

Literacy and Attitudes of Healthcare Professionals Regarding Suicide: A Review

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ABSTRACT

Background: Suicide is currently listed among the leading causes of death, accounts for approximately 1.4% of all mortalities, and remains one of the preventable causes of death and disability. Annually, more than 800,000 people die due to suicide along with a even more higher number of suicide attempts. Stigmatizing attitudes toward suicide still prevail, contributing to a chain of negative consequences for survivors and their families.

Objectives: This review explores the extent of suicide literacy and the factors influencing the suicide literacy among the HCPs, as well as attitudes of HCPs regarding suicidal behavior. In addition, the review also evaluates whether there is an association between HCP's suicide literacy and their attitudes toward suicidal behavior.

Methodology: Literature search was done with keywords "literacy of suicide" and "attitudes toward suicide in healthcare professionals" from the year 1981 to 2020, and the search was conducted on the following platforms—PubMed Central, Google Scholar, and ProQuest. The research was conducted from 2018 to 2019. After applying inclusion and exclusion criteria, out of 80 articles, only 40 articles were selected, out of which majority were original articles, some were meta-analysis, and few were review articles.

Results: Studies have shown different attitudes and suicide literacy in HCPs, some showed positive attitude, and some showed negative attitude regarding suicide. Some studies showed high suicide literacy, and few showed low suicide literacy in HCPs.

Limitations: Family history and personal history of suicide were not studied. Career variables of HCPs were not studied. Interdepartmental differences were not studied.

Conclusion: This review indicates that suicide is a global problem and shows that both suicide literacy and attitude of HCPs toward suicide affect the approach, care, and treatment of patients with suicide-related behavior. Also, within HCPs, there is variation in terms of suicide literacy and attitude toward suicide, which in turn is influenced by several sociodemographic variables and clinical exposure variables. It is also evident from the reviews that suicide is a preventable condition. The reviews clearly indicate a definite scarcity of data on literacy of suicide in our region, highlighting the need for further research in this area.

Keywords: Attitude regarding suicide, Healthcare professionals, Suicide literacy.

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INTRODUCTION

Suicide is currently listed as the 15th most common cause of death, accounts for approximately 1.4% of all mortalities, and remains one of the top leading causes of disability. Annually, more than 800,000 people die due to suicide along with a even more higher number of suicide attempts.^{1,2} Though an attitude toward suicide has been studied, literacy about suicide and the interplay between literacy and attitudes have not been adequately studied among the medical professionals. We did this review to explore the prevailing awareness on suicide literacy and attitudes toward suicide behaviors in healthcare professionals constituting doctors and nurses and to understand the awareness about suicide-related risk factors and the attitudes displayed by healthcare professionals toward people with suicide-related behaviors.

Global Burden of Suicide

As per global estimates, suicide continues to be a leading cause of death and disease burden, and over the next several decades, the number of suicide deaths overall is predicted to increase substantially.³ Seventy-eight percent of all suicides worldwide occur in lower-middle-income countries.⁴ There has been a rise in the global rate of suicide by 60% in the past 45 years, and there has been some decrease in western countries in the same period of time. Significant variations in reporting of suicide have been observed

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across studies from various nations, despite which the increased figures reflect a true burden of suicide rather than the differences due to variation in research methods.

There are many other factors that lead to these variations. Some socioeconomic variables have a strong impact on rates of suicide, which is governed by risk factors and psychiatric disorders. Several groups of risk factors have been defined, which include (a) demographic risk factors such as age, gender, ethnicity, and related parameters; (b) social status risk factors like low income, income inequality, low social support, unemployment, and low education; (c) factors influencing any change in social environment like urbanization and change in income; (d) factors

influencing neighboring environment like inadequate housing, overcrowding, and violence; (e) environmental factors such as climate change, natural disaster, warfare, conflict, and immigration; (f) particular groups needed to be considered specially because they are at more higher risk for suicide, which includes the police, firefighters, and other first-line responders, individuals in the military, imprisoned persons or those in high-security hospitals, refugees and asylum seekers and individuals belonging to minorities. Psychiatric illnesses such as mood disorders, impulse-control disorders, personality disorders, alcohol/substance use disorders, and psychotic disorders are more likely to suggest the maximum risks for suicide and deliberate self-harm behavior, and the occurrence of multiple disorders is linked with particularly high risk.⁴

