



THE IMPORTANCE OF IDENTIFICATION RISK FACTORS TO WOMEN IN RELATION TO RISK PREGNANCY.

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1 The European union's population is growing older. Women give birth more later, and the number of children in the families is low.

- More and more women are endangered by the risks that complicate their pregnancies, bearing the full-term healthy babies, the health of the women, and have a significant impact on the quality of their lives
- The number of births in the Slovak republic is permanently decreasing; number of spontaneous birth decreases, whereby the share of caesarean sections is constantly increasing from 12.2% in 1996 to 29.6% in 2020 of the total number of births.
- The big majority of pregnancies (approximately 75-80%) are physiological
- In about 20-25% of pregnant women, risk factors occur that can significantly alter physiological course of their pregnancies at any phase.
- A risk pregnancy is the one in the course of which we monitoring and detected biological, social, and demographic risk factors.

- 2 Classification of the risk factors is based on mothers' health - factors such as hypertension, diabetes, cardiovascular and pulmonary diseases, renal insufficiency, anemia and other hematological diseases, genetic diseases, congenital or acquired anomalies of reproductive organs, previous treatment of infertility and menstrual cycle disorders, presence of preeclampsia (EPH Gestosis), incompatibility of blood types, Rh isoimmunization, maternity obesity, overweight before pregnancy or a significant weight gain during pregnancy (more than 12 kg), but also the malnutrition, previous spontaneous abortions, preterm births, stillbirths, congenital defects of a fetus, chromosomal disorders of a child, extrauterine pregnancies, complications during past pregnancies and at birth, and previous gynecological and obstetric operations (e.g. Caesarean section).
- The risk factors during the course of the pregnancy include a multiple pregnancy, a woman after previous multiple pregnancies,
- Age under 17 or over 35.
- Lifestyle factors, risk behaviour factors, abuse, and use of other addictive substances by pregnant women are listed in the publications of several authors.

- During prenatal care, those biopsychosocial factors and women's needs are detected and identified that affect pregnancy, but the greatest attention is focused to the biological ones.
- Psychosocial aspects and needs are dealt only marginally, sometimes they are completely neglected.
- But it is necessary to monitor them during physiological pregnancy, but in particular during risk pregnancy in relation to some variables, because they can significantly change the pregnancy experience and behavior of women during pregnancy.

- 4 In our research, we focused on monitoring these aspects - fear or depression, especially experience of anxiety, stress management, hardness, adaptation and coping skills, social support in relation to the **variables** such as age of a pregnant woman, parity, gestational week, abortion, education, employment, and marital status.

We detected

- **anxiety rate**, differences in anxiety occurrence with regard to the variables
- **severity of depression**, identified the differences in occurrence of depression with regard to the non-variables, ascertained the degree of perception of social support, detected differences in the perception of social support with regard to variables
- **strategy for coping with stress** and detected differences in burden coping strategies with regard to variables, and determined mutual relation between anxiety, fear, depression, and coping burden and perception of social support.

5 Research was ongoing from february to august 2019

- **Data collection methods** were self-assessment questionnaires – Hospital Anxiety and Depression Scale (HADS), Brief Cope to assess coping burden, International Personality Item Pool (IPIP) measuring five traits (extraversion, agreeableness, conscientiousness, emotional stability, and intellect) and consisting of 20 personality items and Perceived Social Support Scale (PSSS).

- **6** To evaluate the questionnaire, we used the:
- statistical methods and the descriptive characteristics: multiplicity (n), relative rate (%), arithmetic mean (m), standard deviation (SD), and median (Mdn).
- All variables were normally distributed on the basis of inclination and slope values, and we used parametric statistics tests as well.
- We used Pearson's coefficient of product correlation (R) to investigate relations between variables.
- For exploring differences in quantitative variables, we used Fischer's F-test (scattering - ANOVA analysis).
- Statistical significance was evaluated to 5%, $p=0,05$, and significance level was 1%.
0,01

7 The research sample consisted of women with risk pregnancy.

- We had approached 110 women and included 93 women with risk pregnancy hospitalized at the gynaecological-obstetrical clinics of the university hospitals.
- The return of the questionnaires was 84.5%.
- The inclusion criteria were pregnant women's attendance to the risk pregnancy centres and willingness to cooperate
- The age of respondents hospitalized for risk factors was at average 31.5.
- The average gestational age was the 32nd week of pregnancy.

