

PEER REVIEW

From Prof. Borianna Slancheva, MD, PhD

Member of the Scientific Jury, according to Orders № P-109-193 / 28.04.2022 of

The Rector of Medical University "Prof. Dr. Paraskev Stoyanov" - Varna,

following a Report №184/ 20.04.2022 and decision of the Faculty Council

of the Faculty of Public Health under Protocol № 167/09.06.2021

Subject: Dissertation and abstract on the topic

"Early Childhood Development: Features and Prevention of Disorders"

Presented for public defense to a scientific jury for the award of scientific and educational degree "Doctor" in the field of higher education 7. "Health and sport", professional field 7.1. "Medicine", scientific specialty "Hygiene (including occupational, communal, school, radiation, etc)"

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All administrative documents on the procedure provided for in the Law for the Development of the Academic Staff of the Republic of Bulgaria, the Regulations for its implementation and the Regulations for the Development of the Academic Staff of the Medical University "Prof. Dr. Paraskev Stoyanov" - Varna are presented and attached by Dr. Ekaterina Ivanova Valtcheva

Brief biographical data

Dr. Valtcheva graduated in Medicine at the Medical University - Varna in 1996. She works as a part-time assistant at the Department of Hygiene, Disaster Medicine and Epidemiology and in the Department of Preclinical and Clinical Sciences at MU – Varna for the period 2011-2016. She won a competition and started working as an assistant in 2017 at the Department of Hygiene and Epidemiology of the Medical University "Prof. Dr. Paraskev Stoyanov" - Varna. From 2017 until now - a lecturer at the European School of Clinical Homeopathy. Since 2016 and until now - practicing pediatrician in outpatient specialized medical practice with a focus on counseling and prevention, Varna.

Specializes, trains and participates in congresses, conferences and forums dedicated to effective approaches to support early childhood development and cross-sectoral cooperation, building and developing professional competencies of those working with children. She is the author of over 40 publications (2001 - 2021) related to participation in Bulgarian and international scientific and other forums; She has an award and a scholarship for a young researcher from the XXIII World Congress of Pediatrics, Beijing 2001.

Dr. Valtcheva participates in many national and international scientific forums. Acquires

additional qualifications in the field of early childhood development and the role of the family as a factor in child development. Dr. Valtcheva's professional interests are in the field of early childhood development and working with children with problems. Presents evidence to cover the required publications related to the dissertation.

Relevance and significance of the topic

The childhood is the first stage of human life. Early childhood development (ECD), proven scientifically, is the most significant, unique in its nature - with its quantitative and qualitative changes - period of childhood, which marks the well-being and quality of life (QOL) of each of us for life. In terms of age, "ECD covers physical, social, emotional, cognitive and motor development between 0-8 years of age." A particularly important stage in the formation of the child is the period from birth to 3 years of age.

In the present study, it is accepted as the working definition of the WHO "The early child period is considered to be the most important developmental phase throughout the lifespan. Healthy early child development (ECD) - which includes the physical, social/emotional, and language/cognitive domains of development, each equally important - strongly influences well-being, obesity/stunting, mental health, heart disease, competence in literacy and numeracy, criminality, and economic participation throughout life. What happens to the child in the early years is critical for the child's developmental trajectory and lifecourse."

Early childhood development and providing it as a process with policies and practices at national and institutional level is a real challenge. In this sense, the topic "Early Childhood Development: Features and Prevention of Disorders" is extremely relevant and interdisciplinary, with a strong theoretical and applied focus and great social significance. Different scientific points of view are included - medical, psychological, sociological, philosophical, anthropological, historical.

The existing problems and their interpretation and suggestions for their solution are included in the design of the study: the literature review, the formulation of the goal, the tasks, the discussion of the results, the conclusions and the contributions.

Statement on the structure and content of the dissertation

The scientific work presented for peer review is structured according to the modern standards adopted in our country and the requirements of the Medical University "Prof. Dr. Paraskev Stoyanov" - Varna on a dissertation for the award of scientific and educational degree "Doctor" in medicine.