Regional Burden of Suicide

The heaviest burden of suicide in the world has been found in low-income countries in Asia and the Pacific.⁵ Poverty, rapid industrialization, poor education, and limited health services are the challenges faced by many low-income countries in this part of the world. There is limited availability of resources required for suicide research and prevention (e.g., doctors, nurses, and psychiatrists) as these countries have a high burden of deaths due to both infectious and noncommunicable diseases. Suicide prevention strategies in Asia and the Pacific should encourage basic research and intervention practices (e.g., treatment for “at-risk” patient populations; establishing national suicide prevention plans, suicide helplines).⁵ The “mental health Gap Action Programme” was launched in 2008 to address the deficits in mental health actions. As a result, suicide prevention interventions can be conducted by people without a psychiatric background, in areas with only basic resources.

METHODOLOGY

Literature search was done with keywords “literacy of suicide” and “attitudes toward suicide in healthcare professionals” from the year 1981 to 2020, and the search was conducted on the following platforms—PubMed Central, Google Scholar, and ProQuest. The research was conducted from 2018 to 2019. Out of 60 articles, only 37 were selected after applying inclusion and exclusion criteria.

Inclusion Criteria

- Studies including suicide literacy of healthcare professionals.
- Studies including attitude of healthcare professionals regarding suicide.
- Studies including both suicide literacy and attitude of healthcare professionals regarding suicide.

Exclusion Criteria

- Studies done in nonhospital settings
- Studies including population other than healthcare professionals.

After applying inclusion and exclusion criteria, out of 80 articles, only 40 articles were selected, out of which majority were original articles, some were meta-analysis, and few were review articles.

RESULTS

Awareness and Attitudes among Healthcare Professionals (HCPs) with Regard to Suicide

Attitudes of HCPs that include both doctors and paramedical staff play a very crucial role in suicide care and suicide prevention.

HCPs are the first-line contact in hospital for suicide care. HCPs can also act as “gatekeepers” in preventive actions toward suicidal behavior. For effective “gatekeeper” interventions, the awareness and attitudes toward people with suicidal behavior remain crucial.⁶

Research reveals that people with suicidal behaviors have negative experiences secondary to the attitudes of the healthcare professionals who cared for them.⁷ Lack of awareness, lack of personal confidence, and perception of the client’s control of self-harm behavior are the oft-quoted reasons for the negative attitudes among healthcare staff.

Occasionally, all HCPs have been reported to hold positive attitude toward suicide.⁸ However, there is wide variation in attitudes among HCPs toward suicide in different countries. The variation could be explained by the different cultures prevalent across various regions of the globe. Some cultures forbid suicide and suicide-related behaviors, whereas some are more permissive toward suicide. Two studies supported the cross-national differences in the attitudes of HCPs in different countries. One study from Turkey and UK compared the differences in the attitudes of student nurses across the two nations.⁹ Nursing students from the UK had a relatively lesser judgmental attitudes and a better understanding of suicidal behavior than the Turkish students. Another study was conducted in Austria and India, which found out that there was difference in attitudes among medical students toward suicide in both countries. Indian medical students had a more restrictive attitude toward suicide and considered suicide as medical illness. In contrast, Austrian medical students had more permissive attitudes toward suicide and considered suicide as theoretical or rational model with more emphasis on cognitive factors.¹⁰ Attitude of HCPs differed not only because of cultural differences but also because of age, gender, duration of clinical exposure, and the educational level of a HCP.

