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NURSING STUDENTS' ALTERNATIVE BELIEFS REGARDING CARE FOR PATIENTS SUFFERING FROM DEPRESSION

ABSTRACT

Depression is an illness that constitutes a major challenge for Public Health worldwide. Therefore, there is a clear need to receive training to care for this type of patient. This study sets out to identify non-scientific beliefs among nursing students regarding the topic of depression after studying the module of Psychopathology. This study enrolled 102 Third Year undergraduate nursing students. The students resolved a case on an individual basis in written form which was analysed qualitatively. In this study, we have found that, despite having undergone information-transfer educational training in relation to the physiopathology of depression, nursing students persist in holding unscientific beliefs about this condition. Assuming that the opinions of nurses about depression can influence the care of their future patients, it is important to take into account these alternative conceptions as learning difficulties in order to design an effective teaching instruction.

Key words: Depression, Nursing Education, Students´ beliefs, Preconceived ideas.

INTRODUCTION

Depression is a frequent mental disorder worldwide; the World Health Organisation (WHO, 2016) calculates that it affects some 350 million people. Although there are effective treatments for depression, more than half of those affected worldwide (and over 90% in many countries) receive none of those treatments. In countries with widely varying per capita income figures, persons with depression are often misdiagnosed (WHO, 2016). It is a fact that people with mental disorders have disproportionately high disability and mortality rates. For example, people with major depression and schizophrenia, due to the physical health issues that often go unobserved, have a probability 40% to 60% higher of premature death than the general population (WHO, 2013, p.7). Additionally, the course and recovery rate show the complex nature of this condition (Richards, 2011). The epidemiological evidence mentioned makes it clear that knowing how to treat patients with depression is a skill that every nursing professional will need during their career regardless of the context in which they may be working. However, caring for these patients entails serious difficulties.

Previous research has found that among the obstacles to give effective treatment is, firstly, the stigmatization that psychiatric patients have to endure (Hsiao et al., 2015; Makowski et al., 2016; Stuhlmiller, 2006; Thornicroft et al., 2016; WHO, 2016; Wynaden et al., 2014), and secondly, closely related to the first factor, the high number of false beliefs regarding mental pathologies in general (Vadlamudi et al., 2007; Stone et al., 2016; ; Thongpriwa et al., 2015), and depression in particular (Furnham et al., 2016; Munizza et al., 2013, Shellman et al., 2007). A further obstacle on top of these is the difficulty of changing these beliefs among the general population (Makowski et al., 2016; Thornicroft et al., 2016).

In relation to teaching student nurses how to manage patients with depression, we lack data on the conceptions that Year 3 undergraduate nursing students develop. A specific teaching strategy could be designed to assist nursing students to change their non-scientific beliefs about depression. In this way it will be possible to prevent future generations of nurses from joining the workforce with convictions of this kind intact and they will be able to not only provide effective care to patients with depression but also counter such misconceptions in society at large through their role as educators.

METHODS

Objective

Therefore the aim of the project is to be able to produce an effective teaching-learning proposal that can directly tackle problems identified among students in relation to knowledge about depression. In this article, we will be referring to alternative non-scientific conceptions manifested by students after having completed the Psychopathology module having received traditional expository instruction.

Therefore, the research question in this study is: What conceptions about depression do Third Year nursing students have after having received instruction on Psychopathology with an information-transfer educational model?

Design

To address this research question, we gave 102 Third Year students a problem to solve. All nursing students (102) received 13 hours of lectures and 2 hours of traditional expository instruction on psychopathology. The lectures were given by experienced teachers from the Department of Nursing. Differential aspects of the manifestations of psychopathology according to the different developmental stages were taught.

Taking into account that the students had taken the Psychopathology module, a problem was designed with a sequence of questions relating to depression. The problem and the activities that guided the students' work are presented below:

The "Isabel's anxiety" problem

"45-year old Isabel came to the outpatient clinic asking for treatment because in the last 4 months she had noticed that she was feeling anxious, not sleeping well and wanted to give up her job because she was feeling overwhelmed even though previously she had enjoyed her work. Her husband commented that she was well regarded and very popular at work "*she is very hard-working, very responsible, she isn't satisfied until everything is just right. At home she's the same; everything has to be done ...she is very orderly and she gets cross if the children or I leave things lying around, especially now...she yells at us, cries for no reason"*. The patient acknowledged that she felt sad more often and had almost no enthusiasm for activity of any kind. She felt worse in the morning when she woke up but improved somewhat in the afternoon. She has lost about 7 kg in this time and doesn't sleep well. *"I wake up several times during the night and I find it hard to sleep, I can't stop thinking of all the things I have to do, I feel guilty for not being able to take care of the kids...I believe my husband is*

going to leave me, I'm irritable...I have thought that if I died things would be better. I don't feel like doing anything, I think about quitting my job. I can't stop thinking that things are bound to get worse; it's a vast feeling of sadness, it's different...it feels like a huge void".

