

# ZNANJE STUDENTKINJA NIŠKOG UNIVERZITETA U VEZI POSTOJANJA POLNOPRENOŠIVIH INFKECIJA KAO FAKTORA RIZIKA U NASTANKU RAKA GRLIĆA MATERICE

## KNOWLEDGE OF SEXUALLY TRANSMITTED INFECTIONS AS A RISK FACTOR FOR CERVICAL CANCER AMONG FIRST-YEAR FEMALE STUDENTS AT THE UNIVERSITY OF NIŠ

Mirko Ilić<sup>1</sup>, Biljana Kocić<sup>1,2</sup>, Nataša Rančić<sup>1,2</sup>

<sup>1</sup> Institut za javno zdravlje Niš, Srbija,

<sup>2</sup> Medicinski fakultet Niš, Univerziteta u Nišu, Srbija

### SAŽETAK

Uvod: U svetu se svake godine beleži oko 100 miliona slučajeva polnoprenosivih infekcija (PPI) kod mlađih. PPI su česte u zemljama u razvoju. Nastanak, dugotrajni opstanak i izostanak lečenja PPI predstavlja faktor rizika za nastanak raka grlića.

Cilj rada: Kod studentkinja prve godine niškog univerziteta utvrditi nivo znanja o PPI kao faktoru rizika i načinu zaštite od nastanka PPI u cilju sprečavanja nastanka malignog procesa na grliću materice.

Metode rada: U istraživanje su uključene sve studentkinje prve godine niškog univerziteta (2008) a kao metod rada primenjena je studija preseka. Kao instrument istraživanja korišćen je anketni upitnik.

Rezultati: U ispitivanoj populaciji svega 1,6% ispitanica je bolevalo od neke PPI, dok je u 0,6% slučajeva bolovao njihov seksualni partner.

Najveći broj studentkinja (60%) prepoznaje više od polovine simptoma PPI, statistički značajno češće studentkinje koje potiču iz grada ( $p=0,017$ ), nisu menjale prebivalište ( $p<0,001$ ), koje su završile medicinsku školu ( $p<0,001$ ), upisale Medicinski fakultet ( $p<0,001$ ) i imale seksualne odnose ( $p<0,001$ ).

Da neke PPI mogu da budu bez simptoma znalo je 47,7% ispitanica i to studentkinje koje su završile medicinsku školu ( $p<0,001$ ), upisale Medicinski fakultet ( $p<0,001$ ), potiču iz grada ( $p=0,003$ ), nisu menjale prebivalište ( $p=0,048$ ), čiji očevi imaju visoko obrazovanje ( $p<0,001$ ) i koje su imale seksualne odnose ( $p<0,001$ ).

Da je postojanje PPI kod žena faktor rizika za nastanak raka grlića materice znalo je 58,5% studentkinja i to pre svega one koje su završile medicinsku školu ( $p<0,001$ ), upisale Medicinski fakultet ( $p<0,001$ ), potiču iz grada ( $p=0,024$ ), i čiji roditelji imaju visoko obrazovanje ( $p=0,007$ ) kod oca i ( $p=0,003$ ) kod majke.

Da je postojanje PPI kod seksualnog partnera faktor rizika za nastanak navedenog malignog oboljenja znalo njih 58,6% i to pre svega studentkinje koje su završile medicinsku školu ( $p<0,001$ ), upisale Medicinski fakultet ( $p<0,001$ ), potiču iz grada ( $p=0,005$ ) i čiji roditelji imaju visoko obrazovanje ( $p=0,048$ ) kod oca i ( $p<0,001$ ) kod majke.

Kao najsigurniji način zaštite od PPI studentkinje navode upotrebu kondoma.

Zaključak: Kontinuiranim zdravstveno vaspitim radom sa mlađima i upoznavanjem sa elementarnim činjenicama o PPI može se uticati na odgovarajuće ponašanje i merama koje imaju za cilj sprečavanje nastanka PPI a samim tim i do pojave maligne alteracija grlića materice. Edukaciju pre svega sprovoditi kod mlađih koji još nisu stupili u seksualne odnose.

Ključne reči: polnoprenosive infekcije, znanje, rak grlića materice, faktor rizika

Zahvalnica: Rad je podržan sredstvima iz projekta Ministarstva prosvete, nauke i inovacija Republike Srbije (ugovor broj 451-03-137/2025-03/200113).

### ABSTRACT

Introduction. Approximately 100 million cases of sexually transmitted infections (STIs) among young people are reported worldwide each year. STIs are particularly prevalent in developing countries. The occurrence, persistence, and lack of treatment of STIs represent significant risk factors for the development of cervical cancer.

Aim. To assess the level of knowledge regarding STIs as a risk factor, as well as the awareness of STI prevention methods, among first-year female students at the University of Niš, with the aim of cervical cancer prevention.

Methods. The study included all first-year female students enrolled at the University of Niš in 2008. A cross-sectional study design was employed, and data were collected using a structured questionnaire.

Results. Only 1.6% of respondents reported having had an STI, while 0.6% stated that their sexual partner had experienced an STI. A majority of the students (60%) were able to identify more than half of the STI symptoms. This level of knowledge was significantly more common among students from urban areas ( $p=0.017$ ), those who had not changed their place of residence ( $p<0.001$ ), those who had completed medical secondary school ( $p<0.001$ ), those who enrolled in the Faculty of Medicine ( $p<0.001$ ), and those with sexual experience ( $p<0.001$ ). Awareness that some STIs can be asymptomatic was demonstrated by 47.7% of respondents, particularly among those with a medical education background ( $p<0.001$ ), enrolled in the Faculty of Medicine ( $p<0.001$ ), from urban areas ( $p=0.003$ ), who had not relocated ( $p=0.048$ ), whose fathers had higher education ( $p<0.001$ ), and who had sexual intercourse ( $p<0.001$ ). A total of 58.5% of participants recognized the presence of an STI in women as a risk factor for cervical cancer, most commonly those with medical education ( $p<0.001$ ), those enrolled in medical studies ( $p<0.001$ ), from urban environments ( $p=0.024$ ), and with parents holding higher education degrees (father:  $p=0.007$ ; mother:  $p=0.003$ ). Similarly, 58.6% were aware that an STI in a sexual partner is a risk factor for cervical cancer. This was more common among students with medical education ( $p<0.001$ ), enrolled in the Faculty of Medicine ( $p<0.001$ ), from urban areas ( $p=0.005$ ), and whose parents had higher education (father:  $p=0.048$ ; mother:  $p<0.001$ ). The most frequently cited method of STI prevention was condom use.

Conclusion. Continuous health education targeting young people, particularly those who have not yet become sexually active, and increasing awareness of basic STI-related facts can significantly influence responsible sexual behavior and implementation of preventive measures aimed at reducing the incidence of STIs and consequently, cervical malignancies.

Keywords: sexually transmitted infections, knowledge, cervical cancer, risk factor

Acknowledgement

The work was supported by funds from the project of the Ministry of Education, Science and Innovation of the Republic of Serbia (Contract No.451-03-137/2025-03/200113).