

## *Unfulfilled parenthood in the eyes of young adults*

### BACKGROUND

The goal of the study was to present young adults' perceptions of the experience of loss of a child at different stages of its prenatal development, as well as the level of declared support for couples after the loss.

### PARTICIPANTS AND PROCEDURE

The study used a scenario method based on the method by Claudia Lapman and Seana Dowling-Guyer (1995), translated into Polish by Joanna Szymańska (2013). One of the Berlin Social Support Scales (BSSS, Łyszczynska, Kowalska, Mazurkiewicz, & Schwarzer, 2006) was also used. One hundred ninety two young adults (mean age = 26.76,  $SD = 4.64$ ) took part in the research, mainly university students of technical subjects and humanities.

### RESULTS

The study showed that couples who lost their child, regardless of the stage at which it occurred (miscarriage or fetal death), were assessed more frequently as caring, loving, tender and sensitive, in comparison to couples for whom there was no mention of a child at all. Women who lost their child at a later stage (after the 22<sup>nd</sup> week of pregnancy) were assessed significantly more frequently

as relaxed, less lonely, calm and more self-confident than women who miscarried. The results were similar to those for women from the control scenario, where there was no mention of a child at all. In terms of declared support, the subjects declared significantly higher emotional support (expressing empathy, care, trust, intimacy, allowing for self-expression, etc.) for couples who experienced the loss at a later stage of pregnancy than in the control scenario, as well as a higher level of instrumental support (providing material goods, solving difficult tasks together) for couples who experienced miscarriage than the controls.

### CONCLUSIONS

The experience of miscarriage and dealing with the loss is met with lower levels of empathy from the social environment, and, presumably, lower acceptance for grief. It seems important to sensitize people to the experiences of couples who have experienced a miscarriage. It is also important to theoretically and practically prepare psychologists and medical personnel, as well as to develop written guidelines.

### KEY WORDS

experience of loss; miscarriage; child death; support for people who have experienced a loss

ORGANIZATIONS — Institute of Psychology, Opole University, Opole, Poland

AUTHORS' CONTRIBUTION — A: Study design · B: Data collection · C: Statistical analysis · D: Data interpretation · E: Manuscript preparation · F: Literature search · G: Funds collection

CORRESPONDING AUTHOR — Prof. Alicja Kalus, Institute of Psychology, Opole University, 1 Staszica Square, 45-052 Opole, Poland, e-mail: alicja.kalus@uni.opole.pl

TO CITE THIS ARTICLE — Kalus, A., & Kielek-Rataj, E. (2014). Unfulfilled parenthood in the eyes of young adults. *Health Psychology Report*, 2(3), 189–196. DOI: 10.5114/hpr.2014.45299

## BACKGROUND

Procreational function is one of the normative tasks in the cycle of family development. Many married couples, with the exception of those who remain childless by choice, undertake this developmental task. A significant number of married couples meet difficulties in fulfilling this task. Among the reasons for procreational difficulties is the experience of a loss of a child during the prenatal period (Akker van den, 2012). The loss of a child in the prenatal period is classified as a traumatic experience. Parents, especially mothers, can experience the symptoms of post-traumatic stress disorder (PTSD). Research shows that these symptoms can last for 6 months (Tsartsara & Johnson, 2006), or even for a year (Bidzan, 2013) after the child loss. Bidzan emphasises that the loss of an unborn child is associated with suffering, especially if the child has already been personified, and the fetus is viewed as a separate being (Bidzan, 2013). The loss is understood as a loss of a value, approval of society and a close person (Heszen-Niejodek, 2005).

Child loss might occur at different stages of its prenatal development. Miscarriage is a spontaneous termination of pregnancy before the 20<sup>th</sup> week of its duration<sup>1</sup> (Branch, Gibson, & Silver, 2011). The second period of loss is classified as 'intrauterine fetal demise', and it applies to the death of the fetus in the second half of pregnancy. In the United States of America, the National Center for Health Statistics classifies fetal death as 'intrauterine fetal demise' if it occurs after the 20<sup>th</sup> week of pregnancy (Jaworski, 2008). According to the World Health Organization (1977), the demise before a full expulsion or extraction from the mother's womb is defined as a death of the fetus.