The dissertation is written on 171 pages.

The dissertation has a separate section "Appendix" of 44 pages, which includes: 1) Bulgaria's profile for early childhood development for the period 2019-2021 and prospects for 2030 in cooperation with UNICEF; 2) Protocols from Research Ethics Commission (2020, 2021); 3) Worksheet №1 (AEIOU framework for Participant Observation); 5) Worksheet №2 Empathy map for Participant Observation; 6) Questionnaire for measuring the importance of early childhood development (ECD) in the parental community with 47 questions; 7) Registration of the trademark of "The Green Sea Yard of Varna".

The dissertation exceeds the accepted volume of the dissertation for awarding the scientific and educational degree "Doctor" in medicine. Includes: literature review (57 pages),

purpose and objectives, material and methods (8 pages), results (135 pages), discussion (19 pages), conclusions and contributions. The dissertation is richly illustrated. Three tables and 91 figures were used. The bibliography includes 281 sources - 98 in Cyrillic and 183 in Latin. Of the cited publications, 145 (51.6%) are from the last 10 years, and 50 (17.7%) - from the last 5 years. When quoting the authors in the literature review, discussion and historical and bibliographic data to the results, it following the authors and the year of publication. This makes it difficult to track accurate citations.

The literature review (25.33% of the dissertation) presents the problem comprehensively and systematically. It is presented in three main sections.

First section: A historical overview of the attitude towards the child and his place in the family, as well as the role of parents in building it as an individual. The opinions of many psychologists, psychiatrists, pediatricians working in the field of child development and acceptance of the child by the family as an individual with their needs are presented. Historically, the role of the mother is considered, who acquires the feeling that she is real, that she exists and that her feelings and actions make sense in caring for the child.

The twentieth century is a turning point in the understanding of the child as an individual and his needs. The common denominator of the basic ideas generated by scientists who combine theory with practice in research is human development. The new and different is in the subject of research - the stages of childhood, with a strong interest in early childhood development. Their research forms a number of basic contemporary formulations for ECD.

The second section deals with the current state of the problem. An important point in the concept of ECD is the understanding of complex interactions and interrelated influences of the environment with the health and well-being of the child. Underestimation leads to severe consequences with a high cost. 43% of children under the age of five (approximately 250 million) are at risk of developmental problems due to poverty and stunted growth. Poor start in life can lead to poor health, nutrition and inadequate learning, leading to low adult incomes as well as social tensions.

The negative consequences affect not only present but also future generations. States can lose up to twice their current gross domestic product spending on health and education. An important point for communication with parents is the scientific evidence for the construction of the child's brain, a process that begins before birth and proceeds at a rate that is never repeated in life. The optimal conditions for the development of the child's brain are obtained through the so-called "developmental care" by scientists, which includes five elements for a complete ECD: Health caregiving; Proper Nutrition; Protection/Safety; Caregiving tailored to the needs of the child; Early learning.

The third section includes the national dimensions of ECD.

The problem with ECD in Bulgaria and the processes of its solution are presented. Attention is drawn to the changes that are taking place in the understanding of ECD in cooperation with many international institutions (WHO and UNICEF). An important moment in the last twenty years is the participation and activity of non-governmental organizations and associations of different sizes and scope, working in the field of ECD.

Dr. Valtcheva describes the current and major demographic processes in the country. They are the basis on which all other and upgrading processes and policies in our society

develop. Modern and main demographic processes in Bulgaria are presented - aging population, birth rate and mortality, reduced number of marriages at the expense of cohabitation without marriage.

In these conditions, paramount issues are raised. These are the short-term and long-term care provided in the country for all age groups; to regulate clear and unified standards to put the child and the family at the center of the problems of the demographic crisis. An important point in this care is parental competence. This is a social phenomenon, the set of qualities of the parent's personality, aimed at their own child and necessary for the quality realization of all environmental influences.

