REPRODUCTIVE HEALTH OF ROMA WOMEN IN SLOVAKIA

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SUMMARY

Objective: In most indicators of the way of life, the Roma community is generally different from the majority population and dominant culture. The objective of the study was to describe factors affecting the health of the Roma living in Slovakia, with an emphasis on the sexual and reproductive health of Roma women, and report on the results of analysis of high-risk pregnancies of Roma women in the district of Rimavská Sobota, Slovakia.

Methods: A retrospective study of medical documentation was used. The results were analyzed using the absolute and relative frequencies. Statistical methods were used.

Results: A total of 1,256 high-risk pregnancies were analyzed, of which 622 (49.52%) were in Roma women. The average age of Roma respondents was lower by 5 years compared to non-Roma. The age of Roma women at the first pregnancy was statistically significantly lower compared to non-Roma (p < 0.001). The Roma respondents achieved statistically significantly lower levels of education than non-Roma. There was a demonstrably higher number of pregnancies as well as a higher number of artificial and spontaneous abortions per Roma woman. These results were statistically significant. For Roma women, pregnancy began to be risky demonstrably earlier than for non-Roma (p < 0.001). There was a statistically significant difference in attending prenatal counselling. Roma women attended prenatal counselling statistically significantly less frequently than non-Roma (p < 0.001). A significant statistical dependence was found between attending prenatal counselling and the onset of pregnancy problems in Roma women. There was no significant difference in the incidence of other diseases associated with high-risk pregnancy among Roma and non-Roma respondents.

Conclusion: The findings indicate that Roma women are exposed to health problems in the area of sexual and reproductive health in Slovakia. In the approach to the Roma, it is essential to focus on improving accessibility to health care, prevention, knowledgeability and effectively preventing, eradicating and strongly penalizing all forms of discrimination in access to health care, especially for Roma women, who are more likely to receive health care.

Key words: Roma, reproductive health, high-risk pregnancy, risk factors

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INTRODUCTION

The Roma are a widely dispersed transnational ethnic group with an estimated size of 8 to 10 million worldwide, 7 to 9 million in Europe (1). With regard to the number of inhabitants, Slovakia and Romania have the most numerous Roma communities in Europe and also in the world. The share of Roma in Slovakia is 8–9% of the total number of 5.5 million inhabitants. Their number is estimated at 400,000 (2, 3). In general, the Roma community is different from the majority population in most indicators of the way of life (economic, social, cultural) (4–6). The Roma are influenced by the dominant (non-Roma) culture. Few-decade long attempts to assimilate them forcibly has resulted in disruption of Roma traditions and their natural structures, suppression of positive thinking, personal responsibility and initiative in a large part of the Roma population, as well as many prejudices of both Roma and non-Roma (7–9).

State of Health of Roma

Under current legislation, the practice of monitoring and collecting data on ethnicity (division by ethnicity) is unsatisfactory in Slovakia and also in other European countries (10–13). However, anonymous and non-discriminatory information is not contrary to the Personal Data Protection Act, nor in violation of the Antidiscrimination Act (14, 15). The lack of data is one of the systemic and legislative barriers to improve the situation of the Roma minority. The European Commission also reports on the situation of Roma in an enlarged EU (14) that “More needs to be done to generate reliable indicators of disease incidence and access to healthcare systems among Roma”. It is not possible to verify data on health and health inequalities between the Roma population and the majority. Furthermore, the lack of studies reduces opportunities for international comparison. The WHO also seeks to obtain relevant information on the state of health of Roma in EU countries (16).
The Roma have different patterns of reproductive behaviour compared to the majority population. The Roma women enter motherhood/parenthood earlier and the interval between successive births is shorter (23).

The low age of maternal and parental debut along with frequent pregnancies can also have a significant impact on the increased risk of any subsequent pregnancy. The overall frequency of pregnancies and childbirths combined with exhaustion of the body from frequent pregnancy, impaired health of Roma women, inadequate diet, intake of caffeine and alcoholic beverages and consumption of tobacco products during pregnancy worsen the state of reproductive health (24). There is also a lack of knowledge of contraceptive methods and lack of prenatal care (12, 19, 25, 26).

A high proportion of Roma expectant mothers under the age of 18, as well as a higher number of risk pregnancies, premature births and abortions compared to the majority population are shown in some studies (4, 19, 25, 29).

Higher perinatal and infant mortality rates and a higher proportion of non-marital (non-partnership) births are reported as well (3, 26–28).