The prenatal loss of a child is a significant phenomenon, as 10-25% of women lose at least one pregnancy (Bręborowicz, 2003). According to the Polish Demographic Yearbook (Central Statistical Office of Poland, 2012a) there were 1653 stillbirths in 2011 in Poland. The third period for loss is the perinatal period (the death of a child during the neonatal period). According to the data in the Polish Statistical Yearbook (Central Statistical Office of Poland, 2012b) this phenomenon concerns 437 deaths for every 100 000 stillbirths.

Research to date, used as the basis for the current research project presented in the article, has been concentrated on the determinants of the bond between parents and the child in the prenatal period, as well as the consequences of the loss of a child in the prenatal period, especially with regards to building a prenatal bond with the next child. The analysis of results of these studies leads to the following conclusion: the development of a bond with a child in the prenatal period occurs differently in women

whose pregnancy has been a healthy one compared to those who had difficulties in getting pregnant due to infertility or child loss, usually due to miscarriage (Bielawska-Batorowicz, 2006; Pawlicka, Chrzan-Dętkoś, & Lutkiewicz, 2013). Research by Pawlicka et al. (2013, p. 146) suggests that women who experienced difficulties with conception, compared to those who did not, are more concentrated on and form a stronger bond with their unborn child. They are significantly more focused than the women who experienced no problems conceiving on the wellbeing of the child in their womb, its behaviours and their meaning, they ponder upon its experiences in the womb, and they imagine what it is like during the pregnancy and what it will be like after the birth. As such, they form a stronger representation (image) of the imagined child.

According to studies by Bielawska-Batorowicz (2006) the bond between women who have experienced infertility or miscarriage and a child in the prenatal period is characterised by lower intensity. The second type of research shows that social support is an important factor in forming the bond between the mother and the unborn child (Abasi, Tahmasebi, Zafari, & Takami, 2012). Another type of research is concerned with the personality features of women after miscarriage (Rutkowska, Kowalska, Makara-Studzińska, & Kwaśniewska, 2011).

The above findings form a theoretical basis for the current study. It seems correct to suppose that the period of loss (miscarriage or death of a fetus) has a significant meaning for married couple experiencing child loss. This meaning relates to the experience of unfulfilled parenthood and grief, and is connected to varied levels of understanding, judgment and support from others. The experience of unfulfilled parenthood is understood as an abrupt halt in the natural process of bonding between the parents and a child that occurs in the prenatal period. It is inextricably linked to the experience of loss, and the ability to deal with the loss as well as grief. An important factor in dealing with loss is one's social environment – especially one's closest family and friends. A relevant research question emerges from the above findings: what assessments and attitudes towards a loss of a child in the prenatal period characterise young adults, and what is the relation between these assessments and attitudes and the declared support for the married couple after the loss of a child in the prenatal period? The goal of the current study is to look for an answer to the question: "What are the young adults' assessments and attitudes towards those who experienced a loss of a child at different periods of its prenatal development and what is the level of declared support to couples after the loss?" The specific issues involve: (1) young adults' perceptions of couples who lost their child, (2) young adults' perceptions of couples who lost their child

due to miscarriage (before the 22<sup>nd</sup> week of pregnancy) and couples who lost their child during the fetal period of pregnancy, (3) young adults' perceptions of the occupational status of couples who lost their child during pregnancy. Another research question concerns the support for couples who experienced a loss of a child during pregnancy or soon after birth declared by young adults. The period of young adulthood has been chosen as one during which the fulfilment of procreational tasks is one of the most important developmental tasks (Havighurst, 1953).