Generally, HCPs across various regions working in a general hospital setting tend to show negative attitudes toward patients with suicide history.¹¹ A study conducted in 2013 in the USA including 631 emergency department providers (nurses, staff physicians, and resident physicians) found out that half of the participants endorsed that suicide is preventable and there is no significant difference between nurses and physicians.¹² A quantitative study was conducted in Ghana including 17 nurses and psychologists using interpretative phenomenological analysis (IPA) and found that attitudes of these health workers toward suicide and suicide prevention are varied. Psychologists approached the suicide problem from the healthcare aspect.¹³

Another study by Anderson et al. explored the attitudes toward suicide among nurses and doctors.¹⁴ The suicide opinion questionnaire (SOQ) was administered among 59 nurses and doctors. Qualitative analyses revealed there were mixed responses and notions regarding suicidal behavior among nurses and doctors. However, majority of nurses and doctors concurred that suicide is a “long process” and is essentially a “cry for help.” In another similar study, when HCPs involving doctors and nurses from varied specialties were assessed for attitudes toward suicide, there were no significant differences observed between doctors and nurses. Both the doctors and nurses indicated that suicide is “a mental illness,” “a cry for help,” “an individual’s right to die,” “an impulsive act,” and “a normal phenomenon.” Also, there was no major influence of age, clinical specialty, and length of professional experience on the attitudes of HCPs.¹⁵

Awareness about Suicide (Suicide Literacy) and Attitudes among Doctors Regarding Suicide

Few studies have looked at the attitudes harbored by doctors toward people with suicidal behavior. Majority of studies have, however, revealed that doctors displayed negative attitudes toward suicide-related behaviors.

Studies Reporting Positive Attitudes

A study conducted by Norheim showed that all HCPs had positive attitudes toward suicide and endorsed the view that suicide is preventable.⁸

Studies Reporting Negative Attitudes

In contrast, few studies reveal that doctors and medical students displayed negative attitudes toward people with suicidal behaviors.

A study was conducted in 2008 in Ghana, Uganda, Norway, including 1,076 psychologist students who were administered ATTS. The study showed that there is wide variation in level of happiness in students of different countries.¹⁶ There were cross-national differences across the countries. Norwegian psychology students were more likely to endorse suicide as “an individual’s own right”; Ugandan students were more “justifying the act of suicide” than Ghanaian psychology students. The study also found there were no gender-based differences in these nations.

Awareness about Suicide (Suicide Literacy) and Attitudes among Nurses Regarding Suicide

Nurses play a crucial role in the positive and healthy understanding of the issues, support, and prevention of mental health problems and suicidal behavior. Even within the nursing professionals, attitudes to mental illness and suicide are mixed, varying from nation to nation.¹⁷

Studies Reporting Positive Attitudes

Various studies report mixed findings with regard to attitudes among nurses toward suicide. Few studies have shown that nurses have positive attitudes toward suicide.¹⁷⁻¹⁹ Nurses had expressed sympathetic attitudes to patients with suicidal behavior.²⁰ A cross-sectional study was conducted in 2015 in Victoria including 181 midwives and maternal child healthcare nurses who were administered Attitudes to Suicide Prevention Scale and found that females, younger age, and being a maternal and child healthcare nurse were associated with more positive attitude toward suicide.²¹ A cross-sectional study was conducted in 2014 in Denmark including 122 nurses who were administered attitudes toward deliberate self-harm questionnaire (ADSHQ) and found that emergency nurses had positive attitude toward patients with suicidal behavior, and it was significantly associated with being aware of suicide risk factors.¹⁹ A quantitative study was conducted in 2010 in Ireland including 68 nurses who were administered attitude toward deliberate self-harm questionnaire (ATDSQ). The study found out that emergency department nurses had positive attitudes toward individuals presented with deliberate self-harm. Also, there was no relationship between age, gender, duration of experience, and awareness programs. Age and the length of clinical exposure to suicide led to better attitudes, reached a peak, but later declined with increasing duration.¹⁷ Another quantitative study was conducted in 2007 in Japan including 155 casualty nurses who were administered suicide opinion questionnaire to study the attitudes of casualty nurses toward suicidal behaviors.²² Certain significant findings emerged in the study. Nurses with higher level of nursing

education and nurses who did not follow a particular religion had better positive attitudes than others. Also, interestingly, those nurses who had cared for less than 10 suicidal patients had more positive attitudes than nurses who had nursed for more than 10 suicidal patients.²²