Regarding education level

- secondary education had the largest representation of 44 respondents (47.3%),
- followed by university education – 37 respondents (39.8%),
- less represented was education without school leaving examination – 8 (8.6%),
- and 4 respondents (4.3%) reached only basic education

Eighty-nine (95.7%) respondents reported

- cohabitation with a partner or husband
- 4 (4.3%) were single mothers.
- 47 respondents (50.5%) were primiparas,
- 46 responders (49.5%) were multiparas, what is very proportional representation
- Out of 93 respondents - 69 were employed (74.7%) and 24 unemployed (25.3%).

8 As the most common reasons for risk pregnancy, the respondents reported

- the insufficient cervix – 12 respondents (12.9%)
- hypertension – 7 (7.5%),
- IV fertilization – 6 (6.5%),
- diabetes mellitus – 5 (5.4%),
- preeclampsia – 4 (4.3%),
- and an autoimmune disease – 3 (3.2%).
- placenta previa and kidney diseases -2 (2.1)
- post-abortion status was declared by a third of respondents – 28 women (30.1%)

9 Evaluation

- 9.1 We assumed that moderate level of **anxiety** would be most present in the group of respondents – women at risk of pregnancy.
- We assessed the presence of anxiety as mild in one-third of women. In the group of respondents, the highest incidence was the "anxiety-free" status of 59 women (63.5%). There were 34 respondents (36.5%) experiencing mild and severe anxiety.
- The results of search the presence of anxiety in the sample presented show that only a third of respondents feel mild anxiety, with two-thirds not identifying it at all. This finding is surprising for us, given the risk pregnancy factors reported by respondents as well as the number of primiparas.
- To eliminate anxiety, it is important that women change and adjust their lifestyle and daily routine, reduce stress, exercise more and eat healthily; they should be motivated to undergo psychophysical training and education.
- We observe the statistically significant relationship between the level of anxiety and the week of pregnancy in respondents ($p=0.027$). A statistically significant difference was anxiety level in the parity ($F=3.95$; $p=0.049$).
- Higher levels of anxiety were present in primiparas ($M=7.15$). No statistically significant difference was observed at the level of anxiety due to miscarriage ($F=0.14$; $p=ns.$).

- Women who **had spontaneously miscarried** or lost a child experienced have a higher degree of anxiety and fear.
- However, some other studies declare that after previous abortions, women experience the same psychological discomfort during the next pregnancy as the women without this history.
- Therefore, screening for QoL and mental health status in healthy pregnant women who have experienced previous miscarriage and fetal death is essential at the very first visit at the antenatal centre. (Abbaspoor, etc., 2016).
- We observed no statistically significant difference in the level of anxiety due to marital status ($F=1.52$; $p=ns.$).
- No statistically significant difference was observed in the level of anxiety with respect to employment ($F=0.37$; $p=ns.$) as well as in the level of anxiety due to education level ($F=0.001$; $p=ns.$).

- 9.2 Next, we monitored the **presence of depression**. The highest incidence in the presented set of respondents was "depression-free" (n=80.86%) status.
- There were only 13 respondents (14%) with mild depression and severe depression. Mild and severe depression in more than a tenth of the respondents indicates the need for interventions as it might have serious consequences for the course of risk pregnancy.
- We detected an increased incidence of postpartum depression in women with prenatal fear and anxiety. A statistically significant difference was observed in the level of depression due to marital status ($F=7.90$; $p=0.006$). Higher levels of depression were present in respondents living without a partner ($M=7.75$).
- We observed a statistically significant difference in the level of depression with respect to employment ($F=11.15$; $p=0.001$).
Higher levels of depression were present in unemployed respondents ($M=5.79$).
- Active lifestyle/sport is associated with more positive mood conditions, reduced risk of depression and improved health-related quality of life (HRQoL) in the general population.
- Women who are active at the beginning of pregnancy may perceive psychological discomfort more intensely than inactive women, probably because physical activity was before an important strategy for managing stress and negative emotions, while inactive women used other coping strategies. (Tendais, et al. 2011)

9.3 Satisfaction with social support – the study shows that in women at risk of pregnancy, a higher level of social support will dominate. Respondents expressed high satisfaction with experiencing social support ($M=73.13$).