## PARTICIPANTS AND PROCEDURE

The study was conducted using a scenario method, based on the method of Lampman and Dowling-Guyer (1995), translated into Polish by Szymańska (2013). This method consists of six versions of the same story describing a married couple of Agnieszka and Jarek, where each participant is presented with one of the versions. In the current study the scenarios varied in terms of the cause of child loss (three variants) and the occupational status (two variants). In one variant the couple was described as having lost their child at an early stage of pregnancy (due to a miscarriage), in the second one as having lost their child at a later period of pregnancy, and in the third (control) case there was no mention of a child at all. Additionally, there were two variants of occupational status: the higher status was represented by the professions of programmer and architect, and the lower status was represented by car mechanic and beautician. In the previous study the occupational status had been introduced as a variable that might influence the perception of the reasons for childlessness. In order to preserve the original structure of the tool, this division was preserved in the current study, wherein the analyses will be concerned mostly with the diversity of the attitudes of young adults related to a loss of a child, whereas the occupational status will only be discussed if there is an interaction between it and the loss. Every description of the married couple was accompanied by four scales, on which the subject would assess the characters in the stories and their relationship: Drive, Caring, Emotional Health, Relationship. The first three were constructed as semantic differentia – pairs of two bipolar adjectives such as ambitious – unambitious, hard-working – lazy. The Drive scale is composed of seven items, e.g. ambitious, determined, hardworking, competent, responsible. The Caring scale involves six items, e.g. caring, loving, tender, sensitive. The Emotional Health scale contains four pairs of features, e.g. stressed, lonely, nervous, self-conscious.

The current study also used one of the Berlin Social Support Scales (BSSS, Łuszczynska, Kowalska, Mazurkiewicz, & Schwarzer, 2006). These scales are

used to measure cognitive and behavioural aspects of social support. BSSS has six scales: Perceived Available Support, Need for Support, Support Seeking, Actually Received Support (Recipient), Provided Support (Provider), and a Protective Buffering Scale (Support Provider/Support Recipient). Only the fourth scale, concerned with the support actually provided, was used in the current study. This scale is concerned with three types of support: emotional, informational (giving advice, information that could help solving the problem) and instrumental (providing actual assistance). The Polish version of BSSS has satisfactory psychometric parameters. The Cronbach  $\alpha$  coefficients vary between .74 and .90.

One hundred and ninety-two participants took part in the study (mean age 26.67,  $SD = 4.64$ ), mainly university students of technical participants and humanities.

## RESULTS

The distribution of results is presented in Table 1.

Two-way analysis of variance was conducted (the  $3 \times 2$  factorial involved child-loss variants: miscarriage / loss at a late stage / control – no information; occupational status: low/high respectively) in order to investigate whether the characters in the stories were assessed differently in relation to how they lost a child, as well as their occupational status, where the results on each scale were the dependent variables. The outcome is presented in Table 2.

The analysis revealed that there was a difference between the assessment of Jarek in the Caring scale,  $F(2, 186) = 16.58, p < .001$ , as well as Agnieszka on the Caring scale,  $F(2, 186) = 16.41, p < .001$  and Emotional Health,  $F(2, 186) = 23.41, p < .001$ , depending on whether they had been described as experiencing a miscarriage, loss of a child at a later stage of pregnancy, or there had been no information about child loss at all. In this respect there were also differences in the provided emotional support  $F(2, 186) = 5.85, p = .004$  (Welsch's test) and provided instrumental support,  $F(2, 186) = 3.04, p = .050$ .

In order to further explore the group effect, multiple comparisons were conducted between the participants assessing the married couples on the three versions of the child loss variable (miscarriage, loss at a late stage, control – no information). Scheffe's conservative post-hoc test for equal variances and the Games-Howell test for unequal variances were used. The results are shown in Table 3.

The *post hoc* analysis revealed that the control variant differed in assessment from the other two variants in five cases. Jarek from the control variant was described significantly lower on the Caring scale than in the variants with experienced miscarriage or loss of the child at a late stage of pregnancy.