This is exactly the goal set in the dissertation of Dr. Valtcheva:

“To establish the importance of early childhood development (ECD) in the parent community in Bulgaria and the resulting needs for knowledge, practices, competencies and opportunities for prevention of disorders. The results of the research should be used for the purpose of health promotion and prevention in early childhood and for increasing parental competence.”

The purpose of the dissertation is precisely and clearly stated.

Dr. Valtcheva sets herself six specific and realistic tasks, which are based on the hypothesis: the developing qualities of the environment in which children grow, live and learn - parents, caregivers, family and community - are decisive/most significant impact on their development.

The object of the study is the parental community in Bulgaria. For this purpose, qualitative and quantitative sociological research was conducted.

The qualitative research “Participant Observation” was conducted by the PhD student in the community of “The Green Sea Yard of Varna”. The framework for selection of participants includes all parents who visit with their child, once or more times, the space for early socialization and prevention of children from 0 to 3 years “The Green Sea Yard of Varna”. Dr. Valtcheva applies a subjective approach with a complex and broad focus on the target group by collecting the necessary data through interviews, observations and analysis. The aim is to study reality as a complex of subjective and numerous interpretations, life experience and perspective of the participants in the study. The results of the qualitative research are a prerequisite and serve as a basis for the next stage of the research - quantitative sociological research.

Quantitative sociological survey is a national online survey with parents for a period of 30 days. It focuses on the real state of processes and trends at the macro level. The results of it build on the qualitative research, informing about the social interactions in the target group at the micro level. The survey uses a “Questionnaire for measuring the importance of early childhood development (ECD) in the parental community.” The questionnaire is an author's product of the project team № 19021/2019. Special criteria for admission and inclusion in the study have been developed. Participation in the survey is based on pre-set criteria for participation: voluntary participation of parents over 18 years of age with one and/or more children from 0 months to 3 years and 11 months inclusive.

The questionnaire contains seven main parts. A total of 47 questions with the following characteristics were included in the questionnaire: a) Closed question with one answer; b) Closed question with more than one answer; c) Closed question with digital scale; c) Open question without answer. The questions and answers are well formulated and clear to the

parents: a) only through positive statements; b) do not contain a suggestive tendency to respond; c) anticipating all possible cases, regardless of the expected number of participants who will respond to them; d) in an equivalent way, with equal semantic weight; e) by reference to the same attribute; f) accessible and understandable.

The detailed and accurate formulation of the questions has the opportunity for maximum reliability of the parents' answers and the opportunity through the results to draw the right conclusions and accurate conclusions confirming the hypotheses.

Results and discussion

The Participant Observation performed by the PhD student lasts 2 days a week for 4 hours for 14 months in the period 2020 - 2021. Two worksheets have been developed for its implementation. They are based on modern concepts of qualitative sociological research with adapted tools for testing the hypothesis.

The AEIOU framework for eight age subgroups from 0 months to 4 years of age (every 6 months) using the five elements - activities, environments, interactions, objects, users - is used to prepare **Worksheet №1**. In order to have a more in-depth interpretation and analysis of the information from the parents' point of view, **Worksheet №2** has been created. The research is more objective and more reliable.

Empathy Map is used for this purpose (how the person or an audience thinks) and is reduced to six areas that are adapted to the goal - to establish the importance of early childhood development in the parent community. Dr. Valtcheva monitors through participation and summarizes the important and complementary roles of the environment, parental involvement in the socialization of the child, the role of space, the processes of separation of the child from parents to help children's independent existence and early recognition of symptoms deviations in the physical, emotional and psycho-motor development of the child.

A qualitative study "Participant Observation" was conducted. Based on the results obtained, the PhD student draws very important conclusions about the level of parental awareness and competencies for ECD, related to their literacy and attitude towards the child. She came to the conclusion that building trust on the parent-child-specialist axis is an element of early recognition of the symptoms of deviations in the physical, emotional and psycho-motor development of the child.

Dr. Valtcheva creates a special "Questionnaire for measuring the importance of early childhood development (ECD) in the parental community." The proposed questionnaire is author's and was created on the basis of qualitative research "Participant Observation" and current scientific literature.