A1. Based on the symptoms presented, what condition does the patient have? (define the sub-type and rule out the rest, providing a rationale for your answer). Identify all of the characteristics that appear in the text before arriving at a conclusion. Do you believe that the patient may be suffering from other symptoms as well as the ones she has mentioned? If so, what are they? Why do you think she may be suffering from them but hasn't mentioned them?

A2. The patient has commented indirectly on several possibilities with regard to the aetiology of her problem. Do you think it is important to know what it is? If so, why? What do you think could be the cause of this problem? Could there be some other cause? Provide a rationale for your answer.

A3. As a general nurse, what nursing care would you give the patient and her family? Do not lose sight of the fundamentals of an interview based on a supportive relationship and support your answer with argumentation.

Once the problem had been prepared, it was validated in terms of contents and aims. Regarding the validity of the scenarios and their relevance to the aims of the study, two faculty members from the Department of Nursing and two psychiatric–mental health clinical nursing specialists with over 5 years' experience in the field, confirmed that the content and questions of the problems were appropriate for any student who had taken the Psychopathology module. Additionally, a pilot study was conducted with a small student sample. This confirmed that the students generally had no difficulty understanding the meaning of the problems and the questions.

The 102 students submitted their solutions of the problem "Isabel's anxiety" individually and in writing, for which they had to apply their knowledge of psychopathology to do so.

In order to characterize the responses, the comments recognized as "an explanation" were coded, based on categories with easily recognizable features, such as scientific statements and argumentation from a scientific point of view (Cortazzi, 1993). This involved one member of the research team reading the students´ answers and deriving a

draft set of description categories for each question. The same researcher then re-read the students´ answers and tentatively allocated each answer to one of the draft categories. The other researchers carried out the latter task independently. Once the answers had been classified, answer allocations were compared and a very significant degree of agreement was reached, with a Cohen kappa reliability coefficient average of 0.86. Any disagreements about category description or answer allocations were resolved by referring to the answers as the only evidence of the students´ understanding. The focus was on the students´ understanding, taking the students' answers as a whole, rather than on the occurrence of particular statements corresponding to a specific category of explanation. An interactive process was used to produce the final-category descriptions that reflected a similar understanding among answers allocated to each category and the differences between the categories (Ericsson and Simon, 1993).

The students´ written answers to the problem were analyzed qualitatively. Common tendencies have been identified in the students´ answers, and representative examples of their answers have been included here. This study has built on Jiménez-Alexandre et al.´s (2005) interpretation of Toulmins´ Arguments Pattern (1985) using a framework to analyze argumentation. The examples included in the Results section are representative of the data and illustrate how students persist in alternative conceptions of depression despite having been taught about the subject.

With respect to ethical considerations, this study was not disadvantageous in any way for the participants. Identities were kept strictly confidential and all questionnaires were analysed anonymously. This research was supported by The Education Advisory Service of the University of the Basque Country (UPV/EHU), who provided funding for developing the research (REF: N. 6836).

RESULTS AND DISCUSSION

In this section we look at the results obtained from the problem-solving activity "Isabel's anxiety" with regard to depression. The results encompass the convictions held by undergraduate nursing students having completed the Psychopathology module with an information-transfer educational model. The results obtained are also discussed.

The students come to the lecture theatre with preconceived ideas regarding the various topics covered in the Psychopathology subject module, some of which are based on nothing more than popular myth or folk wisdom. The literature on cognitive psychology refers to ideas of this type as "alternative ideas or folklore" (Driver, 1994). Depression

is no exception in this regard. Solving the problem of a woman who is depressed has enabled us to identify four categories of alternative conceptions among this group of students, which are summarised in Table 1.

Table 1. Students 'alternative beliefs detected in the problem.