Table 1

*Descriptive statistics of the results broken down by child loss variant and occupational status*

|                       | LC    |      | LM    |      | LS    |      | HC    |      | HM    |      | HS    |      |
|-----------------------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|
|                       | M     | SD   |
| Drive J               | 28.94 | 4.46 | 26.75 | 4.32 | 28.00 | 5.44 | 27.44 | 4.34 | 30.06 | 5.90 | 30.56 | 4.83 |
| Drive A               | 23.62 | 6.14 | 22.31 | 5.06 | 24.56 | 6.68 | 26.88 | 5.51 | 29.19 | 4.33 | 29.12 | 4.53 |
| Caring J              | 19.56 | 3.78 | 23.25 | 3.98 | 21.56 | 4.79 | 18.06 | 5.41 | 23.44 | 5.08 | 22.00 | 3.82 |
| Caring A              | 19.88 | 5.33 | 24.69 | 3.00 | 23.44 | 4.13 | 20.75 | 5.58 | 24.38 | 4.86 | 24.81 | 4.19 |
| Health J              | 13.13 | 3.39 | 11.88 | 3.63 | 11.94 | 1.74 | 12.19 | 4.05 | 11.94 | 3.64 | 13.75 | 2.86 |
| Health A              | 14.94 | 2.40 | 9.75  | 3.06 | 11.56 | 2.30 | 13.44 | 3.85 | 10.56 | 4.28 | 12.00 | 3.73 |
| Emotional support     | 30.25 | 5.21 | 31.44 | 3.59 | 31.72 | 5.60 | 26.19 | 9.43 | 30.25 | 5.58 | 32.37 | 2.80 |
| Informational support | 5.88  | 1.76 | 5.00  | 2.06 | 6.25  | 1.67 | 5.44  | 2.09 | 5.56  | 1.87 | 5.63  | 2.06 |
| Instrumental support  | 9.81  | 1.69 | 10.31 | 1.82 | 9.81  | 2.04 | 8.81  | 2.55 | 9.94  | 1.32 | 9.88  | 1.72 |

*Note.* L – low occupational status, H – high occupational status, C – control group, M – miscarriage, S – loss at a late stage of pregnancy

Table 2

*Two-way analysis of variance with 3 × 2 factorial*

|                       | Sources of variation |        |                     |        |                |      |
|-----------------------|----------------------|--------|---------------------|--------|----------------|------|
|                       | Child loss variant   |        | Occupational status |        | Variant status |      |
|                       | F                    | p      | F                   | p      | F              | p    |
| Drive J               | 0.89                 | .414   | 4.22                | .041   | 4.44           | .013 |
| Drive A               | 1.44                 | .240   | 38.39               | < .001 | 1.82           | .165 |
| Caring J              | 16.58                | < .001 | 0.20                | .655   | 0.87           | .421 |
| Caring A              | 16.41                | < .001 | 0.95                | .332   | 0.57           | .567 |
| Emotional Health J    | 1.44                 | .239   | 0.43                | .513   | 2.84           | .061 |
| Emotional Health A    | 23.41                | < .001 | 0.03                | .863   | 2.19           | .115 |
| Emotional support     | 5.85                 | .004   | 3.12                | .079   | 2.72           | .068 |
| Informational support | 1.85                 | .162   | 0.36                | .549   | 1.76           | .175 |
| Instrumental support  | 3.04                 | .050   | 2.56                | .111   | 1.27           | .283 |

The same relation occurred with regards to assessment of Agnieszka on the Caring scale. On the Emotional Health scale Agnieszka from the control variant was assessed significantly higher than in the two remaining variants. At the same time, Agnieszka who had experienced loss of the child at a late stage of pregnancy was assessed higher on the Emotional Health scale than the one who had experienced miscarriage. In terms of support, significantly higher emotional support was declared for the person experiencing the loss at a later stage of pregnancy, whereas significantly higher instrumental support was declared for the person experiencing a miscarriage. Plots of the means

of dependent variables for the three variants are presented below (Figures 1 and 2).

The analysis also revealed a significant interaction between the child loss variant and occupational status variables for the assessment of Jarek on the Drive and Emotional Health scales, as well as emotional support. The interaction effect was explored by examining the results for the 6 versions of the story (child-loss variant\*occupational status) and conducting a one-way analysis of variance as well as Scheffe's and Games-Howell *post hoc* tests.

