS One 2017;12:e0185781.
- World Health Organization. Depression and other common mental disorders. Available at: https://www.who.int/publications/i/item/depression-global-health-estimates. Accessed Aug 25, 2025.
- 10. Ohler MC, Kerr MS, Forbes DA. Depression in nurses. Can J Nurs Res 2010;42:66–82.
- 11. Brandford AA, Reed DB. Depression in registered nurses: A state of the science. Workplace Health Saf 2016;64:488–511.
- 12. Ślusarska B, Nowicki GJ, Niedorys-Karczmarczyk B, Chrzan-Rodak A. Prevalence of depression and anxiety in nurses during the first eleven months of the COVID-19 pandemic: A systematic review and meta-analysis. Int J Environ Res Public Health 2022:19:1154.
- 13. Jorm AF. Mental health literacy: Empowering the community to take action for better mental health. Am Psychol 2012;67:231–43.
- 14. Jorm AF. The concept of mental health literacy. In: Okan O, Bauer U, Levin-Zamir D, Pinheiro P, Sørensen K, editors. International handbook of health literacy: Research, practice and policy across the life-span. Bristol (UK): Policy Press; 2019. p. 53–66.
- 15. World Health Organization. Shanghai declaration on promoting health in the 2030 Agenda for Sustainable Development. Health Promot Int 2017;32:7–8.
- 16. World Health Organization. World mental health report: Transforming mental health for all. Available at: https://www.who.int/publications/i/item/9789240049338. Accessed Aug 25, 2025.
- 17. Loureiro LMJ. About this thing we call mental health literacy. Rev Enferm Referência 2024;6:e24.19.34548.
- 18. Blake H, Chambers D. Supporting nurse health champions: Developing a 'new generation' of health improvement facilitators. Health Educ J 2012;71:205–10.
- 19. Oztas B, Aydoğan A. Assessment of mental health literacy levels of health professionals. J Psychiatric Nurs 2021;12:198–204

- 20. Wang A, Jia S, Shi Z, Sun X, Zhu Y, Shen M, et al. Mental health literacy of Chinese nurses from public general and psychiatric hospitals: A cross-sectional study. Front Psychiatry 2023:14:1148380.
- 21. Von Elm E, Altman DG, Egger M, Pocock SJ, Gøtzsche PC, Vandenbroucke JP. Strengthening the reporting of observational studies in epidemiology (STROBE) statement: Guidelines for reporting observational studies. BMJ. 2007;335:806–8.
- 22. De Jesus Loureiro LM. Questionnaire for assessment of mental health literacy-QuALiSMental: Study of psychometric properties. Rev Enferm Referência 2015;4:79.
- 23. Jorm AF, Korten AE, Jacomb PA, Christensen H, Rodgers B, Pollitt P. "Mental health literacy": A survey of the public's ability to recognise mental disorders and their beliefs about the effectiveness of treatment. Med J Aust 1997;166:182–6.
- 24. American Psychiatric Association. Diagnostic and statistical manual of mental disorders: DSM-5. Arlington (VA): American Psychiatric Association; 2014.
- 25. Wu Q, Luo X, Chen S, Qi C, Long J, Xiong Y, et al. Mental health literacy survey of non-mental health professionals in six general hospitals in Hunan Province of China. PLoS One 2017;12:e0180327.
- 26. Hao Y, Wu Q, Luo X, Chen S, Qi C, Long J, et al. Mental health literacy of non-mental health nurses: A mental health survey in four general hospitals in Hunan Province, China. Front Psychiatry 2020;11:507969.
- 27. Yeo SG, Parker G, Mahendran R, Jorm AF, Yap HL, Lee C, et al. Mental health literacy survey of psychiatrically and generally trained nurses employed in a Singapore psychiatric hospital. Int J Nurs Pract 2001;7:414–21.
- 28. Liu W, Gerdtz MF, Liu TQ. A survey of psychiatrists' and registered nurses' levels of mental health literacy in a Chinese general hospital. Int Nurs Rev 2011;58:361–9.
- De Diego-Adeliño J, Portella MJ, Puigdemont D, Pérez-Egea R, Alvarez E, Pérez V. A short duration of untreated illness (DUI) improves response outcomes in first-depressive episodes. J Affect Disord 2010;120:221–5.
- 30. Loureiro L, Abrantes R. Estigma e procura de ajuda em saúde mental. Enfermagem, editor. In: Unidade de Investigação em

- Ciências da Saúde. Literacia em saúde mental capacitar as pessoas e as comunidades para agir. Vol. 8. Coimbra: Unidade de Investigação em Ciências da Saúde: Enfermagem; 2014. p. 41–61
- 31. Schomerus G, Angermeyer MC, Matschinger H, Riedel-Heller SG. Public attitudes towards prevention of depression. J Affect Disord 2008;106:257–63.
- 32. Dagani J, Buizza C, Ferrari C, Ghilardi A. The role of psychological distress, stigma and coping strategies on help-seeking intentions in a sample of Italian college students. BMC Psychol 2023;11:177.
- 33. Jorm AF, Griffiths KM. Population promotion of informal self-help strategies for early intervention against depression and anxiety. Psychol Med 2006;36:3–6.
- 34. Ordem dos Enfermeiros, ed. Guia orientador de boas práticas de promoção da literacia em saúde mental. Lisboa: Ordem dos Enfermeiros; 2023. [Portuguese]
- 35. Loureiro LM. Literacia em saúde mental acerca da depressão e abuso de álcool de adolescentes e jovens portugueses. Rev Port Investig Comport Soc 2016;2:2–11. [Article in Portuguese]
- 36. Loureiro L, Freitas P. Literacia em saúde mental dos jovens estudantes de enfermagem na integração ao ensino superior. Rev Port Enferm Saúde Mental 2020;24:34–42. [Article in Portuguese]
- 37. Lucchetti G, Koenig HG, Lucchetti ALG. Spirituality, religiousness, and mental health: A review of the current scientific evidence. World J Clin Cases 2021;9:7620–31.
- 38. García-Vivar C, Rodríguez-Matesanz I, San Martín-Rodríguez L, Soto-Ruiz N, Ferraz-Torres M, Escalada-Hernández P. Analysis of mental health effects among nurses working during the COVID-19 pandemic: A systematic review. J Psychiatr Ment Health Nurs 2023;30:326–40.
- 39. Conselho Nacional de Saúde. Sem mais tempo a perder—saúde mental em Portugal: Um desafio para a próxima década. Lisboa: Conselho Nacional de Saúde; 2019. [Article in Portuguese]
- 40. Jorm A. We need to move from 'mental health literacy' to 'mental health action'. Ment Health Prev 2020;18:200179.