

Abstract

## The Presence of Suicidal Thoughts and Their Connection with Social, Family, and Romantic Loneliness among Nurses and Technicians

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The nursing profession is faced with various challenges, and the work of nurses and technicians has become extremely responsible and demanding. Sometimes such a way of working can have negative consequences on mental health.

The goal was to examine the differences in suicidality between nurses/technicians and nursing students, the association of suicidality with sociodemographic variables and loneliness in nursing students and nurses/technicians, and the contribution of variables to suicidality in nurses/technicians and nursing students.

Subjects and methods: A cross-sectional study was conducted on the population of nurses and technicians and nursing students. A total of 144 respondents participated in the online survey conducted in February and March 2023. One hundred and thirteen (78.5%) employed nurses and technicians who are not studying and 31 (21.5%) nursing students participated in the research, the mean age of the respondents was 31.26 (SD=11.62). Sociodemographic data were collected. The presence of suicidal thoughts was tested with the attribute scale of suicidal ideation. Loneliness was tested with the scale of social and emotional loneliness.

Results: Significantly higher levels of suicidality were found in nursing students compared to nurses/technicians (Mann-Whitney test;  $p=0.047$ ). The results showed that in nursing students there is a significant moderate positive association between suicidality and family loneliness (Spearman's correlation;  $p=0.018$ ) and a moderate negative association with the assessment of

financial status (Spearman's correlation;  $p=0.019$ ). In nurses/technicians, the results showed that suicidality is moderately positively associated with social (Spearman correlations;  $p<0.001$ ), emotional (Spearman correlations;  $p=0.001$ ) and family loneliness (Spearman correlations;  $p<0.001$ ), low negative with age (Spearman's correlation;  $p=0.022$ ), financial condition (Spearman's correlation;  $p = 0.014$ ), family relationships (Spearman's correlation;  $p=0.009$ ) and health condition (Spearman's correlation;  $p=0.002$ ). It was shown that significant predictors of suicidality in nurses/technicians are assessment of health status ( $p<0.001$ ) and social loneliness ( $p=0.002$ ), while significant predictors of suicidality in nursing students are assessment of health status ( $p=0.015$ ), level of education ( $p= 0.025$ ) and family loneliness ( $p=0.010$ ).

Conclusion: This research confirmed that the population of nurses/technicians and nursing students is at risk of suicidal thoughts and behavior. It has been shown that the state of health, family and social loneliness, and poorer financial conditions are significant factors that contribute to suicidality. Considering the somewhat higher presence of suicidality in nursing students, it is necessary to design an educational approach with special emphasis on early recognition of suicidality and providing adequate help..

**Keywords:** nurses and technicians; suicidal ideas; suicidal thoughts; loneliness

Sažetak

## Prisutnost suicidalnih misli i njihova povezanost sa socijalnom, obiteljskom i ljubavnom usamljenosti u medicinskih sestara i tehničara

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Uvod: Sestrinska profesija suočena je sa različitim izazovima, a rad medicinskih sestara i tehničara postao je izrazito odgovoran i zahtjevan. Ponekad takav način rada može imati negativne posljedice na mentalno zdravlje.

Cilj je bio ispitati razlike u suicidalnosti između medicinskih sestara/ tehničara i studenata sestrinstva, povezanost suicidalnosti sa sociodemografskim varijablama i usamljenosti u studenata sestrinstva i medicinskih sestara/ tehničara te doprinos varijabli na suicidalnost u medicinskih sestara/ tehničara i studenata sestrinstva.

Ispitanici i metode: Provedeno je presječno istraživanje na populaciji medicinskih sestara i tehničara i studenata sestrinstva. U online anketi provedenoj u veljači i ožujku 2023. godine ukupno je sudjelovalo 144 ispitanika. U istraživanju je sudjelovalo 113 (78,5%) zaposlenih medicinskih sestara i tehničara koji ne studiraju i 31 (21,5%) student sestrinstva, srednja vrijednost dobi ispitanika je bila 31,26 (SD=11,62). Prikupljeni su sociodemografski podaci. Prisutnost suicidalnih misli testirana je skalom atributa suicidalnih ideja. Usamljenost je testirana skalom socijalne i emocionalne usamljenosti.

Rezultati: Utvrđene su značajno veće razine suicidalnosti u studenata sestrinstva u odnosu na medicinske sestre/ tehničare (Mann Whitney test;  $p=0,047$ ). Rezultati su pokazali kako u studenata sestrinstva postoji značajna umjerena pozitivna povezanost suicidalnosti i obiteljske usamljenosti (Spearmanove korelacije;  $p=0,018$ ) i umjerena negativna sa procjenom financijskog

stanja (Spearmanove korelacije;  $p=0,019$ ). U medicinskih sestara/ tehničara rezultati su pokazali kako je suicidalnost umjereno pozitivno povezana sa socijalnom (Spearmanove korelacije;  $p<0,001$ ), emocionalnom (Spearmanove korelacije;  $p=0,001$ ) i obiteljskom usamljenosti (Spearmanove korelacije;  $p<0,001$ ), nisko negativno sa dobi (Spearmanove korelacije;  $p=0,022$ ), financijskim stanjem (Spearmanove korelacije;  $p = 0,014$ ), odnosima u obitelji (Spearmanove korelacije;  $p=0,009$ ) i zdravstvenim stanjem (Spearmanove korelacije;  $p=0,002$ ). Pokazalo se kako su značajni prediktori suicidalnosti u medicinskih sestara/ tehničara procjena zdravstvenog stanja ( $p<0,001$ ) i socijalna usamljenost ( $p=0,002$ ) dok su u studenata sestriinstva značajni prediktori suicidalnosti procjena zdravstvenog stanja ( $p=0,015$ ), stupanj obrazovanja ( $p=0,025$ ) i obiteljska usamljenost ( $p=0,010$ ).

Zaključak: Ovim se istraživanjem potvrdilo da je populacija medicinskih sestara/tehničara i studenata sestriinstva u opasnosti od pojave suicidalnih misli i ponašanja. Pokazalo se da su zdravstveno stanje, obiteljska i socijalna usamljenost te lošije financijsko stanje značajni faktori koji pridonose suicidalnosti. Obzirom na nešto veću prisutnost suicidalnosti u studenata sestriinstva, potrebno je osmisliti odgojno – obrazovni pristup s posebnim naglaskom na rano prepoznavanje suicidalnosti i pružanje adekvatne pomoći.

**Ključne riječi:** medicinske sestre i tehničari; suicidalne ideje; suicidalne misli; usamljenost