The investigation of the interaction effect (Table 4) showed that Jarek, of low occupational status, who

Table 3

Multiple comparisons for the group independent variable

|                             | Control (C)  |             | Miscarriage (M) |             | Loss at a late stage of pregnancy (S) |             | Post hoc test  |   |
|-----------------------------|--------------|-------------|-----------------|-------------|---------------------------------------|-------------|--|---|
|                             | M            | SD          | M               | SD          | M                                     | SD          | Scheffe  | Games-Howell  |
| Drive J                     | 28.19        | 4.43        | 28.41           | 5.39        | 29.28                                 | 5.26        |  |   |
| Drive A                     | 25.25        | 6.01        | 25.75           | 5.82        | 26.84                                 | 6.11        |  |   |
| <b>Caring J</b>             | <b>18.81</b> | <b>4.69</b> | <b>23.34</b>    | <b>4.53</b> | <b>21.78</b>                          | <b>4.30</b> | <b>K &lt; P</b><br><b>(p &lt; .001)</b><br><b>K &lt; S</b><br><b>(p = .001)</b>  | <i>Unfulfilled parenthood in the eyes of young adults</i> |
| <b>Caring A</b>             | <b>20.31</b> | <b>5.43</b> | <b>24.53</b>    | <b>4.01</b> | <b>24.12</b>                          | <b>4.18</b> | <b>K &lt; P</b><br><b>(p &lt; .001)</b><br><b>K &lt; S</b><br><b>(p &lt; .001)</b>   |   |
| Emotional Health J          | 12.66        | 3.73        | 11.91           | 3.60        | 12.84                                 | 2.52        |  |   |
| <b>Emotional Health A</b>   | <b>14.19</b> | <b>3.27</b> | <b>10.16</b>    | <b>3.71</b> | <b>11.78</b>                          | <b>3.08</b> | <b>K &gt; P</b><br><b>(p &lt; .001)</b><br><b>K &gt; S</b><br><b>(p &lt; .001)</b><br><b>P &lt; S</b><br><b>(p = .026)</b> |   |
| <b>Emotional support</b>    | <b>28.22</b> | <b>7.83</b> | <b>30.84</b>    | <b>4.70</b> | <b>32.05</b>                          | <b>4.40</b> | <b>K &lt; P</b><br><b>(p = .060)</b><br><b>K &lt; S</b><br><b>(p = .003)</b>   |   |
| Informational support       | 5.66         | 1.93        | 5.28            | 1.97        | 5.94                                  | 1.89        |  |   |
| <b>Instrumental support</b> | <b>9.31</b>  | <b>2.20</b> | <b>10.13</b>    | <b>1.59</b> | <b>9.84</b>                           | <b>1.87</b> | <b>K &lt; P</b><br><b>(p = .048)</b>   |   |

*Unfulfilled parenthood in the eyes of young adults*

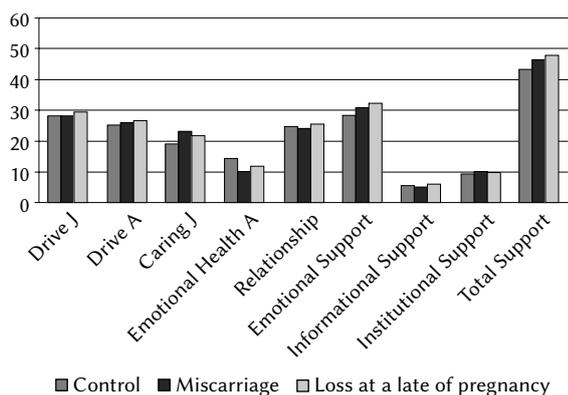


Figure 1. Means of all dependent variables for the three variants.

