

### **Original article**

# The Brazilian Journal of INFECTIOUS DISEASES

#### www.elsevier.com/locate/bjid



### Characteristics of gonorrhea and syphilis cases among the Roma ethnic group in Belgrade, Serbia



### Milan Bjekić<sup>a</sup>, Hristina Vlajinac<sup>b,\*</sup>, Sandra Šipetić-Grujičić<sup>b</sup>

<sup>a</sup> City Institute for Skin and Venereal Diseases, Belgrade, Serbia

<sup>b</sup> University of Belgrade, Faculty of Medicine, Institute of Epidemiology, Belgrade, Serbia

#### ARTICLE INFO

Article history: Received 12 November 2015 Accepted 3 May 2016 Available online 6 June 2016

Keywords: Roma population Syphilis Gonorrhea Serbia

#### ABSTRACT

*Background*: The Roma ethnic group is the largest and most marginalized minority in Europe, believed to be vulnerable to sexually transmitted infections.

Aim: The purpose of the study was to investigate frequency and characteristics of gonorrhea and syphilis among the Roma population in Belgrade.

*Methods*: Data from the City Institute for Skin and Venereal Diseases to which all gonorrhea and syphilis cases are referred were analyzed.

Results: During the period of 2010–2014 sexually transmitted infections were more frequent among Roma than in rest of Belgrade population. Average percentages of Roma among all reported subjects with syphilis and those with gonorrhea were 9.6% and 13.5%, respectively, while the percentage of Roma in the total Belgrade population was about 1.6%. Roma with syphilis and gonorrhea were more frequently men (75%), most frequently aged 20–29 years (43.4%), never married (64.5%), with elementary school or less (59.2%), unemployed (80.3%), and heterosexual (89.5%). Among Roma 10.5% were sex workers and 68.4% did not know the source of their infection. Significant differences between Roma cases and other cases in Belgrade in all characteristics observed were in agreement with differences between Roma population and the total population of Serbia.

*Conclusion:* The present study confirmed the vulnerability of the Roma population to sexually transmitted infections.

© 2016 Elsevier Editora Ltda. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/).

#### Introduction

The Roma are Europe's largest and most vulnerable minority. In total, about 7–9 million Roma live in Europe and approximately 70% of them live in countries of Central and Eastern Europe and those of the former Soviet Union.<sup>1</sup> According to the population census in 2011 the total number of declared Roma in Serbia was 147,604 which accounts for 2.05% of the population in Serbia. The highest concentration of declared Roma in Serbia is in Belgrade, the capital and the largest city, where there are 27,325 or 18.5% of their total number, and 1.6% of the total population of Belgrade.<sup>2</sup> The Roma minority is the most vulnerable and marginalized in the field

\* Corresponding author.

E-mail address: kristiv@eunet.rs (H. Vlajinac).

http://dx.doi.org/10.1016/j.bjid.2016.05.004

<sup>1413-8670/© 2016</sup> Elsevier Editora Ltda. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/).

of health because of extreme poverty, improper hygiene, bad nutrition, undignified living conditions, high unemployment rate and lack of education.<sup>2,3</sup> Discrimination in accessing health care services have an additional negative impact on their health.

Roma may be at high risk for sexually transmitted infections (STIs) because of their risky sexual behavior. According to an investigation conducted among Roma youth (aged 15–24 years) in Serbia during the year 2010, risky sexual behaviors were highly prevalent, especially among male subjects.<sup>4</sup> In Belgrade, out of male Roma youth, 36.2% had sexual debut before the age of 15 years, 53.9% had more than one sexual partner in the past year, 11.5% had engaged in commercial sex, and 4.0% reported having anal sex with other men.<sup>4</sup>

STIs are a major global cause of acute illness, infertility, long-term disability and death with serious medical and psychological consequences among people. Gonorrhea and syphilis are common bacterial venereal diseases and their reporting is compulsory in Serbia. During the period 2010–2014 in Belgrade syphilis incidence increased 182.2% from 2.25 per 100,000 in 2010 to 4.4 per 100,000 in 2014, and gonorrhea incidence increased 226.2% from 2.56 per 100,000 in 2010 to 5.79 per 100,000 in 2014.<sup>5</sup>

The purpose of this study was to present gonorrhea and syphilis cases among Roma who sought treatment at the City Institute for Skin and Venereal Diseases in Belgrade during the period of 2010–2014, and to describe their demographic characteristics. Reporting on gonorrhea and syphilis is compulsory in Serbia, and in Belgrade all reported cases were treated in the aforementioned Institute which is an exclusive treatment center. There is possibility that some patients are referred to private physicians, but these cases are usually not reported.

