

WHY AND WHEN IS IT IMPORTANT TO USE THE STANDARDIZED QUESTIONNAIRE "AGES & STAGES QUESTIONNAIRES" (ASQ-3) - "AGE & DEVELOPMENT OF THE CHILD", FOR ASSESSMENT AND MONITORING OF CHILDREN'S DEVELOPMENT IN EARLY CHILDHOOD?

Dragana Lozanovic (1), Marica Milidrag (1), Radovan Bogdanovic (1), Ljiljana Sokal Jovanovic (1), Marina Videnovic (2), Ivana Stepanovic Ilic (2)

(1) ASSOCIATION OF PEDIATRICIANS OF SERBIA; (2) INSTITUTE OF PSYCHOLOGY, DEPARTMENT OF PSYCHOLOGY, FACULTY OF PHILOSOPHY, UNIVERSITY OF BELGRADE

Abstract: In pediatric primary health care, one of the basic activities is the prevention of diseases and conditions that endanger the quality of life of the child and his/her daily functioning in the environment. According to world data , about 17% of children have some developmental difficulties which are discovered in only 50% of them before they start school. The goal of development assessment is systematic and precise early detection of deviations from normative development, timely undertaking of appropriate interventions, as well as elimination or mitigation of disorders. Research has shown that the use of instruments has increased the early detection of developmental delays or developmental disorders (in this way, 70-80% of children with developmental problems are detected) and provided an opportunity for early application of intervention measures. The set of 21 Ages & Stages Questionnaires ASQ-3 has been used for more than 30 years worldwide to screen and evaluate children's development by observing how children progress in important areas such as speech, physical ability, social and problem-solving skills for children aged 2 months to 5.5 years. It is filled in by parents and returned to professionals, and they further make an assessment based on clear instructions on the procedure of writing results in the domains of development, scoring (graphical and tabular) interpretation and communication, as well as training parents to stimulate development through play, ie. what to do next with the child's parent to stimulate development through play, ie. how and what to do next with the child. In the past ten years, the Association of Pediatricians of Serbia, together with its partners, has advocated for a comprehensive assessment and monitoring of children's development using valid instruments in the framework of preventive pediatric examinations. Through a series of projects in this area, through education of pediatricians and associates, and by application in practice, the standardized questionnaire ASQ-3, entitled "Age and development of the child" was tested and adapted in 2019.

INTRODUCTION:

In pediatric primary health care, one of the basic activities is the prevention of diseases and conditions that endanger the quality of life of the child and his daily functioning in the environment. According to world data, about 17% of children have some developmental difficulties, which are discovered in only 50% of them before they start school [1]. That would mean that today in Serbia there are 60,000 children with developmental risks and disabilities. Data on the situation in Serbia, obtained during the standardization of the questionnaire "Age and development of the child" - URD in 2019, indicate that 8-13% of children need constant monitoring in some area of development, 4-5% of children need to be referred to a detailed research, as well as that 16.5% of children do not live in a developmentally supportive environment [2]. If nothing is done at the societal level to reduce the prevalence of retardation to 15% or lower and if retardation is not addressed through pre-school education and public health nursing, the costs are several times higher than the current allocations of most countries for health and education [2]. At the individual level, 43% of children at risk do not reach their developmental potential and are likely to lose 26% of average annual income as adults, resulting in poverty [3]. Therefore, the processes of assessment, monitoring and support of the development of each child are in the focus of the work of the pediatric service.



Objective of development assessment

The goal of development assessment is systematic and precise early detection of deviations from normative development, timely undertaking of appropriate interventions, as well as elimination or mitigation of disorders [4]. Assessment of developmental achievement and age of development is a comparison, standardization of developmental achievements in relation to the age at which certain behaviors are manifested in the development of a healthy child, who lives in adequate (stimulating) environmental conditions, ie. comparing the behavior of the examined child with typical (expected, normative, common) behaviors that occur in the development of a healthy child [5].