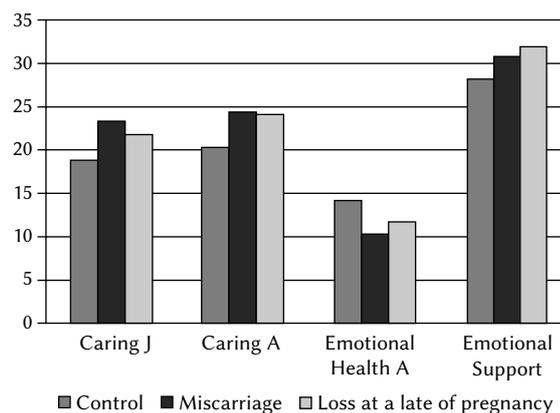


Figure 2. Statistically significant means of dependent variables for the three variants.

had lost the child at a late state of his wife’s pregnancy, was assessed significantly lower on the Emotional Health scale than Jarek, of high occupational status (Levene’s test  $F(5, 186) = 2.10, p = .013$ ). In terms of emotional support, significantly higher support was

declared by the participants for the characters who lost the child at a late stage of pregnancy and had a high occupational status than for the characters of high occupational status in the control variant (Levene’s test  $F(5, 186) = 8.69, p < .001$ ).

Table 4

Multiple comparisons of interaction of child-loss variant\*occupational status variables

|                                 | LC    | LM    | LS    | HC    | HM    | HS    | Scheffe  | Games-Howell |
|---------------------------------|-------|-------|-------|-------|-------|-------|--|--------------|
| Drive J                         | 28.94 | 26.75 | 28.00 | 27.44 | 30.06 | 30.56 | NP < WS ( $p = .092$ )   |              |
| Emotional Health J <sup>#</sup> | 13.13 | 11.88 | 11.94 | 12.19 | 11.94 | 13.75 | NS < WS ( $p = .039$ )   |              |
| Emotional Support <sup>##</sup> | 30.25 | 31.44 | 31.72 | 26.19 | 30.25 | 32.37 | WK < WS ( $p = .013$ )<br>WK < NP ( $p = .056$ )<br>WK < NS ( $p = .065$ ) |              |

Note. <sup>#</sup>Health J – Levene's test  $F(5, 186) = 2.10, p = .013$ ; <sup>##</sup>Emo – Levene's test  $F(5, 186) = 8.69, p < .001$

Alicja Kalus,  
Ewa Kielek-Rataj

Two results were obtained at a level of statistical tendency: (1) higher emotional support was offered to the characters of lower occupational status after miscarriage than the characters of higher occupational status from the control variant; (2) similarly higher emotional support was declared for the characters of lower occupational status after miscarriage than the characters of higher occupational status from the control variant.

## DISCUSSION

The study presented in this article was concerned with the assessments and attitudes towards unfulfilled parenthood resulting from a loss of the child in the prenatal period. The investigated participants were young people in the period of early adulthood. The presented results seem to be both in line with current knowledge, and also complement it. They are concentrated on the assessment of the experience of a loss of the child in the prenatal period as well as declared social support from the young adults to the parents after the loss. The conducted statistical analyses revealed some significant relationships. The following relationships were observed with regards to whether there are any differences in perception between married couples who lost a child due to miscarriage, those who lost a child at a late stage of pregnancy and the married couples in the control variant. First, it appears that couples who experienced loss, irrespective of the period at which it occurred (miscarriage or fetal death) were assessed higher on the Caring scale in comparison to the couples for which there was no mention of the child. Young adults assessed them significantly more frequently as caring, loving, tender and sensitive. Second, the study suggests that the assessment of the mother who experienced a loss of the child at a later stage of development – after the 22<sup>nd</sup> week of pregnancy – is described significantly more frequently as relaxed, less lonely, calm and more self-confident than the woman who miscarried. Similar assessments were obtained for the woman from the control scenario where there was no mention of a child. Pre-

vious research suggests that women participant to a high-risk pregnancy experience significantly more negative emotions (Rutkowska et al., 2011). Loss of the child at a later stage of pregnancy seems to be a significantly different experience to miscarriage. The third finding is concerned with the declared support from the investigated participants for characters experiencing loss at a later stage of pregnancy, due to miscarriage or in the control variant. Social psychology describes social support as help available to an individual in difficult situations, resources delivered to the individual through interactions with other people, consequences of one's membership in the society and fulfilment of needs in a difficult situation by significant others and a reference group (Sęk & Cieślak, 2004). The study revealed that subjects declared significantly higher emotional support (expressing empathy, care, trust, intimacy, allowing for self-expression, etc.) for people who experienced loss at later stages of pregnancy than for those in the control scenario, as well as significantly higher instrumental support (providing material goods, doing difficult tasks together) for people who experienced miscarriage than for those in the control variant.