Explanatory categories	**Example answer**
1. The cause of the depression is exogenous.	1. "The problem could be due to any stressful situation that may have arisen in her environment: at work, at home or socially, and this has brought her to a depressed state (Student 58).
2. Makes no distinction between anxiety and depression.	2. "As she is having problems sleeping because she is obsessing about all the things she has to do, I would recommend relaxation techniques so that she can calm down and think about something else." (Student 4).
3. Fails to detect the high risk of suicide.	3. "Inform the patient, establish priorities, share the work, play sport, relaxation techniques…" (Student 44).
4. Incomplete explanations that contain isolated elements of theory.	4. "As a nurse, I would advise her to use relaxation techniques. This will help her to face up to her problem and acknowledge it. It would also help her with her low self-esteem." (Student 85).

The first alternative conception is derived from the analysis of the second question (A2) in which the students were asked to explore the aetiology of the patient's problem. The majority of the students (72%) situate the aetiology of this condition in external events (stressful phenomena, loneliness, deaths, etc.), without acknowledging the possible endogenous source of many cases of depression (WHO, 2016). Just 8% of the students believed that the depression could be due to endogenous causes (a genetic predisposition, a biochemical alteration of the brain, a sensory deficiency). Several examples of this conviction were identified in comments such as:

> *"The aetiology can be traced to some event that occurred in the last 4 months (a death, a traumatic event) that the patient has not been able to overcome (Student 28).*

> *"In my opinion, the depression could be caused by stress. The patient says she feels overwhelmed so this could have taken away her motivation. Moreover, she seems to feel that her family do not support her or understand her (Student 101).*

This belief that depression is only caused by external causes is borne out by the responses to question 3 (A3) in which the students' recommendations about the treatment to offer focus on factors that are external to the patients:

"The patient's attention needs to be stimulated, recommending that she engage in social activities" (Student 75).

"Work could be putting her under stress, so we can recommend that she take sick leave" (Student 40).

Advice of this kind would appear to be consistent with the conviction that depression is linked to an external factor and therefore the treatment should aim to mitigate the external cause.

When the students were asked to reflect on the treatment that should be given to the patient suffering from the problem (A3), a second alternative conviction became apparent: they do not discriminate between anxiety and depression. Although they are similar in some respects, these are two different disorders which a nurse must be able to tell apart. However, in response to the third question the students tended to suggest forms of care that are more relevant to anxiety than to depression. Indeed, in more than half of cases (51%), as in the examples shown below, the students used the term "anxiety" or "calm down" situating anxiety as the heart of the problem:

"I would recommend relaxation techniques before going to bed to reduce her anxiety so that she doesn't obsess about thousands of things" (Student 1).

"I would teach her relaxation techniques to help her calm down and not become angered" (Student 11).

As a result of this conflation of anxiety and depression, among the kinds of care students suggested, one stands out: relaxation activities. Although there has not been a single study that shows that relaxation techniques can eradicate a major depression, 64% of the students recommended relaxation as a suitable treatment, whereas only 18% recommended treatment with anti-depressants. Here are some student responses in this vein:

"She needs to calm down, to do this she should use relaxation techniques" (Student 76).

"Relaxation techniques (whatever suits her: reading, listening to music…) so that she can become calmer and use the opportunity to think about other things" (Student 4).

The third alternative conviction can be gleaned from an analysis of question (A3) in which we find that the students do not appreciate the seriousness of the patient's condition. When they are asked to provide a rationale for the advice they should give the patient, we find that just 5% of the sample mention the importance of preventing suicide in the case of Isabel, who openly stated "I have thought that if I were to die things would be better". Furthermore, only one person makes any reference to the importance of treating the depression as a matter of urgency as this case demands, not just because of the risk of suicide, but because of the high rate of relapse. These attitudes are in contrast, however, with the responses given by many students to the first question (A1), in which 70% of the sample identified suicidal thoughts as a symptom.

Finally, another group of students was identified who offered incomplete explanations that contain isolated elements of the theory. That is to say, although they are not erroneous comments, they contain incomplete reasoning. Thus, for example we see the example of student 85 who intuits that it may be an endogenous problem and suggests treatments consistent with this diagnosis, but fails to explain why this is or how to proceed:

> *"As a nurse, I would instruct her to try relaxation techniques. This would help her to realise that she has a problem and face up to it. It would also help her with her self-esteem" (Student 85).*

As commented in the previous paragraphs, after completing the Psychopathology module receiving instruction with an information-transfer educational model, the students have three main alternative conceptions: the root cause of the depression is attributed to external events; they tend not to distinguish between depression and anxiety; and thirdly, they do not seem to be aware of the danger of the patient self-harming nor of the condition's chronification.