The Slovak Republic is administratively divided into 8 self-governing regions and 79 districts. The district of Rimavská Sobota has 83,124 inhabitants. Of this, 26–32% are Roma nationals (30).

In 2014, 55,033 children were born alive in Slovakia. Most of them in the self-governing regions of Prešov, Košice and Banská Bystrica, in districts with the highest representation of Roma (31).

The total fertility rate in Slovakia is 1.4 children per woman (31). For Roma, it is 4.3 children, with the largest difference in the age group of 15–19 years (7 times the majority) depending on the degree of integration of Roma (8).

In 2014, according to the Statistical Office of the Slovak Republic (31), there were 84,752 inhabitants in the district of Rimavská Sobota and the total number of live births was 976. There was the highest number of abortions in the region of Banská Bystrica (2,205 abortions, 13.9%) of which most (416) in the district of Rimavská Sobota.

This study was conducted in the district of Rimavská Sobota, one of the districts with the highest representation of Roma in Slovakia.

Based on an analysis of the health documentation of women hospitalized with high-risk pregnancy in the Rimavská Sobota district, we aimed to ascertain which demographic and other factors are the most frequently reported in women with high-risk pregnancy, with a detailed focus on Roma women and correlations between the variables.

MATERIALS AND METHODS

The method used was a retrospective study of medical documentation.

The sample comprised 1,256 pregnant women hospitalized at the gynaecological department of Rimavská Sobota with a diagnosis of high-risk pregnancy in the two monitored years 2014 and 2015. The reasons for hospitalization were contractile activity, premature discharge of amniotic fluid, colporrhagia, induction of labour, adverse vaginal findings, EPH gestosis, pre-eclampsia, diabetes mellitus, and intra uterine growth restriction (IUGR). It was evaluated as follows: imminent abortion – until the 28th completed week of pregnancy; imminent premature birth – recurrent contractions and/or discharge of amniotic fluid after the 22nd completed week of pregnancy but less than 37 completed weeks of pregnancy; premature birth – until the 37th completed week of pregnancy. Abortion – prematurely terminated pregnancy if the foetus does not show signs of life weighing less than 1,000 g at birth, if the weight cannot be ascertained and pregnancy lasts for less than 28 weeks, if the foetus shows signs of life weighing up to 500 g at birth and does not survive 24 hours, foetal egg without foetus or decidua was removed from the uterus (32).

The study sample was created based on the identification of high-risk pregnancies from the documentation of pregnant women kept during their hospitalization at the gynaecological department. In the analysis of the medical records of the hospitalized women, the following data were recorded: demographic data (age, education, status, employment) and ethnic origin (based on the nationality reported and ethnic features where the Roma identification is obvious), anamnesis focused on the reproductive and sexual health. Each case of a high-risk pregnancy was monitored from the first hospitalization in the gynaecological department until the end of pregnancy, including a record of the method of pregnancy termination. Every woman was entered into the sample only once. As the consumption of alcohol and other addictive substances was recorded in the medical records only in an insignificant number of cases, we did not include this variable in the research.

Data Analysis

The following statistical methods were used: absolute and relative frequencies, Chi-square, Kruskal-Wallis test, Mann-Whitney test, and Cohen correlation.

RESULTS

For the two years surveyed, the total number of pregnancies in the region was 2,222, of these the number of pregnancies of
Roma women was 1,415. The number of high-risk pregnancies was 1,256 representing 56.53% of all the pregnancies. Of these, 622 pregnant women were Roma accounting for 49.52% of the total high-risk pregnancies.

**Age Composition**

The Roma women were statistically significantly younger. Roma women are pregnant for the first time at a significantly younger age than non-Roma. (Table 1).

**Degree of Education**

Roma women are significantly less educated than non-Roma (Table 2).

**Fertility**

There are 2.78 pregnancies per one respondent of Roma origin and 2.15 pregnancies per non-Roma (Table 3).

**Number of Abortions**

Table 4 presents the overview of total recorded artificial interruptions of pregnancy and spontaneous abortions in Roma and non-Roma women.

**Correlation of Respondent’s Age and Number of Abortions**

A statistically significantly higher number of abortions in women of Roma origin compared to non-Roma women was demonstrated (Table 5).