In order for these processes to take place to the satisfaction of children, parents, and professionals themselves, modern pediatricians can not rely solely on professional but insufficiently systematic clinical examination, but need to use additional information that can provide various tools in the form of questionnaires. tests and scale. With their help, a more comprehensive insight into the child's abilities and health is gained in a shorter time, and if there are minor deviations and delays in development, they are detected early and the help of health workers and associates arrives on time, when it is most effective [3].

Research results

Research has shown that the use of instruments has increased the early detection of developmental delays or developmental disorders (in this way, 70-80% of children with developmental problems are detected) and provided an opportunity for early application of intervention measures. The use of instruments eliminates the uncontrolled effects of personal and subjective standards and reduces the inconsistencies of standards applied by different evaluators [6]. It is possible to monitor the results by repeating the application of certain instruments.

The set of 21 Ages & Stages Questionnaires ASQ-3 has been used for more than 30 years worldwide to screen and evaluate children's development by observing how children progress in important areas such as speech, physical ability, social and problem-solving skills for children aged 2 months to 5.5 years [7]. It is filled in by parents and returned to professionals, and they further make an assessment based on clear instructions on the procedure of writing results in the domains of development, scoring (graphical and tabular) interpretation and communication, as well as training parents to stimulate development through play, ie. how and what to do next with the child [8].

In the past ten years, the Association of Pediatricians of Serbia, together with its partners, has advocated for a comprehensive assessment and monitoring of children's development using valid instruments within preventive pediatric examinations.

Standardized questionnaire ASQ-3 - "Age and development of the child" (URD)

Through a series of projects in this area, through education of pediatricians and associates, application in practice, the standardized questionnaire ASQ-3, entitled "Age and development of the child" (URD) was tested and adapted in 2019. After standardization and entry of our borderline values, the Serbian version was approved by the author of the original ASQ-3, and is available on the publisher's portal (https://brookespublishing.com/product/asq-3/). The association also prepared an expert-methodological instruction along with the Serbian version of the URD questionnaire with a description of its use as a screening [8]. Our results and recommendations of the American Academy of Pediatrics were used to select three ages at which it is necessary to do universal screening for all children in Serbia, using the Serbian version of standardized URD-3 questionnaires at the ages:

- 10 months (age period from 9 months and 0 days to 10 months and 30 days) or 12 months (if not implemented in the 10th month)

- 18 months or 24 months (if not implemented in the 18th month)
- 30 months or 36 months (if not implemented in the 30th month).

Targeted screening (at any age, regardless of age) can be performed when a doctor, parent or other professional close to the child expresses concern for the child's development or the child is exposed to multiple risks that could jeopardize development [9]. Our research on the standardization of this instrument indicates that it would be desirable to do screening at the age of 48 and 60 months [10].

The reasons why URD is recommended in our country as an instrument for universal screening of development and why we are in favor of its application lie in its advantages: it is easy to apply - it contains



tasks from the child's daily life and can be easily checked; it is focused on what the child can do; contains accompanying materials for professionals and parents (Incentive activities); includes and trains parents to monitor and encourage child development. The URD questionnaire can help identify a child's talents, as well as any areas where a child may need help. It is filled in by the child's parent or guardian. In this way, the competence and self-confidence of the parents increase, and the child's progress confirms the feeling that they are successfully fulfilling their parental role [11]. Our experiences during the application and during the research in the process of standardization confirm that parents in our environment are also interested in this type of joint monitoring of children's development [2].

In addition to the above, significant reasons lie in the fact that the Decree on the National Program for Improving Early Childhood Development clearly defines the need to introduce instruments into the daily practice of pediatricians and teams in development counseling departments of health centers, and for screening of whole population standardized URD questionnaires are recommended 12]. In addition, over 240 pediatricians, 250 pediatric nurses, visiting nurses, and numerous health associates have already been trained in the courses of the Association of Pediatricians of Serbia and partners. Pediatricians used it as a screening for over 13,000 children in Serbia. The education of future educators for the entire territory of Serbia was also performed. It is expected that in the next period, they will train colleagues in their districts. It is no less important that the questionnaire is very well accepted by parents [13].