In an attempt to explain the current results, one must refer to the findings of the psychology of pregnancy. The prenatal period is divided into three trimesters, each of them lasting three months (Kornas-Biela, 2000). The development of a child in each of the trimesters is characterized by different change dynamics, but the most intense occurs in the first trimester (Provine, 1993). The beginning of a pregnancy is also associated with significant changes in the lives of the parents of the child. New developmental tasks emerge, including the roles of mother and father. The changes in the first trimester of pregnancy are associated primarily with the physical and psychological functioning of the couple, and especially the woman. Significant changes that occur in the second and third trimester are noticeable in the social environment (Kornas-Biela, 2009). The visible changes of the pregnancy cause the women who lost their child at a late stage of pregnancy to be assessed as experiencing fewer negative emotions, and may count on more emotional support. In the case of miscarriage, par-

ents may expect greater instrumental support. Parents who experienced the loss of a child during a late stage of pregnancy are afforded a higher level of social acceptance for experiencing pain and grief. They also have the possibility to say goodbye to their child and to bury the child's body. These elements are important for the appropriate course of grief and they stimulate more efficient coping mechanisms (Ney, 1977). Grief after a miscarriage is usually hidden, and social acceptance for the grief is often minimal. Women often hear from the physicians that 'this' should be removed; they undergo a procedure called 'uterus cleaning' and may even be told that 'it's good that it is aborting now, it will get easier later'.

These results lead to several important conclusions. First, they bring attention to the contrasts between the psychological situations of parents who have experienced miscarriage and those who lost the child at a later stage of development. The experience of miscarriage and dealing with the associated loss evokes lower levels of empathy from the social environment and, one can assume, lower social acceptance for grief. It is expressed, for example, by the fact that women do not have the possibility to say goodbye to the child's body (Ogryzko-Wiewiórkowska, 1994). Most frequently, in such cases there are no rituals associated with burial, which are an important factor in the course of grief. Second, society should be sensitized to the experiences of parents after a miscarriage. It seems important to prepare psychologists and medical personnel both theoretically and practically, as well as to develop written guidelines.

#### ENDNOTES

1 Before the 22<sup>nd</sup> week in Poland.

#### REFERENCES

- Abasi, E., Tahmasebi, H., Zafari M., & Takami, G. N. (2012). Assessment on effective factors of maternal-fetal attachment in pregnant women. *Life Science Journal*, 1, 69-75.
- Akker van den, O. B. A. (2012). *Reproductive Health Psychology*. Chichester, West Sussex, UK: Wiley Blackwell.
- Bidzan, M. (2013). *Nastoletnie rodzicielstwo. Perspektywa psychologiczna* [Teenage parenthood. Psychological perspective]. Gdańsk: Harmonia Universalis.
- Bielawska-Batorowicz, E. (2006). *Psychologiczne aspekty prokreacji* [The psychological aspects of procreation]. Katowice: „Śląsk” Wydawnictwo Naukowe.