The questionnaire contains seven topics:

1. Informed consent to participate in the study
2. Guidance information on completing the questionnaire
3. Demographic characteristics
4. Parental competencies for ECD up to 3 years and 11 months
5. Parental literacy for ECD up to 3 years and 11 months
6. Seeking help from a specialist - experience and attitudes.
7. Quality of life of the child

The demographic issues in this study are ten in total and provide an opportunity for a basic analysis of some of the most important factors (economic, biological, social, educational, cultural) influencing the status of parents and families and their attitude to the importance of ECD. They are presented in Figure 2 - 4 and table 1. The average age of the parents participating in the study is 33.27 +/- 0.177 years (from 18 to 59 years), most often 30 years from 873 participants who have reached their age. The predominant part of them are women 861 (96.63%) compared to 28 (3.14%) men.

The survey involved parents with mostly higher education degree - 778 (87.3%) and Bulgarian ethnicity 857 (96.2%). (Table 2).

One third of the surveyed parents 296 (3.22%) indicate the highest possible monthly family income of over BGN 3,000 and live in a regional city or in the capital 754 (84.6%) of them. There are 576 children raising children (64.6%) and 530 three-member households (59.5%). (Figure 7)

Dr. Valtcheva has examined the demographic characteristics of a special group of parents in view of the need for more information from/about them. It includes **families with unspecified suspicions of developmental disorders in the child**. These are mothers of 24 women (100%) with mostly higher education 21 (87.5%) and Bulgarian ethnicity 23 (95.8%) mainly in a regional town - 17 (70.8%) compared to 8 children with special needs (53.3%) and 469 children without special needs (55%). The majority of unspecified children suspected of ECD violations come from high-income families. (figures 12 and 13)

Parental awareness and competencies for ECD up to 3 years and 11 months

In this part of the survey on a specific question on a particular topic are formulated from 6 to 8 fixed statements related to parental competencies and behavior. The answers are given through a scale type thermometer - from 1 to 9 - from not at all important to extremely important. The topics on which the parental competence for ECD is assessed are:

- Stimulating care
- Early learning
- Protection/Safety
- Complete/proper nutrition
- Health caregiving

The results are presented graphically and include Figures 14 to 23.

When presenting "Stimulating Care" the leading behavior is the flattering attitude - 733 (82.27%) of the respondents give a positive answer (4.82 points on a 5-point scale), and the least common is the telling and reading of children's stories - 450 of the respondents or 50.51% (score 4.1 of the maximum 5).

In "Early Learning" parents most often purposefully teach the child new things - 501 (56.23%) almost always (4.45 points on a 5-point scale), and most rarely lead him to organized educational activities - never 144 (16.16%), and almost always 102 (11.45%) (2.8 points on a 5-point scale).

When presenting "Parental Protection/Safety" the most common behavior is ventilation of the room (644 - 72.28% almost always and 4.65 points on a 5-point scale) and the least common is the safety check of toys (344 - 38.61 % and average score 3.81).

To the question of what parents understand by "Complete/proper nutrition" - the answers

are the inclusion of mainly typical regional foods and cuisine (almost always 538 - 60.38% and an average score of 4.52) and lastly - nutrition without the use of electronic devices (almost always 452 - 50.73% and an average score of 4.04).

Parents' understandings of "Health caregiving" include mandatory preventive examinations (almost always 79-95.7% (in the text 793 is given as 899%) and an average score of 4.82) and at least the annual preventive dental examination (barely 160 or 17.96% of the parents state it as true, and the average score is 3.26).

The PhD student evaluates on a **nine-point scale** how parents rank the care of the child in order of importance. They place in the first place among the areas of ECD child health caregiving (rated at a maximum of 82.60% and a score of 8.76) and child stimulation (rated at a maximum of 82.60% and a score of 8.73), followed by complete/proper nutrition (estimated at a maximum of 69.58% and a score of 8.52), protection (estimated at a maximum of 69.02% and a score of 8.47) and lastly - early learning of the child (estimated at a maximum of 69.7% and a score of 8.46). (Figure 10)

Parental literacy for ECD up to 3 years and 11 months

The next topic of the questionnaire is parental literacy, divided into two parts - assessment of one's own literacy, and the second - assessment of the partner's literacy. The results of the answers are presented in Figures 29 - 33.