- As a part of the assessment, we evaluated the impact of family, friends, social networks and other sources of support, whereby there was no significant difference among the types of social support.
- However, we found the difference between primiparas and multi-paras in perceived social support. We observed a statistically significant difference in the overall perceived support as well as in all types ($F=7.65$, $p=0.007$). In all cases, multiparas experienced higher perceived social support.
- We found no statistically significant difference in the perceived social support due to abortion, either in the overall score or in the different types. However, there were differences between respondents living with a partner and singles.
- A statistically significant difference was observed in the overall perceived support as well as in all types ($F=15.00$, $p<0.001$). Our research confirmed that lonely women felt a lower degree of social support because they did not have a strong social network and their social relationships are limited.
- No statistically significant difference was found in the perceived social support with respect to woman respondents' employment. Higher perceived support was found in respondents with higher education (university education, secondary school with a leaving examination).

9.4 We also examined the premise that women with risk pregnancy would show out **more adaptive** burden management strategies than maladaptive strategies.

- The respondents used adaptive burden management strategies focused on the problem at most.
- Maladaptive stress management strategies were used most by women without a partner and with poor social support.
- With regard to variables, we noted differences in the use of strategies as follows: multiparas, women with higher education, and employed women used adaptive strategies effectively, whereby maladaptive behaviour was more demonstrated by unemployed, single women and lower-educated women.

- In respondents living with a **partner and single women**, there were statistically significant differences in three burden management strategies: denial ($F=4.32$; $p=0.040$), use of addictive substances ($F=11.53$; $p=0.001$), and “non-engagement” type of behavior ($F=14.5$, $p<0.001$). These strategies were used more by single respondents.
- We found statistically significant differences in two burden management strategies between **employed and unemployed respondents**: addictive substance use ($F=7.75$; $p=0.007$) and “non-engagement” type of behavior ($F=4.48$; $p<0.038$).
- The unemployed respondents used these maladaptive strategies more. Statistically significant differences were found in burden management strategies with regard to the reached educational level of **respondents**: use of emotional support ($F=7.43$; $p<0,001$), use of instrumental support ($F=3.42$, $p=0.021$), planning ($F=3.48$, $p=0.019$), and self-blame ($F=2.99$, $p=0.035$).
- The more educated the respondents were the more they used all four burden management strategies.

Summary

- **Our research shows that education has an impact on the perception** of social support and on the use of adaptation strategies
- **Education does not** affect the extend of experiencing anxiety and depression, the perception of social support, as well as the characteristics of personality.
- **Employment has an impact** on the severity of depression. A higher degree of depression was reported by the unemployed whereby higher and better use of positive stress management strategies was found in the employed. **Employment neither** affects experiencing anxiety, perception of social support, **nor** characteristics of personality.
- **Marital status affects** experiencing depression and lack of social support, and maladaptive behavior, that occurs at a higher rate in the lonely women than the women living with a partner. **Neither marital status nor** the characteristics of personality affect experiencing anxiety.
- **The week of pregnancy does not affect** the incidence of anxiety, depression, or perception of social support. **A week of pregnancy has** an impact on the use of coping – women with higher level of pregnancy use more positive adaptation behavior.
- **Number of abortions or previous births is related to experiencing anxiety – primiparas** experience anxiety more intense; women after previous miscarriages, single women and anxious ones perceive need for social support with a strong intensiveness.

Conclusion

- Examination of psychosocial aspects of experience in women at risk pregnancy should fall within the standard "anamnestic-diagnostic" skills of midwives.
- The incidence of anxiety or depression, especially during a risk pregnancy, represents an adverse prognostic indicator in addition to the complications of pregnancy.
- It worsens women's response to the therapy and the course of pregnancy itself, prolongs hospitalization, and weakens the ability of pregnant women to take care of their needs.
- Anxiety and depression induce a risk to the development of a foetus and ultimately increase the cost of treatment and healthcare requirements.
- Their early recognition and adequate therapy are extremely important.
- The occurrence of anxiety or depression has also been confirmed to a statistically significant extent in our research.
- The network of social support as well as the personality assumptions of our respondents are sufficient to cope with stressful situations.

- Psychosocial needs of women at risk of pregnancy have been not adequately investigated.
- Our experience gained during the course of the research as well as the research results show the need to create a uniform tool for measuring the occurrence of psychosocial factors that affect experiencing of women at risk of pregnancy.
- The analysis of various investigations shows that in general, only a few measurements are made during pregnancy and even less in women at risk of pregnancy aimed at to assessment of the quality of life.
- Despite fact that according to the comparative studies, 10-20% of pregnant women suffer from anxiety or depression, there is no research on the impact of these factors on healthy experiencing of pregnancy in women at risk of pregnancy.

THANK YOU FOR YOUR ATENTION