Studies Reporting Negative Attitudes

Some studies showed that nurses have negative attitudes toward suicide.²³⁻²⁵ A quantitative study was conducted in 2015 in Brazil including 58 nursing students and questionnaire of attitudes Before suicidal behavior (QABS) was administered to nursing students and found that there was negative attitude and perceptions among nursing students toward suicide-related behaviors and concluded that academic training should affect the attitude and can change it to positive attitude toward suicide.²⁵ A cross-sectional study was conducted in 2012 in Spain including 255 nurses who were administered CCCS (Spanish version of attitudinal beliefs questionnaire about suicidal behavior). The authors found that nurses display negative attitude toward suicidal behavior. Religious and moral notions tend to negatively influence the attitudes toward suicidal patients.²³ A cross-sectional study was conducted in Brazil including 146 nurses and studied their attitudes toward suicide using the suicide behavior attitude questionnaire (SBAQ). The majority of nurses reported lack of awareness related to suicide and displayed negative attitudes. Mental health nurses were more positive in dealing with suicidal patients than nurses of other disciplines.²⁶ A cross-sectional study was conducted in Malaysia in 2017 including 262 HCPs who were administered attitude toward suicide questionnaire (ATTS).

Influence of Nurse Characteristics on Attitudes toward Suicide

Few studies tried to analyze the effects of increasing age and duration of experience on the attitudes toward suicide in nursing population.^{18,27,28} An exploratory study was conducted in 1994 in Ireland including 95 nurses who were administered suicide opinion questionnaire to assess their attitudes toward suicidal behavior. The study found that casualty nurses held positive attitude toward suicide. The study also found that the attitudes improved with increasing age and experience.¹⁸ Another study explored nurses’ attitudes toward suicide and compared the attitudes between community mental health nurses and nurses posted in accident and emergency. The study found that both the groups held positive attitudes and the attitudes tended to improve with increasing age.²⁸ A descriptive correlation design study conducted in Bhutan in 2017 studied 216 nurses. The nurses were asked to provide their responses to the suicidal behavior attitude questionnaire (SBAQ). The study found that there is a strong impact of nurses’ characteristics like age, level of nursing education, years of experience, and a history of attempted or contemplated suicide on the knowledge of suicide risk and attitudes toward suicide.²⁷

A study was conducted in 2006 in Victoria with 43 nurses posted in the accident and emergency ward settings, to explore the attitudes toward self-harm using the suicide opinion questionnaire. The study found that majority of nurses did not receive formal education or awareness programs to address suicidal behavior. The older and more experienced nurses had better and positive attitudes toward suicide when compared to their younger counterparts. Those few nurses who had been exposed to awareness or education programs related to suicide had better attitudes than those who were not exposed to such

programs.²⁹ A survey was done in 2002 in Brisbane including 1,003 nurses who were administered attitudes toward deliberate self-harm questionnaire and found out that the nurses held negative attitudes toward suicidal behaviors. The study also found that there were no significant correlations between attitudes toward suicide, age, and years of experience.²⁴ A survey was done in 1996 in Manchester including 106 nurses and found that nurses working in medical wards and emergency settings can have significant impact on reduction of suicide and parasuicide rates.³⁰ Nurses possessed some knowledge about risk factors related to suicide and displayed professionalism in treating such patients. However, negative emotional reactions were displayed while caring for patients with self-harm behaviors.³⁰