The results of self-assessment of literacy for ECD prove the highest percentage of parents adequately informed about the rules of hardening (761 people or 85.41%), followed by sleep and wakefulness regimes (754 or 84.62%), seat safety for a car and the minimum daily physical activity (715 or 80.25%).

Relatively lower are the percentage distributions of the literate for limiting the time in a lying or sitting position on a stroller (255 or 28.62%) and in front of a screen (624 or 70.03%), as well as for the regular daily tummy time of the child in infancy (391 or 43.88%).

The connection between parental literacy and parental competencies in ECD is sought and presented. It was found that parental literacy correlates positively with each of the areas of parental competence in the ECD with the highest values for health care (0.149 $p < 0.01$) **and the lowest for stimulating care (0.09 $p < 0, 01$).**

Dr. Valtcheva proves that the level of parental literacy statistically affects parental behavior. Higher literacy also has a significant effect on the higher assessment of the importance of early education (96 persons or 83.5% of the highly literate compared to 525 or 67.7% of the low-literate parents $\chi^2 = 14.741$ $p < 0.05$). Weak positive correlations were found between the level of literacy and the level of awareness of stimuli in ECD (Spearman's ratio = 0.181 at $p < 0.001$) and early childhood risks (Spearman's ratio = 0.148 at $p < 0.001$). The analysis by gender shows that mothers show more intensive parenting competencies, but the difference is significant only in the score for the importance of incentives - 8.6 ± 0.02 for women compared to 8.19 ± 0.18 for fathers who answered the questionnaire ($p < 0.05$).

An analysis of the educational status shows that the higher education degree of the parents, compared to the lower educational status of the parents, is associated with significantly higher scores for stimulating care (4.55 ± 0.013 compared to 4.52 ± 0.039 , $p < 0.05$), importance of incentives (8.61 ± 0.02 vs. 8.43 ± 0.08 , $p < 0.05$) and risk awareness (8.17 ± 0.03 vs. 7.97 ± 0), 11, $p < 0.05$.

Regarding the second part of the questionnaire, concerning the literacy of the male

partner, who is involved in raising a child in 860 (96.52%) of the respondents, the answer is "less informed" in 473 (55%) and more informed in only 28 (3.26%) of those who completed the survey.

Seeking help from a specialist - experience and attitudes. This part of the questionnaire occupies the largest share of the results. It seeks correlations with the previous parts - demographic, parental competence for ECD, parental literacy for ECD, awareness.

The questionnaire includes questions that aim to assess parental attitudes towards seeking and using support and interaction between parent and specialist on the "parent-child-specialist" axis. This part of the questions also includes children with special needs. Assessments of the competence of the specialist are given according to a scoring system and the analysis is made according to the average score of the primary source of help in case of an established problem. Distribution of parents according to the primary source of help in case of an identified problem (excluded and most certain) (%) The results are presented from Figure 34 to Figure 51.

The parents answered questions were:

First source of help in case of an established problem in the child (assessment of the specialist in score and distribution of parents in %).

The leading specialist that most parents would seek **as a source of help** with an established problem is a pediatrician or general practitioner (probably 723 or 81.14% and an average score of 4.78 out of 5), followed by a specialist (speech therapist, psychologist and others). (686 or 76.99% and 4.72), followed by mother, mother - in - law or grandmother (231 or 25.93% with an average score of 3.49). In the last place is the religious community - indicated as completely safe by 12 parents or 1.35% and an average score of 1.35. The statistics of those responsible for dealing without external assistance is similar - also 12 parents or 1.35% and an average score of 1.29. (Figures 34, 35)

Dr. Valtcheva also looked for a correlation between the level of literacy and seeking medical help. She found that a higher level of literacy correlated with a lower probability of not seeking outside help (Spearman's ratio = -0.130 $p < 0.05$). Higher level of education degree correlates with the probability of seeking help from friends (Spearman coefficient = 0.073 $p < 0.05$), Highly educated parents more often seek help from the circle of friends - 415 people or 53.8% compared to other people - 44 or 40.4%, ($\chi^2 = 7.312$ $p < 0.05$).