- Branch, D. W., Gibson, M., & Silver, R. M. (2011). Poronienie nawracające [Recurrent miscarriage]. *Ginekologia po Dyplomie*, 2, 37-44.
- Bręborowicz, G. H. (2003). *Położnictwo i ginekologia* [Obstetrics and Gynaecology]. Warsaw: PZWL.
- Central Statistical Office of Poland (GUS) (2012a). *Rocznik Demograficzny* [Demographic Yearbook]. Warszawa: Zakład Wydawnictw Statystycznych.
- Central Statistical Office of Poland (GUS) (2012b). *Rocznik Statystyczny* [Statistical Yearbook]. Warszawa: Zakład Wydawnictw Statystycznych.
- Havighurst, R. J. (1953). *Human development and education*. New York: Longman & Greens.
- Heszen-Niejodek, I. (2005). *Teoria stresu psychologicznego i radzenia sobie* [The theory of stress and coping]. In: J. Strelau (ed.), *Psychologia* [Psychology] (pp. 466-492). Gdańsk: GWP.
- Jaworowski, A. (2008). *Ocena skuteczności metod farmakologicznej indukcji porodu w zaawansowanej ciąży obumarłej* [Assessment of methods for pharmacological induction of labour in advanced pregnancy in order to expel a demised foetus]. Cracow: Collegium Medicum UJ.
- Kornas-Biela, D. (2000). *Okres prenatalny* [Prenatal development]. In: B. Harwas-Napierała, & J. Trempała (eds.), *Psychologia rozwoju człowieka* [The psychology of human development] (pp. 303-316). Warsaw: Wydawnictwo Naukowe PWN.
- Kornas-Biela, D. (2009). *Pedagogika prenatalna* [Prenatal Pedagogy]. Lublin: KUL.
- Lampman, C., & Dowling-Guyer, S. (1995). Attitudes Toward Voluntary and Involuntary Childlessness. *Basic and Applied Social Psychology*, 17, 213-222.
- Łuczyńska, A., Kowalska, M., Mazurkiewicz, M., & Schwarzer, R. (2006). Berlińskie Skale Wsparcia Społecznego (BSSS). Wyniki wstępnych badań nad rzetelnością i trafnością [The Berlin Scales of Social Support (BSSS). Results of preliminary research of their reliability and validity]. *Studia Psychologiczne*, 44, 17-27.
- Ogryzko-Wiewiórkowska, M. (1994). *Rodzina a śmierć* [Family and death]. Lublin: Wydawnictwo UMCS.
- Pawlicka, P., Chrzan-Dętkoś, M., & Lutkiewicz, K. (2013). Prężność psychiczna przyszłych matek oraz kolejność ciąży jako moderatory budowania więzi z nienarodzonym jeszcze dzieckiem [Psychological resilience and the number of previous pregnancies as moderators of building a bond with an unborn child]. *Family Forum*, 3, 139-152.
- Provine, R. R. (1993). Prenatal behavior development. Ontogenetic adaptations and non-linear processes. In: G. J. Savelsbergh (ed.), *The development of coordination in infancy. Advances in psychology* (pp. 203-236). Amsterdam: North-Holland/Elsevier Science Publishers.
- Rutkowska, A., Kowalska, A., Makara-Studzińska, M., & Kwaśniewska, A. (2011). Analiza struktury osobowości u kobiet w pierwszej ciąży prawidłowej

*Unfulfilled parenthood in the eyes of young adults*

i wysokiego ryzyka [Analysis of the personality structure of women during a normal and high risk first pregnancy]. *Current Problems of Psychiatry*, 12, 420-427.

Sęk, H., & Cieślak, R. (2004). *Wsparcie społeczne – sposoby definiowania, rodzaje i źródła wsparcia, wybrane koncepcje teoretyczne* [Social support – definitions, types and sources of support, selected theoretical framings]. In: H. Sęk, & R. Cieślak (eds.), *Wsparcie społeczne, stres i zdrowie* [Social support, stress and health] (pp. 11-28). Warszawa: PWN.

Alicja Kalus,  
Ewa Kiełek-Rataj

Szymańska, J. (2013). Childless by choice in perception of young adults. *Family Forum*, 3, 79-95.

Tsartsara, E., & Johnson, M. P. (2006). The impact of miscarriage on women's pregnancy-specific anxiety and feelings of prenatal maternal-fetal attachment during the course of a subsequent pregnancy: An exploratory follow-up study. *Journal of Psychosomatic Obstetrics and Gynecology*, 3, 173-182.

World Health Organization (1977). *Manual of the international classification of diseases, injuries and causes of death* (9 ed.). Geneva: WHO.