Research conducted by Park et al. (2015) and Youssef (2014) with nursing staff in Korean hospitals, indicate that the sample studied held the opinion that depression does not have a biological aetiology. In a study by Lauber et al. (2003) conducted with a sample of the general population, over half of the sample attributed depression to family difficulties or issues with partners. Another study adds that those who endorse the environmental factor as a more important cause tended to be younger (Furnham et al. 2016). According to the data of this study, the nursing students displayed the same tendency. In this regard, the participants in our study did not appear to acknowledge the

genetic and biochemical nature of many cases of depression (WHO, 2016). The fact that they thought that the aetiology of depression is solely exogenous may be due to a confusion between the root causes and the stressful events that trigger it. However, to confirm this hypothesis more studies are needed to explore this issue in greater depth.

Differentiating between anxiety and depression is not always a simple matter, because their symptoms and even their causes are so similar as noted in the International Classification of Mental and Behavioral Disorders, ICD-10 (WHO, 1993) and Diagnostic and Statistical Manual of Mental Disorders, DSM-V (American Psychiatric Association, 2014). In this regard, a tendency was observed among the students to conflate the two pathologies, omitting the treatment of symptoms typical of depression such as: loss of self-confidence and feelings of inferiority, thoughts of blame and guilt and of being useless, a bleak view of future prospects, loss of appetite, and losing the ability to enjoy things (WHO, 1993). In addition, research conducted with general public have shown the same difficulty to distinguish both conditions (Munizza et al., 2013) This failure to discriminate between the two disorders may be influenced by the comorbidity of the two pathologies (Richards, 2011), and not just the similarities between some of their symptoms. In numerous publications the two disorders are discussed together (Al-Modallal, 2012; Cummings et al., 2014). Hence, when designing a teaching-learning strategy, it is crucial to ensure that the students can distinguish between the two disorders.

Turning to the prevalence of recommending relaxation techniques as a treatment for mild and severe depression, there is very limited evidence on which to base conclusions about the relative effectiveness of relaxation therapy. The WHO has made it very clear that relaxation can be used in the treatment of adults who have suffered from a depressive episode, but such an intervention must be used to complement anti-depressants or brief structured psychotherapy (WHO, 2016). The nursing students in our study, however, tended to believe that relaxation is an effective technique for tackling depression. Perhaps the fact that anxiety and depression, as we have said, despite being two different disorders (APA, 2014; WHO, 1993), resemble each other in several respects, can cause confusion for students when they have to choose among a range of possible interventions. Several authors have already shown that members of the general population (Shin et al., 2014) and also mental health professionals (Lakeman, 2013) use not interventions that are consensually accepted, based on faith rather than on science. It

would appear that student nurses, despite having received training on this issue, persist with this tendency. The first alternative conviction may also influence this popular received wisdom, as the fact that the majority stated that the root cause of depression is to be found in external events could influence their choice of this treatment. This hypothesis is supported by recent studies (Drori et al., 2014; Furham et al. 2016; Khalsa et al., 2011) where they show that the beliefs held by nurses, general public and patients influence the strategies they adopt.

Another key issue is suicide. It is surprising that even though the patient in the problem explicitly stated "I have thought that it would be better if I were dead" only one student responded that the case demanded immediate treatment in the third activity. The social stigma associated with suicide (Billings, 2004; Chapple et al., 2015; Joiner, 2005; WHO, 2016) would also appear to run deep in the nursing students; belief system, supporting the widespread myth that "those who talk about suicide never carry it out", when the scientific evidence shows that the majority of suicides give some kind of sign before committing suicide and that one of the mental disorders most commonly associated with suicidal behaviour is depression (Richards, 2011; WHO, 2014).

It is disconcerting, however, that in response to the first question, when the students were asked to identify Isabel's symptoms, the vast majority (70%) detected the phrase "I have thought that if I were dead things would be better" as a symptom of depression. It seems, therefore, that the students are able to identify the objective facts of the problem, but their critical capacity fails them and they are unable to resolve the problem correctly when it comes to drawing up a care plan (Activity 3). In this case, this means excluding high priority care. This lack of critical thinking is consistent with numerous studies in the field of nurse education (Kong et al., 2014; Morrall & Goodman, 2013; Popil, 2011).