It also looks at the problem demographically. Parents living in a village or small town are more likely to seek help from a mother or mother-in-law, grandmother - 65 people - 60.7% compared to those living in a big city and capital - 403 (53.9%), ($\chi^2 = 7,893$ $p < 0.05$).

Religious community is another possible support for families mainly from small settlements. 7.6% of the small settlements are very likely to seek advice from the religious community, compared to 2.5% of the large ones. ($\chi^2 = 8.817$ $p < 0.05$).

When asked why help is not sought, **the leading reason** is the practice of relying on the opinion and experience of relatives and acquaintances (fully accept this 50 - 5.61% and an average score of 2.08). The rarest reason for this is worries about the opinion of others (11 people fully accept this - 1.23% and an average score of 1.31), less often - the lack of time and the loss of too much time (13 people fully accept this) - 1.46% and an average score of 1.42). (Figure 36)

When asked which specialist to turn to for information, Dr. Valtcheva proved that Bulgarian parents most often use a pediatrician as a source of information about ECD - 526 (59.03%) with a score of 3.41, followed by a general practitioner - 358 (40.18%) with a score of 2.88, a doctor with a narrow specialty - 299 (33.56%) (score 2.86) and friends - 136 (5.26%) with a score of 2.58. The rarest respondents are informed by unconventional (alternative specialists) - 691 (77.55%) with a score of 1.37, the media (television, radio, newspapers) - 549 (61.62%) with a score of 1.51 and websites/blogs of famous people - 567 (63.64%) and a score of 1.56. (Figures 38, 39)

The PhD student proves that a higher level of parental literacy correlates with greater clarity of which specialist to turn to for outside help (Spearman's ratio = -0.116 $p < 0.05$). The level of literacy shows statistically significant positive correlation values with respect to sources of information and, although weak in strength, their highest values are for general practitioners (Spearman's ratio = 0.118 $p < 0.001$), psychologist (Spearman's ratio = 0.117 $p < 0.001$), speech therapist (Spearman's ratio = 0.115 $p < 0.001$), narrow medical specialist (Spearman's ratio = 0.106 $p < 0.001$), homeopath (Spearman's ratio = 0.104 $p < 0.05$), but also for unconventional (alternative) practices (Spearman coefficient = 0.101 $p < 0.05$). **Pediatricians as an information channel have the lowest correlation coefficient** with literacy (Spearman's ratio = 0.076 $p < 0.05$), after pharmacists (Spearman's ratio = 0.082 $p < 0.05$) and scientific and popular science publications Spearman's ratio = 0.085 $p < 0.05$). (Figure 40)

Dr. Valtcheva receives interesting results in the analysis of the answers to questions to parents related to the search for counselors, the frequency of consultations, trust and assessment of their competence.

The answers to these questions prove the fact - Bulgarian parents put in the top three specialists in the first place of pediatricians, followed by almost equal in score in second place - a narrow specialist and a general practitioner.

- Frequency of consultations - the data are presented in Figure 42.

The majority of parents 315 (35.35%) turn to specialists with questions about their child's development once a month, 240 (26.94%) do so once every three months.

- Postponement of consultations in case of established or suspected problem - the data are presented in Figure 43.

It was found that in case of a problem related to ECD, the majority - 405 (45.45%) of parents postpone the consultation with a specialist within a week, the next large parent group (253 - 28.40%) postpone this visit within month.