Contrasting studies reveal that there was no significant difference in attitude of nurses toward suicide with gender or length of work experience.³¹ A study was conducted in 1995 in New York including 128 home healthcare nurses aimed to study their knowledge and attitudes toward self-harm. The nurses were administered recognition of suicide lethality (RSL) scale, suicide attitude vignette experience—adolescent (SAVE-A), and suicide attitude vignette experience—elderly (SAVE-L). The study found that there was no significant relationship between knowledge of signs of impending suicide and attitude toward suicide in the elderly population.³² Studies that explored the knowledge and attitudes of nurses toward suicidal behaviors revealed that negative emotions and lack of experience are linked with negative attitudes of nursing staff toward suicide.³¹

Indian Studies on Awareness and Attitude with Regard to Suicide

Awareness and Attitudes among Healthcare Professionals (HCPs) in Regarding Suicide

Indian studies have revealed that there is a need to study the suicide awareness and prevention among HCPs.^{33,34}

A cross-sectional study was conducted by Narendra et al. in 2016 in India including 721 general hospital staff, which comprised consultants, postgraduates, CMOs, interns, medical students, and nursing students. A validated questionnaire was used, and the study found out that there was wide variation in staff attitude and knowledge levels related to self-harm. The knowledge was highest in consultants, followed by postgraduates, and was lowest in nursing students. This study concluded that there is urgent need for training general hospital staff in self-harm assessment and prevention in Indian settings.

Another study attempted to compare the suicide literacy between medical and paramedical students using the literacy of suicide scale-8-item version (LOSS-8). The study found that the suicide literacy is poor among the paramedical students.³⁵

A cross-sectional study was conducted by Nebhinani et al. in 2016 in India including 205 final year undergraduate students by using suicide opinion questionnaire, which was filled in 30 minutes and posits that there is wide variation in attitudes and a lot of uncertainty prevails among medical students regarding suicide.³³

A cross-sectional study was conducted by Shah et al. in 2016 in India including 80 nurses and found that majority of nursing teachers felt that suicide prevention was their responsibility and that a large number of suicides were preventable. The study observed that mental health training and more emotional intelligence can bring about positive attitudes.⁶

CONCLUSION

This review indicates that suicide is a global problem and shows that both suicide literacy and attitude of HCPs toward suicide affect the approach, care, and treatment of patients with suicide-related behavior. Also, within HCPs, there is variation in terms of suicide literacy and attitude toward suicide, which in turn is influenced by several sociodemographic variables and clinical exposure variables. It is also evident from the reviews that suicide is a preventable condition.

Research literature implies the need to reduce negative attitude toward suicide in HCPs as well as increase awareness amid HCPs. The reviews clearly indicate a definite scarcity of data on literacy of suicide in our region, highlighting the need for further research in this area.