We also compared gonorrhea and syphilis cases in order to identify any distinct need for prevention, diagnosis, screening, or for other public health measures for these diseases of the Roma population.

#### Methods

Patients with symptoms of sexually transmitted infections were referred to the City Institute for Skin and Venereal Diseases in Belgrade, by their primary care providers between January 2010 and December 2014. Their diagnoses (gonorrhea and early syphilis) at the initial visit were noted. All diagnoses were based on patient history and physical examination and were confirmed by laboratory analyses. Case definitions of gonorrhea and syphilis were in line with STD Surveillance case definitions,<sup>6</sup> and updated definitions for gonorrhea and syphilis.<sup>7</sup> For gonorrhea it was required isolation of Gramnegative intracellular diplococci by culture from a clinical specimen (a urethral smear obtained from a male or an endocervical smear obtained from a female). Requirements for syphilis were as follows: for primary syphilis (PS), ulcers and reactive treponemal (Treponema pallidum hemagglutination assay – TPHA) and nontreponemal (Venereal Disease Research Laboratory – VDRL) serologic tests; for secondary syphilis (SS), clinical manifestations of this stage with both reactive treponemal test and a nontreponemal titer  $\geq 4$ ; for early latent syphilis both reactive treponemal and nontreponemal tests

and any of the following criteria within the past 12 months: documented seroconversion or fourfold or greater increase in titer of nontreponemal test, documented seroconversion on a treponemal test, a history of symptoms consistent with a diagnosis of PS or SS, sexual exposure to a person with PS, SS or early latent syphilis, and sexual debut within the last 12 months.

The data on basic demographic characteristics of Roma patients (age, sex, marital status, education, working status) were retrospectively abstracted from their charts. Data about possible source of infection as well as sexual orientation, provided on the official form for notification of syphilis and gonorrhea, were also analyzed.

In the analysis of data, proportions were compared using  $\chi^2$  test and Fisher's exact test. All *p*-values were based on two-tailed tests, and *p*<0.05 was considered as significant.

The manuscript was reviewed and approved by the responsible authorities of City Institute for Skin and Venereal disease in Belgrade.

#### Results

The frequency of syphilis and gonorrhea among Roma and other ethnic groups of Belgrade population taken together are presented in Table 1. During the period of 2010–2014 the Roma accounted for 3.4% to 17.1% (an average of 9.6%) out of all subjects registered with syphilis and for 11.7% to 18.8% (an average of 13.5%) out of all registered patients with gonorrhea. Considering that the percentage of Roma in the total Belgrade population was about 1.6%, both syphilis and gonorrhea were more frequent among Roma comparing with the rest of Belgrade population.

Roma with syphilis and gonorrhea were more frequently men (75%), the majority aged 20–29 years (43.4%), never married (64.5%), with elementary school or less (59.2%), unemployed (80.3%), and heterosexual (89.5%). Among them 10.5% were sex workers and 68.4% did not know the source of their

Table 1 – Number of syphilis and gonorrhea cases in Roma and all other ethnic groups of Belgrade population registered at City Institute for Skin and Venereal Diseases, Belgrade, 2010–2014.

Year	Roma Number (%)	Other ethnic groups Number (%)	Total Number
Syphilis cases			
2010	3 (9.7)	28 (90.3)	31
2011	1 (3.4)	28 (96.6)	29
2012	6 (17.1)	29 (82.9)	35
2013	3 (10.3)	26 (89.7)	29
2014	4 (7.4)	50 (92.6)	54
Total	17 (9.6)	161 (90.4)	178
Gonorrhea cases			
2010	5 (12.5)	35 (87.5)	40
2011	9 (18.8)	39 (81.2)	48
2012	14 (14.9)	89 (85.1)	94
2013	16 (11.7)	121 (88.3)	137
2014	15 (12.6)	104 (87.4)	119
Total	59 (13.5)	379 (86.5)	438

Download English Version:

# https://daneshyari.com/en/article/3343713

Download Persian Version:

## https://daneshyari.com/article/3343713

Daneshyari.com