- Specialists to whom parents turn in case of a problem

The Figure 44 presents the distribution of parents according to the type of specialist to whom they turn in case of suspicion of a problem related to the child's development (%). This is again the pediatrician - 633 (71.04%), followed by a significantly lower percentage - the general practitioner - 108 (12.12%). In third place as the first choice is consulting a psychologist - 41 (4.60%).

- **With whom previous consultations on ECD issues were conducted**

The pediatrician remains in first place with 681 (76.43%). The next specialist, ranked first in frequency, is the general practitioner - 171 (19.19%). The doctor-specialist as a consultant is most often placed in second place - 333 (37.37%). As the least sought-after specialist, parents

put a social worker - from 871 (97.76%) and an ergotherapist - from 868 (97.42%).

The dissertation examines and proves the influence of demographic factors such as educational status, financial opportunities and place of residence and age of parents and the choice of medical specialist to whom they turn on issues related to ECD. Among the parents with higher education, residence in a big city and capital and high income over BGN 2,000, the ergotherapist immediately ranks fourth.

The youngest parents up to 25 years of age and those in the age group 36-45 years are in second place by the general practitioner, and the oldest group over 45 years of age - the doctor-narrow specialist.

Children with special educational needs

For the parents of these children, the choice of specialist together with the pediatrician is the speech therapist, followed also by the same score by a narrow specialist and a psychologist/psychotherapist. In third place in the score, these parents put the rehabilitator. (Figure 52)

An important place in the survey is occupied by a strong topic: **The attitude of the specialist to the child and family**, which strongly influences the development of parental competence and literacy and timely action with both preventive and diagnostic and therapeutic goals regarding ECD.

The following emotional-subjective interpretations of the attitude of medical professionals towards the child are analyzed:

"Treats the child and the family politely" - 75.31% with a score of 4.68; Speaks in a language understandable to parents - 69.25% with a score of 4.65; Perceives the family as partners in child care - 52.64% with a score of 4.3; Shows flexibility in providing care for the child with a score of 4.48 and fully manifested in 64.42% of parents; Professional provision of clear and objective information with a score of 4.47 and fully manifested in 58.81% of parents; Careful professional listening in the care of the child with a score of 4.41 and fully manifested in 58.92% of parents; the Benevolent attitude towards the child and the family is leading with a score of 4.76 and fully manifested in 78.45% of the parents; Empowering the family in the provision of health care - perception of parents as partners in health care and providing the family itself with opportunities to choose solutions for the type of child care. (Figures 53-63)

The problem is again considered through the prism of the demographic characteristics of the parents participating in the survey. It is proven that the level of family empowerment correlates positively with the levels of literacy, assessing the importance of incentives, awareness of the risks and aspects of ECD such as stimulating care, protection, proper nutrition and early learning.

The received analyzes of the statistics show that for the Bulgarian parents it is most important that they receive clear and objective information (average score 8.62); the specialist should show respect for the child and the family (score 8.5) and be flexible in providing care for the child (8.4). Next are qualities such as the ability to listen (8.30) and to show concern (8.28). Last, parents place the empowerment of the family (7,65).

There are several questions in the survey regarding the parents' trust in the specialist, related to his/her professional competence.

The final conclusion based on statistical research and analysis (scale from 1 to 9) is that in

order to gain the trust of the Bulgarian parent, the ECD specialist should show an individual approach (8.64) and have extensive practical experience (8.20). The importance of the parent's trust in the child's sympathy for the specialist is high (7,87). Confidence and qualifications have the least impact on the specialist's trust (7.23) and the application of the latest methods, tools and medicines (7.27). The data are presented in figures 70 - 84.

The assessment of parental satisfaction correlates moderately and strongly positively with all components of the professional attitude of ECD experts. The highest degree is the correlation with flexibility (Spearman's ratio = 0.683 p <0.001), the provision of clear and objective information (Spearman's ratio = 0.648 p <0.001) and the ability to listen (Spearman's ratio = 0.615 p <0.001).