REFERENCES

- Vijaykumar L. Suicide and its prevention: the urgent need in India. *Indian J Psychiatry* 2007;49(2):81–84. DOI: 10.4103/0019-5545.33252.
- India State-Level Disease Burden Initiative Suicide Collaborators. Gender differentials and state variations in suicide deaths in India: the Global Burden of Disease Study 1990–2016. *Lancet Public Health* 2018;3(10):e478–e489. DOI: 10.1016/S2468-2667(18)30138-5.
- Nock MK, Borges G, Bromet EJ, Cha CB, Kessler RC, Lee S. Suicide and suicidal behavior. *Epidemiol Rev* 2008;30(1):133–154. DOI: 10.1093/epirev/mxn002.
- Bachmann S. Epidemiology of suicide and the psychiatric perspective. *Int J Environ Res Public Health* 2018;15(7):1425. DOI: 10.3390/ijerph15071425.
- Milner A, de Leo D. Suicide research and prevention in developing countries in Asia and the Pacific. *Bull World Health Organ* 2010;88(10):795–796. DOI: 10.2471/BLT.09.070821.
- Shah N, Mehta R, Vankar GK. Nursing teachers' attitude towards suicide prevention—a study from Gujarat. *Natl J Integr Res Med* 2016;7(1):74–78.
- McHale J, Felton A. Self-harm: what's the problem? A literature review of the factors affecting attitudes towards self-harm. *J Psychiatr Ment Health Nurs* 2010;17(8):732–740. DOI: 10.1111/j.1365-2850.2010.01600.x.
- Norheim AB, Grimholt TK, Ekeberg Ø. Attitudes towards suicidal behaviour in outpatient clinics among mental health professionals in Oslo. *BMC Psychiatry* 2013;13:90. DOI: 10.1186/1471-244X-13-90.
- Flood C, Yilmaz M, Phillips L, Lindsay T, Eskin M, Hiley J, et al. Nursing students' attitudes to suicide and suicidal persons: a cross-national and cultural comparison between Turkey and the United Kingdom. *J Psychiatr Ment Health Nurs* 2018;25(7):369–379. DOI: 10.1111/jpm.12461.
- Etzersdorfer E, Vijayakumar L, Schöny W, Grausgruber A, Sonneck G. Attitudes towards suicide among medical students: comparison between Madras (India) and Vienna (Austria). *Soc Psychiatry Psychiatr Epidemiol* 1998;33(3):104–110. DOI: 10.1007/s001270050029.
- Saunders KEA, Hawton K, Fortune S, Farrell S. Attitudes and knowledge of clinical staff regarding people who self-harm: a systematic review. *J Affect Disord* 2012;139(3):205–216. DOI: 10.1016/j.jad.2011.08.024.
- Betz ME, Sullivan AF, Manton AP, Espinola JA, Miller I, Camargo CA, et al. Knowledge, attitudes, and practices of emergency department providers in the care of suicidal patients. *Depress Anxiety* 2013;30(10):1005–1012. DOI: 10.1002/da.22071.
- Osafo J, Knizek BL, Akotia CS, Hjelmeland H. Attitudes of psychologists and nurses toward suicide and suicide prevention in Ghana: a qualitative study. *Int J Nurs Stud* 2012;49(6):691–700. DOI: 10.1016/j.ijnurstu.2011.11.010.
- Anderson M, Standen P, Nazir S, Noon JP. Nurses' and doctors' attitudes towards suicidal behaviour in young people. *Int J Nurs Stud* 2000;37(1):1–11. DOI: 10.1016/S0020-7489(99)00057-7.
- Anderson M, Standen PJ. Attitudes towards suicide among nurses and doctors working with children and young people who self-harm.