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**Table 1. Composition of sample by age of respondents**

<table>
<thead>
<tr>
<th>Age</th>
<th>Roma women (n = 622) n (%)</th>
<th>Non-Roma women (n = 634) n (%)</th>
<th>Total (n = 1,256) n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 14</td>
<td>3 (0.48)</td>
<td>0 (0.00)</td>
<td>3 (0.24)</td>
</tr>
<tr>
<td>14 to 17</td>
<td>106 (17.04)</td>
<td>6 (0.95)</td>
<td>112 (8.92)</td>
</tr>
<tr>
<td>18 to 30</td>
<td>402 (64.63)</td>
<td>320 (50.47)</td>
<td>722 (57.48)</td>
</tr>
<tr>
<td>31 to 40</td>
<td>99 (15.92)</td>
<td>292 (46.06)</td>
<td>391 (31.13)</td>
</tr>
<tr>
<td>More than 40</td>
<td>12 (1.93)</td>
<td>16 (2.52)</td>
<td>28 (2.23)</td>
</tr>
</tbody>
</table>

**Table 2. Education of respondents**

<table>
<thead>
<tr>
<th>Education</th>
<th>Roma women (n = 622) n (%)</th>
<th>Non-Roma women (n = 634) n (%)</th>
<th>Total (n = 1,256) n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incomplete elementary school</td>
<td>37 (5.95)</td>
<td>1 (0.16)</td>
<td>38 (3.03)</td>
</tr>
<tr>
<td>Completed elementary school</td>
<td>524 (84.24)</td>
<td>22 (3.47)</td>
<td>546 (43.47)</td>
</tr>
<tr>
<td>Completed secondary school</td>
<td>59 (9.49)</td>
<td>457 (72.08)</td>
<td>516 (41.08)</td>
</tr>
<tr>
<td>Completed university</td>
<td>2 (0.32)</td>
<td>154 (24.29)</td>
<td>156 (12.42)</td>
</tr>
</tbody>
</table>

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**Onset of Problems during Pregnancy**

We recorded the onset of problems during pregnancy. For Roma respondents, the problems started, on average, at 27.18 weeks of pregnancy, in non-Roma women at 30.28 weeks. Roma women began to experience problems during their pregnancy significantly earlier than non-Roma (Table 5).

**Prenatal Care**

The number of Roma women who attended counselling was lower. The difference of the percentages is statistically significant (p < 0.001) (Table 5).

The Roma women who attended counselling regularly started to experience problems, on average, at 29.63 weeks. The Roma women who attended counselling irregularly started to have problems, on average, at 22.95 weeks (Table 5).

**Prenatal Care and Number of Abortions**

The average number of abortions per Roma woman who attended counselling regularly is 0.4695. The average number of abortions per Roma woman who did not attend counselling on a regular basis is 0.6031, which is statistically significantly more (p < 0.001) (Table 5).

**Termination of Pregnancy**

In the two years under review, a total of 88 cases (7.01%) of high-risk pregnancies were terminated by abortion. The percentage of pregnancy termination by abortion is, in women who did not attend counselling, statistically significantly higher than the percentage of women who attended counselling (p < 0.001). Preg-
Table 3. Composition of sample by total number of pregnancies

<table>
<thead>
<tr>
<th>Number of pregnancies</th>
<th>Roma women (n = 622) n (%)</th>
<th>Non-Roma women (n = 634) n (%)</th>
<th>Total (n = 1,256) n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>269 (43.25)</td>
<td>320 (50.47)</td>
<td>589 (46.89)</td>
</tr>
<tr>
<td>2 to 4</td>
<td>275 (44.21)</td>
<td>292 (46.06)</td>
<td>567 (45.14)</td>
</tr>
<tr>
<td>5 to 10</td>
<td>67 (10.77)</td>
<td>22 (3.47)</td>
<td>89 (7.09)</td>
</tr>
<tr>
<td>More than 10</td>
<td>11 (1.77)</td>
<td>0 (0.00)</td>
<td>11 (0.88)</td>
</tr>
</tbody>
</table>

Table 4. Number of artificial interruptions of pregnancy and spontaneous abortions in Roma women

<table>
<thead>
<tr>
<th>Number of artificial interruptions</th>
<th>Roma women (n = 622) n (%)</th>
<th>Non-Roma women (n = 634) n (%)</th>
<th>Number of spontaneous abortions</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>567 (91.16)</td>
<td>575 (90.69)</td>
<td>493 (79.26)</td>
</tr>
<tr>
<td>1 to 4</td>
<td>54 (8.68)</td>
<td>59 (9.31)</td>
<td>129 (20.74)</td>
</tr>
<tr>
<td>5 to 10</td>
<td>0 (0.00)</td>
<td>0 (0.00)</td>
<td>0 (0.00)</td>
</tr>
<tr>
<td>More than 10</td>
<td>1 (0.16)</td>
<td>0 (0.00)</td>
<td>0 (0.00)</td>
</tr>
</tbody>
</table>