The fact that just one person stressed the importance of treating the patient as soon as possible may also reflect an alternative belief consisting in the short-term prognosis of this illness. However, studies have shown that relapse rates are high for depression and that an early identification and intervention improve the prognosis (Richards, 2011; WHO, 2016).

Previous studies with sample populations with different characteristics from this study have revealed a tendency among the general population to hold mistaken received beliefs such as "people with depression shouldn't talk about their condition" (Munizza

et al, 2013) or that the aetiology of depression lies on "Thinking about things too much" (Furnham et al., 2016). To date, attitudes of student nurses towards patients with sexually transmitted infections (Bell and Bray, 2014; Pickles et al., 2016) and alcohol abuse (Vadlamudi et al, 2007) have been addressed. However, no-one has investigated to what extent such misconceptions have taken root among nursing students regarding depression. This knowledge is crucial to be able to draw up an effective teaching-learning proposal that can tackle such conceptions head-on. This would prevent future generations of nurses joining the profession with beliefs of this kind. It could not only ensure that patients suffering from depression would receive effective treatment, but would also counter such false ideas in society at large, thanks to nurses' role as educators.

Limitations and recommendations

There are some limitations to the present study that should be addressed. This study was conducted among students from only one nursing department in only one region of the country, so caution should be taken in generalizing these findings to other groups or regions. Further research will be needed to more fully examine erroneous convictions in nursing students and larger representative samples will be needed.

Pursing the line of argumentation taken by Morrall and Goodman (2013) and by Burgermeister et al. (2012), namely, that nurses need to develop progressively critical thinking and to change attitudes through the process of nurse education, and with the aim of correcting the difficulties referred to in this section, the authors of this study propose, in future studies, to design and implement a teaching sequence that will improve the learning about and management of depression by future nursing professionals.

CONCLUSIONS

This study has contributed evidence that Third Year undergraduate nursing students, having received instruction with an information-transfer educational model as part of the Psychopathology module display the following alternative convictions:

- The students do not consider the underlying biological causes of many cases of depression and instead focus the external causes that may trigger it.
- The students have difficulty distinguishing between anxiety and depression.

- Among the students there does not seem to be any awareness of the danger of the patient self-harming, nor of the risk of a relapse.

If we assume that the attitudes and opinions of nurses about depression and how to manage it can influence nurses' clinical practice, we can trace an optimistic horizon because training initiatives can detect alternative misconceptions and erroneous convictions.

Identifying these alternative depression beliefs is a sine qua non to be able to design an effective teaching-learning strategy for the provision of care to the depressed. This step is undoubtedly indispensable in order to develop the ability of the healthcare professionals involved to take decisions on a scientific basis and to drive improvement in these patients' health and quality of life. Furthermore, implementing strategies that aim to eradicate such alternative beliefs will improve the information that nurses offer their patients and family members and indeed the information the profession gives to the general public as a whole, thereby helping to reduce the stigma associated with this health problem.

Although the study outcomes are positive, the teaching design feasibility and outcomes may vary in different contexts. In our experience, continuous modifications by instructors based on evaluations of prior implementations will be necessary. Working examples of teaching sequences that bridge the gap between general clinical practice and classroom practice constitute an important goal for continuing research in nursing education.

REFERENCES

Al-Modallal, H., 2012. Psychological partner violence and women's vulnerability to depression, stress, and anxiety. International Journal of Mental Health Nursing 21 (6), 560–566. doi: 10.1111/j.1447-0349.2012.00826.x.

American Psychiatric Association, 2014. Diagnostic and statistical manual of mental disorders, DSM-5, Panamericana, Madrid.

Bell, A., Bray, L., 2014. The knowledge and attitudes of student nurses towards patients with sexually transmitted infections: Exploring changes to the curriculum. Nurse Education in Practice 14 (5), 512–517. doi: 10.1016/j.nepr.2014.05.002.

Billings, C. V., 2004. Psychiatric Inpatient Suicide: Focus on Intervention. Journal of the American Psychiatric Nurses Association 10, (4), 190-192. doi: 10.1177/1078390304267429.

