Conditions of the Quality of Life and Life Satisfaction of Mothers of Preterm Babies in Poland

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Premature Birth Trauma

According to the World Health Organization, the correct duration of pregnancy in women is 38 to 42 weeks. Pregnancy terminated with delivery between the 22nd and 37th week is called the premature birth, and the born infant is called a preterm baby. Currently premature birth is the most frequent complication occurring in case of unifetal [1,2] and multifetal [3-7] pregnancies. The indicator of premature births in Poland decreases year by year, nevertheless it is still higher than in other developed European countries and it is estimated as approx. 8% [8].

Premature birth is a distressing situation for women. Therefore, can premature birth be considered as a psychological trauma? Many scientists think that premature birth is indeed a psychological trauma due to the emotional background and intensity of effects [9-14], as well as its short-term and long-term consequences. It may condition, especially in case of a difficult and complicated delivery, the Posttraumatic Stress Disorder, PTSD [15]. Data presented in literature, which refer to the occurrence of PTSD symptoms after the delivery, are not unequivocal. It is estimated that at least between 9% [16] to 34% [17] of women in labor experienced giving birth as a trauma. It is worth emphasizing that birth can be a traumatic event before it actually occurs (the perspective of giving birth, including life threatening premature birth). It is underlined that help provided to parents in case of a premature birth trauma is a crisis intervention and is analogous to the one provided to people suffering from PTSD [10]. Factors, which determine the perception of a premature birth as a traumatic event, include the following: parents’ anxiety whether the child will survive, diametrically changeable infant’s situation and chronic uncertainty about the situation; loss of ‘the fantasy baby’; anxiety about the infant’s further somatic health; availability of negative information about the long-term consequences of premature birth and a mother’s confrontation with her traumatic experience from her childhood [9].

Preterm babies form a heterogenic clinical group, whose health state is conditioned by their maturity, birth mass and fetal age; nevertheless, due to the immature life functions body systems they require special supervision and care [18]. It is estimated that 80% of deaths during the postpartum period are related to premature birth [19]. Currently, infants born in the 24th week of pregnancy have 50% chances for surviving, in the 25th week – 70%, in the 26th week – 80%. It is assessed that 1/3 of infants born between the 23rd – 25th week of fetal age, 40% of those born between the 26th – 29th week and 65% of those born between the 30th – 33rd week of fetal age will not have any health problems. Others are diagnose to suffer from various diseases [20]. The most important ones are presented in Table 1.

Can this fact have an impact on the assessment of the quality of life and life satisfaction of these babies’ mothers? If so, is a baby’s state of health the only factor affecting this assessment, or are there any other conditions of the quality of life and life satisfaction or preterm babies’ mothers? If so, what are they?

‘Becoming’ a Preterm Baby’s Parent

In addition, premature birth trauma has to be considered in terms of adopting a new parental role, i.e. ‘being a preterm baby’s parent’, which the spouses/partners have not been prepared to during the pregnancy. The premature birth problem is closely related to the problem of infants’ survival rate indicator, and potential complications. Due to the medical progress infants weighing less than 1000 g, being just 28 weeks old, are nowadays rescued [4,19]. Also introducing surfactants in treatment of respiratory failure increased the survival rate among infants born before the 29th week of pregnancy and weighing between 500 and 750 g three times [8]. It is worth adding that the minimum age for a preterm baby’s survival is the 23rd week of gestation [21]. Therefore in recent years the main problem has been not keeping preterm babies alive, but diminishing the consequences of premature birth, so that preterm babies do not differ from children born on due date. In our study we verified factors affecting the quality of life and life satisfaction of preterm babies’ mothers. We adopted Allen’s model (Figure 1), which considers a birth to be a traumatic event.

Our study included 109 patients from the Obstetrics Clinic at the Medical University in Gdańsk, who gave birth to 137 preterm babies: 86 from unifetal pregnancies and 51 from multifetal pregnancies, 80 girls (58.4%), 57 boys (41.6%). The impact of the following variables was assessed: Pregnancy termination date; Birth weight; Apgar scale result; Pregnancy type: correct versus other; Birth type: physiological birth versus C-section; Baby position at birth: head down, breech,

<table>
<thead>
<tr>
<th>Condition</th>
<th>Preterm</th>
<th>Full-term</th>
<th>Correct</th>
<th>Other</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respiratory Distress Syndrome (RDS)</td>
<td>Almost all</td>
<td>Most</td>
<td>23rd</td>
<td>25th</td>
<td></td>
</tr>
<tr>
<td>Chronic Lung Disease (CLD)</td>
<td>65%</td>
<td>50%</td>
<td>26th</td>
<td>29th</td>
<td>10-15%</td>
</tr>
<tr>
<td>Patent Ductus Arteriosus (PDA)</td>
<td>40-50%</td>
<td>40-50%</td>
<td>30th</td>
<td>33rd</td>
<td></td>
</tr>
<tr>
<td>Periventricular/Intraventricular Haemorrhage (PVH/IVH) / Periventricular leukomalacia (PVL)</td>
<td>15-20%</td>
<td>5-10%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Retinopathy of prematurity (ROP)</td>
<td>100%</td>
<td>75%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Infections</td>
<td>50%</td>
<td>30%</td>
<td></td>
<td></td>
<td>15%</td>
</tr>
<tr>
<td>Necrotizing enterocolitis (NEC)</td>
<td>5-10%</td>
<td>5-10%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Own work, based on Linden [21]

Table 1: The most frequent health problems with preterm babies depending on their fetal age.
shoulder presentation; History of negative procreation experience; Subjective impact of a women on the course of delivery; Similarity of the own baby to the fantasy one (in terms of appearance and behavior); Psychomotor development of a baby; Quality of the marital relation; Social support (including: the expected support, received support and the assessment of the quality of the received support).

The obtained results indicate that the assessed quality of life and life satisfaction of preterm babies’ mothers is affected by the birth date (preterm versus on time), birth type (physiological versus C-section), subjective impact of a woman on the course of delivery, similarity of the own baby to the fantasy one (in terms of appearance and behavior), psychomotor development of a baby, quality of the marital relation, support received from the medical personnel and the partner. Currently it cannot be stated unequivocally that these factors play identical role with all preterm babies’ mothers, nevertheless biological factors (biomedical predictors, e.g. birth date, birth type), psychological factors (e.g. impact of a women on the course of delivery) and social ones (especially the quality of the marital relation and social support) affect the assessed quality of life and life satisfaction of preterm babies’ mothers.

Due to the fact that giving birth to a preterm baby affects the functioning of the whole family, the conditions of the assessed quality of life and life satisfaction of mothers (and fathers) require further investigation. The results may trigger the implementation of interdisciplinary actions aimed at not only stimulating the development of disordered areas with preterm babies, but also improving the physical, psychological and social state of parents affected by the preterm birth trauma.

References