Table 5. Overview of statistical relations between variables

<table>
<thead>
<tr>
<th>Issue</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age of women of Roma ethnicity vs. non-Roma women&lt;sup&gt;a&lt;/sup&gt;</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>First pregnancy at age, Roma women vs. non-Roma women&lt;sup&gt;b&lt;/sup&gt;</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Education of Roma women vs. non-Roma women&lt;sup&gt;c&lt;/sup&gt;</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Number of pregnancies per women, Roma women vs. non-Roma women&lt;sup&gt;d&lt;/sup&gt;</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Occurrence of 5 and more pregnancies, Roma women vs. non-Roma women&lt;sup&gt;e&lt;/sup&gt;</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Number of children, Roma women vs. non-Roma women&lt;sup&gt;f&lt;/sup&gt;</td>
<td>0.001</td>
</tr>
<tr>
<td>Age and number of abortions, Roma women&lt;sup&gt;g&lt;/sup&gt;</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Age and number of abortions, non-Roma women&lt;sup&gt;h&lt;/sup&gt;</td>
<td>0.013</td>
</tr>
<tr>
<td>Number of abortions, Roma women vs. non-Roma women&lt;sup&gt;i&lt;/sup&gt;</td>
<td>0.011</td>
</tr>
<tr>
<td>Onset of problems, Roma women vs. non-Roma women&lt;sup&gt;j&lt;/sup&gt;</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Correlation of age and onset of problems&lt;sup&gt;k&lt;/sup&gt;</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Visiting counselling centre, Roma women vs. non-Roma women&lt;sup&gt;l&lt;/sup&gt;</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Visiting counselling centre, Roma women vs. non-Roma women&lt;sup&gt;m&lt;/sup&gt;</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Onset of problems with Roma women who did not attend vs. those who attended counselling&lt;sup&gt;n&lt;/sup&gt;</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Number of abortions in Roma women who did not attend vs. those who attended counselling&lt;sup;o&lt;/sup&gt;</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Termination of pregnancy by abortion, Roma women vs. non-Roma women&lt;sup&gt;p&lt;/sup&gt;</td>
<td>&lt;0.001</td>
</tr>
</tbody>
</table>

<sup>a</sup>Chi-quadrate test, <sup>b</sup>Mann-Whitney test, <sup>c</sup>z-test, <sup>d</sup>correlation

nancy termination by abortion is statistically significantly higher for Roma women than non-Roma (Table 5).

DISCUSSION

Available research results demonstrate a high proportion of early Roma mothers aged 18 years and younger at first birth. Šegregur J and Šegregur D (26) report that, on average, the age of Roma women is lower by more than three years compared to non-Roma. In our sample, Roma women were, on average, 5 years younger than non-Roma. The difference was statistically significant (Table 1). For Roma women under 18, foetal hypotrophy and premature birth are more frequent (12, 22, 33).

The education of Roma women was statistically significantly lower compared to non-Roma (Table 2). The unsatisfactory level of education of Roma women in other European countries is highlighted by several authors (4, 26). The low level of education of the Roma population is, in addition to discrimination, the main cause of high unemployment and the accompanying negative phenomena such as poverty, social exclusion, extremely low mobility and poor health conditions. Thus, raising education levels is a key and starting point in the efforts to improve living conditions in the Roma population (18).
CONCLUSION

The results of this study prove the assumptions on the state of sexual and reproductive health of Roma women. It is characterized by an early beginning of sex life, low age at first birth and multiparity. Problematic is the absence of future mothers in prenatal counselling centres and the associated occurrence of prenatal, perinatal and postnatal complications, or even death of the foetus or newborn. We can prove these facts with the results obtained.

The analysis of determinants of high-risk pregnancies of Roma women is an important contribution to further observation and comparison of the incidence of high-risk pregnancies, the targeted elimination of possible risk factors, spread of enlightenment in the problematic areas of pregnancy, especially in the Roma community. The objective is to improve the course of pregnancy, eliminate potential risk factors, prevent abortions and premature births.

In the approach to the Roma, it is essential to focus on improving accessibility to health care, prevention, knowledgeability and effectively preventing, eradicating all forms of discrimination in access to health care, especially for the Roma women who are more likely to receive health care.

The results of our research complement the missing data on the monitoring of state of reproductive health of the Roma women in one of the districts with the largest Roma community. At the same time, they provide quantitatively based arguments for the institutions that can effectively help the Roma community.

Conflict of Interests
None declared

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