Burgermeister, D., Kwasky, A., Groh, C., 2012. Promoting mental health concepts in a doctor of nursing practice curriculum: An integrated and global approach. Nurse Education Today 12, 148-152. doi: 10.1016/j.nepr.2011.10.012.

Chapple, A., Ziebland, S., Hawton, K., 2015. Taboo and the different death? Perceptions of those bereaved by suicide or other traumatic death. Sociology of Health & Illness 37(4), 610-25. doi: 10.1111/1467-9566.12224.

Cortazzi, M., 1993. Narrative analysis, Palmer Press, London.

Cummings, C. M., Caporino, N. E., Kendall, P. C., 2014. Comorbidity of anxiety and depression in children and adolescents: 20 years after. Psychological Bulletin 140(3), 816-45. doi: 10.1037/a0034733.

Driver, R., Asoko, H., Leach, J., Mortimer, E., Scott, P., 1994. Constructing Scientific Knowledge In the Classroom. Educational Researcher 23(7), 5-12. doi: 10.3102/0013189X023007005.

Drori, T., Guetta, H., Ben Natan, M., Polakevich, Y., 2014. Effect of mental health nurses' beliefs and knowledge of medication on their use of strategies to improve medication adherence. International Journal of Mental Health Nursing 23(4), 374–380. doi: 10.1111/inm.12062.

Ericsson, K. A., Simon, H. A., 1993. Protocol Analysis Verbal Reports: As Data Revised Edition, The MIT Press Cambridge, Massachusetts.

Furnham, A., Ritchie, W., Lay, A., 2016. Beliefs about the causes and cures of depression. International Journal of Social Psychiatry 1–10. doi: 10.1177/0020764016644279.

Hsiao, C. Y., Lu, H. L., Tsai, Y. F., 2015. Factors influencing mental health nurses' attitudes towards people with mental illness. International Journal of Mental Health Nursing 24(3), 272–280. doi: 10.1111/inm.12129.

Jiménez-Aleixandre, M. P., Pereiro-Munaz, C., 2005. Argument construction and change while working on a real enviroment problema, in Research and the quality of science education, edited by Boersma, K., Goedhart, M., Jong, O. and H. Eijklhof, Dordrecht, The Netherlands, Springer, pp. 38-53.

Joiner, T., 2005. Why people die by suicide, Harvard University Press, Cambridge.

Khalsa, S. R., McCarthy, K. S., Sharpless, B. A., Barrett, M. S., Barber, J. P., 2011. Beliefs About the Causes of Depression and Treatment Preferences. Journal of Clinical Psychology 67(6), 539-549. doi: 10.1002/jclp.20785.

Kong, L. N., Qin, B., Zhou, Y. Q., Mou, S. Y., Gao, H. M., 2014. The effectiveness of problem-based learning on development of nursing students' critical thinking: a systematic review and meta-analysis. International Journal of Nursing Studies 51 (3), 458-69. doi: 10.1016/j.ijnurstu.2013.06.009.

Lakeman, R., 2013. Talking science and wishing for miracles: Understanding cultures of mental health practice. International Journal of Mental Health Nursing 22(2), 106–115. doi: 10.1111/j.1447-0349.2012.00847.x.

Lauber, C., Falcato, L., Nordt, C., Rössler, W., 2003. Lay beliefs about causes of depression. Acta Psychiatrica Scandinavica 108(418), 96–99. doi: 10.1034/j.1600-0447.108.s418.19.x.

Makowski, A. C., Mnich, E. E., Ludwig J., et al., 2016. Changes in beliefs and attitudes toward people with depression and schizophrenia - results of a public campaign in Germany. Psychiatry Research 237, 271–278. doi: http://dx.doi.org/10.1016/j.psychres.2016.01.029.

Morrall P., Goodman, B., 2013. Critical thinking, nurse education and universities: some thoughts on current issues and implications for nursing practice. Nurse Education Today 33 (9), 935-7. doi: 10.1016/j.nedt.2012.11.011.

Munizza, C., Argentero, P., Coppo, A. et al., 2013. Public Beliefs and Attitudes towards Depression in Italy: A National Survey. PLoS One 8 (5) e63806. doi: 10.1371/journal.pone.0063806.

Park, S. C., Lee, H. Y., Lee, D. W., et al., 2015. Knowledge and Attitude of 851 Nursing Personnel toward Depression in General Hospitals of Korea. Journal of Korean Medical Science 30 (7), 953-9. doi: 10.3346/jkms.2015.30.7.953.