- J Psychiatr Ment Health Nurs 2007;14(5):470–477. DOI: 10.1111/j.1365-2850.2007.01106.x.
16. Hjelmeland H, Akotia CS, Owens V, Knizek BL, Nordvik H, Schroeder R, et al. Self-reported suicidal behavior and attitudes toward suicide and suicide prevention among psychology students in Ghana, Uganda, and Norway. *Crisis* 2008;29(1):20–31. DOI: 10.1027/0227-5910.29.1.20.
 17. McCarthy L, Gijbels H. An examination of emergency department nurses' attitudes towards deliberate self-harm in an Irish teaching hospital. *Int Emerg Nurs* 2010;18(1):29–35. DOI: 10.1016/j.ienj.2009.05.005.
 18. McLaughlin C. Casualty nurse' attitudes to attempted suicide. *J Adv Nurs* 1995;20(6):1111–1118. DOI: 10.1046/j.1365-2648.1994.20061111.x.
 19. Perboell PW, Hammer NM, Oestergaard B, Konradsen H. Danish emergency nurses' attitudes towards self-harm—a cross-sectional study. *Int Emerg Nurs* 2015;23(2):144–149. DOI: 10.1016/j.ienj.2014.07.003.
 20. Hawton K, Marsack P, Fagg J. The attitudes of psychiatrists to deliberate self-poisoning: comparison with physicians and nurses. *Br J Med Psychol* 1981;54(Pt 4):341–348. DOI: 10.1111/j.2044-8341.1981.tb02572.x.
 21. Lau R, McCauley K, Barnfield J, Moss C, Cross W. Attitudes of midwives and maternal child health nurses towards suicide: a cross-sectional study. *Int J Ment Health Nurs* 2015;24(6):561–568. DOI: 10.1111/inm.12162.
 22. Sun F-K, Long A, Boore J. The attitudes of casualty nurses in Taiwan to patients who have attempted suicide. *J Clin Nurs* 2007;16(2):255–263. DOI: 10.1111/j.1365-2702.2005.01479.x.
 23. Carmona-Navarro MC, Pichardo-Martínez MC. Attitudes of nursing professionals towards suicidal behavior: influence of emotional intelligence. *Rev Lat Am Enfermagem* 2012;20(6):1161–1168. DOI: 10.1590/s0104-11692012000600019.
 24. McAllister M, Creedy D, Moyle W, Farrugia C. Nurses' attitudes towards clients who self-harm. *J Adv Nurs* 2002;40(5):578–586. DOI: 10.1046/j.1365-2648.2002.02412.x.
 25. Bott NCL, de Araújo LMC, Costa EE, Machado JS de A. Nursing students attitudes across the suicidal behavior. *Invest Educ Enferm* 2015;33(2):334–342. DOI: 10.17533/udea.iee.v33n2a16.
 26. Giacchero Vedana KG, Magrini DF, Zanetti ACG, Miasso AI, Borges TL, Dos Santos MA. Attitudes towards suicidal behaviour and associated factors among nursing professionals: a quantitative study. *J Psychiatr Ment Health Nurs* 2017;24(9–10):651–659. DOI: 10.1111/jpm.12413.
 27. Letho Z, Hengudomsu P, Deoisres W. Knowledge and attitudes towards suicide among nurses of national referral hospital in Bhutan. *Thai Pharmaceutical Health Sci J* 2017;12(3):119–128. Corpus ID: 80440985.
 28. Anderson M. Nurses' attitudes towards suicidal behaviour—a comparative study of community mental health nurses and nurses working in an accidents and emergency department. *J Adv Nurs* 1997;25(6):1283–1291. DOI: 10.1046/j.1365-2648.1997.19970251283.x.
 29. McCann T, Clark E, McConnachie S, Harvey I. Accident and emergency nurses' attitudes towards patients who self-harm. *Accid Emerg Nurs* 2006;14(1):4–10. DOI: 10.1016/j.aen.2005.10.005.
 30. Sidley G, Renton J. General nurses' attitudes to patients who self-harm. *Nurs Stand* 1996;10(30):32–36. DOI: 10.7748/ns1996.04.10.30.32.c6221.
 31. Wheatley M, Austin-Payne H. Nursing staff knowledge and attitudes towards deliberate self-harm in adults and adolescents in an inpatient setting. *Behav Cogn Psychother* 2009;37(3):293–309. DOI: 10.1017/S1352465809005268.
 32. Wang WL, Anderson FR, Mentis JC. Home healthcare nurses' knowledge and attitudes towards suicide. *Home Healthc Nurse* 1995;13(5):64–69. DOI: 10.1097/00004045-199509000-00009.
 33. Nebhinani N, Chahal S, Jagtiani A, Nebhinani M, Gupta R. Medical students' attitude toward suicide attempters. *Ind Psychiatry J* 2016;25(1):17–22. DOI: 10.4103/0972-6748.196050.
 34. Kumar N, Rajendra R, Majgi SM, Krishna M, Keenan P, Jones S. Attitudes of general hospital staff toward patients who self-harm in South India: a cross-sectional study. *Indian J Psychol Med* 2016;38(6):547–552. DOI: 10.4103/0253-7176.194920.
 35. Ram D, Chandran S. Suicide and depression literacy among healthcare profession students in tertiary care center in South India. *J Mood Disord* 2017;7(3). DOI: 10.5455/jmood.20170830064910.