

Psychoemotional status of families of preterm newborns with patent ductus arteriosus in the industrial region of a country with a developing economy

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Introduction. The birth of a very preterm child in the family is a great stress, which is associated with the presence of a multiple congenital abnormalities, including congenital heart disease. Successful nursing management of such children significantly increased the number of congenital heart defects, in particular, patent ductus arteriosus (PDA). PDA in developing countries usually requires surgical treatment due to absence of parenteral forms of non-steroids, which in turn is an additional stress factor.

Methods. We interviewed 112 families of preterm infants. 47 children (group 1) have had surgery of PDA. In 65 families (group 2) the situation did not require surgical treatment in the neonatal period. The survey was conducted using adapted Symptom Checklist-90-revised questionnaires, Family Environmental Scale.

Results. The average score for clusters of questionnaires among mothers was: somatization 1.29 ± 0.46 ; anxiety 2.06 ± 0.52 ; depression 1.30 ± 0.53 , an index of general severity 1.56 ± 0.49 . The same parameters for fathers were 0.60 ± 0.33 , 0.82 ± 0.35 , 1.21 ± 0.40 , 0.74 ± 0.44 , respectively, and were significantly lower than that of mothers. In group 1, the average index of total severity in the parents was 1.95 ± 0.62 , in the second 1.36 ± 0.43 ($p < 0.01$).

Conclusions. The presence of the PDA which required surgical treatment was the main stress factor. The level of anxiety was higher in mothers than in fathers. The level of fathers' distress affected on the relationship in the family significantly more often in group 1. All parents would prefer the availability of professional psychological assistance. Certification of intravenous NSAIDs would reduce surgical management of PDA.