Pickles, D., King, L., Lacey, S., 2016. Culturally construed beliefs and perceptions of nursing students and the stigma impacting on people living with AIDS: A qualitative study Nurse Education Today 49, 39–44. doi: 10.1016/j.nedt.2016.11.008.

Popil, I., 2011. Promotion of critical thinking by using case studies as teaching method. Nurse Education Today 31, 204-207. doi: 10.1016/j.nedt.2010.06.002.

Richards, D., 2011. Prevalence and clinical course of depression: A review. Clinical Psychology Review 31(7), 1117-1125. doi: 10.1016/j.cpr.2011.07.004.

Richards, D., 2011. Prevalence and clinical course of depression: A review. Clinical Psychology Review 31,1117–1125. doi: 10.1016/j.cpr.2011.07.004.

Shellman, J., Mokel, M., Wright, B., 2007. “Keeping the Bully Out”: Understanding Older African Americans' Beliefs and Attitudes Toward Depression. Journal of the American Psychiatric Nurses Association 13, (4), 230-236. doi: 10.1177/1078390307305926.

Shin, E. H., Ha, J., Lim, S. W. et al., 2014. The use and perceived helpfulness of self-help interventions for depressive symptoms and sub-threshold depression: comparisons among the general population, patients with depression, and psychiatrists. International Journal of Methods in Psychiatric Research 23(1):99-108. doi: 10.1002/mpr.1430.

Stone, T. E., Jung Kang, S., Cha, C., Turale, S., Murakami, K., Shimizu, A., 2016. Health beliefs and their sources in Korean and Japanese nurses: A Q-methodology pilot study. Nurse Education Today 36, 214–220. doi: 10.1016/j.nedt.2015.10.017.

Stuhlmiller, C.M., 2006. Promoting Student Interest in Mental Health Nursing. Journal of the American Psychiatric Nurses Association 11 (6), 355-358. Doi: 10.1177/1078390305284274.

Thongpriwan, V., Leuck, S. E., Powell, R. L., Young, S., Schuler, S. G., Hughes, R. G., 2015. Undergraduate nursing students’ attitudes toward mental health nursing. Nurse Education Today 35(8), 948–953. doi: 10.1016/j.nedt.2015.03.011.

Thornicroft, G., Mehta, N., Clement, S. et al., 2016. Evidence for effective interventions to reduce mental-health-related stigma and discrimination. Lancet 387(10023), 123-32. doi: 10.1016/S0140-6736(15)00298-6.

Toulmin, S., 1985. The uses of argument, Cambridge University Press, Cambridge.

Vadlamudi, R.S., Adams, S., Hogan, B., Wu, T., Wahid, Z., 2007. Nurses' attitudes, beliefs and confidence levels regarding care for those who abuse alcohol: Impact of educational intervention. Nurse Education in Practice 8 (4), 290–298. doi: 10.1016/j.nepr.2007.10.003.

World Health Organisation, 1993. International Classification of Diseases (ICD-10). Update 2016: World Health Organisation official page. http://www.who.int/classifications/icd/en/ Accessed: 15 april 2016.

World Health Organisation, 2013. Mental health action plan 2013-2020. WHO Press: Geneva. http://www.who.int/mental_health/publications/action_plan/en/ Accessed: 15 april 2016.

World Health Organisation, 2014. Preventing suicide. A global imperative. WHO press: Geneva. http://www.who.int/mental_health/suicide-prevention/world_report_2014/en/ Accessed: 15 april 2016.

World Health Organisation, 2016. Depression. Fact sheet N°369 April 2016. http://www.who.int/mediacentre/factsheets/fs369/en/ (Accessed: 15 May 2016)

Wynaden, D., McAllister, M., Tohotoa, J., et al., 2014. The Silence of Mental Health Issues Within University Environments: A Quantitative Study. Archives of Psychiatric Nursing 28 (5), 339-344. doi: 10.1016/j.apnu.2014.08.003.

Youssef, F., Bachew, R., Bodie, D., Leach, R., Morris, K., Glenderia S., 2014. Knowledge and attitudes towards mental illness among college students: Insights into the wider English-speaking Caribbean population. International Journal of Social Psychiatry 60 (1), 47–54. doi: 10.1177/0020764012461236.