CONCLUSION

The presented facts about screening, the importance of the application of the standardized instrument for monitoring development and the URD questionnaire, are sufficient reasons to introduce it into the daily preventive work of pediatricians. In order for it to be applied in practice for screening development in early childhood, all pediatricians should undergo appropriate training; a sufficient number of staff, pediatricians and nurses should be provided for its application; by amending the relevant regulations that should become mandatory. It is necessary to secure the rights of use from the rights holders and procure a sufficient number of copies of the Serbian version of the URD questionnaire, every year.

LITERATURE:

- 1. Lozanović D, Radivojević D: Podrška uzajamnom odnosu porodice i deteta u ranom detinjstvu. Vodič za zdravstvene radnike i saradnike u primarnoj zdravstvenoj zaštiti. Udruženje pedijatara Srbije, Beograd, 2017; 41-50.
- Videnović M., Stepanović Ilić I., Lozanović D. Šta smo saznali standardizacijom upitnika Uzrasti i razvoj deteta. U: Zbornik predavanja 23. seminara Pedijatrijske škole Srbije. Beograd; 2021. Dostupno na: www.udruzenjepedijatara.rs. preuzeto 22. 7. 2021.
- Lozanović D. Videnović M. Stepanović Ilić I. Standardizovani upitnik "Uzrasti i razvoj deteta": ka uspešnoj primeni u radu pedijatara u Srbiji. U: Bogdanović R, Radlović N. Zbornik predavanja 23. seminara Pedijatrijske škole Srbije. Beograd, 2021; Dostupno na: www.udruzenjepedijatara.rs. preuzeto 22. 7. 2021.
- 4. Mikov A, Lozanović D. Instrumenti za procenu i praćenje razvoja dece do pet godina. U: Bogdanović R, Radlović N. (kancelarija): Zbornik radova 20. seminara Pedijatrijske škole Srbije. Beograd, 2017; 7-15.
- 5. Lozanović D, Radivojević D: Podrška razvoju dece u ranom detinjstvu: Instrumenti za procenu razvoja. Udruženje pedijatara Srbije, Beograd. 2013.
- 6. Kliegman RM, St Geme JW, Blum NJ, at al. Nelson Textbook of Pediatrics, 21st ed. Elsevier Saunders, 2019.
- 7. Squires J, Farrell J, Clifford J, et al. ASQ and ASQ: SE Training Materials by. Paul H. Brookes Publishing Co; 2007. Dostupno na: http://products.brookespublishing.com/ASQSE-2-Users-Guide-P851.aspx, preuzeto 2.5.2021.
- Sokal Jovanović Lj. Milidrag M, Lozanović D. Tim Projekta "Standardizacija upitnika Ages & Stages-3/Uzrasti i razvoj deteta". Stručno-metodobško uputstvo za primenu upitnika "Uzrasti i razvoj deteta". Dostupno na: www.udruzenjepedijatara.rs. preuzeto 22. 7. 2021.
- 9. Lozanović D. Praćenje i procena razvoja dece u ranom detinjstvu. U: Bogdanović R, Radlović N.: Pedijatrija, udžbenik za poslediplomsko usavršavanje lekara, II dopunjeno izdanje.
- 10. Videnović M, Rajić M, Stepanović Ilić I. i sar. Standardizacija instrumenta ASQ-3 za skrining razvoja male dece u okviru pilot projekta sistema rane intervencije u Srbiji. Institut za psihologiju Filozofskog fakulteta Univerziteta u Beogradu. Beograd. 2019.
- 11. Small W. J., Hix-Small H. Examining developmental monitoring and screening in LMICs. Pediatric News, PM: Dostupno na: https://www.mdedge.com/pediatricnews/article/170112/mental-health/examining-developmental-monitoring-and-screeninglmics?print. Preuzeto: 7.12.2020
- 12. Vlada Republike Srbije. Uredba o Nacionalnom programu za unapređenje razvoja u ranom detinjstvu. Sl. Glasnik RS 22/16, 2016.
- 13. Lozanović D. Zašto se zalažemo za primenu standardizovanog upitnika "Ages & Stages Questionnaires" (ASQ-3) "Uzrasti i razvoj deteta"?. U-. Zbornik radova: 50. jubilarni Pedijatrijski dani Srbije. Niš, 2021.