Quality of life of the child

The predominant part of the surveyed parents rate the overall health of their child - 91.92%, and in 38.50% of all it is highly rated. (Figure 91)

From the characteristics of the quality of life, the parents rate the panel "Emotional development of the child" with an average score of 4.48, followed by "Physical development" with a score of 4.01 and the lowest "Social development of children" with a score of 3.93 on a five-point scale.

The leading indicator in the emotional sphere with almost a maximum score of 4.92 is the curiosity, which is most developed in their children according to 843 (94.61%) of parents (Figures 85-90).

The results are under **discussion**, which deserves high praise.

Very important in the present study is the voluntary participation of parents and the desire for feedback and a declared desire to participate in the pilot use of the future ECD instrument.

This confirms the thesis of Dr. Valtcheva, the need to continue in-depth research in this direction. The results of the research can be used to develop a Bulgarian methodology for identifying, assessing and preventing risk factors for ECD and lifelong well-being. This gives grounds to accept the present study as a basis for determining the priorities of the modern educated parent in our society.

The study is extremely complex and detailed on the parent-child-specialist axis. It raises many important issues for future consideration.

The results of the analysis for "Determining early learning in the last importance of the part of parental competence" in the case that 90.8% of the surveyed parents have higher and semi-higher education degree are alarming and require urgent and concrete measures at all levels of national policies.

The modern Bulgarian parent puts the empowerment of the family last. This proves the need for constant, purposeful and constantly expanding work to increase the competencies of the parent in order to feel ready for empowerment.

The conclusions made are correctly formulated. They correspond to the set goals and objectives, logically follow the results and statistical analysis.

I support the presented recommendations with a practical focus.

I approve the contributions, which are a total of 13 and mostly of an original nature. I believe that the main merits of the dissertation are the following:

1. A qualitative study "Participant Observation" in the area for early socialization and prevention "The Green Sea Yard of Varna" of children from 0 months to 3 years old is

attached.

2. An author's "Questionnaire for measuring the importance of ECD in the parental community" was created, fully consistent with the modern scientific approach to the topic - international and Bulgarian, specific, containing the following topics with possible use as stand-alone tools:
 - ✓ Parental competencies for ECD up to 3 years and 11 months;
 - ✓ Literacy for ECD;
 - ✓ Seeking help from a specialist - experience and attitudes;
 - ✓ Quality of life of the child.
3. The interactions on the parent-child-specialist axis in the period of ECD are studied using simultaneously complementary qualitative and quantitative research in limiting pandemic conditions.
4. Recommendations are formulated for health promotion and prevention in the period of ECD and for increasing parental competence, in accordance with current processes and changes in Bulgarian society.

Technically, the dissertation is designed according to the requirements. The dissertation is written in good language, precise in terms of terminology, but in certain sections in great detail.

The "Results" section is 135 pages of the dissertation. In this part there is a lot of detailed and descriptive information, which has no place in the results and can definitely be shortened. The project "The Green Sea Yard of Varna" (2019) and its community in the context of suitable field terrain for "Participant Observation" is described in great detail as the information about the inspirer of this project. I recommend highlighting only the most important of it, which are used in the current study.

Worksheet 1 and Worksheet 2 are given in the Appendix 6 and 7 and it is not necessary to give such details as to the reasons for their creation. Some of this information can be included in the literature review (pages 71 and 72) relating to Worksheet 1 and pages 74 and 75 relating to empathy and Empathy map (Worksheet 2).

The description of the creation of Worksheets 1 and 2, as well as the Questionnaire for "Measuring the importance of early childhood development (ECD) in the parental community" - analysis of topics and constructs should be included in the methodology and not in the results. The results include the answers to the questions and the statistical analyzes obtained during the processing of the questions.

There are many bibliographic references in the section "Parental competencies for ECD up to 3 years and 11 months" (p. 101). This data has no place in the "Results" section. The description of the questions to this section of the questionnaire is redundant. There are them in Appendix № 8. I have the same remarks to all other sections of the questionnaire - a lot of bibliographic data and repetition of the questions to Appendix №8.

With the presentation and characterization of the results of the questionnaire on demographic indicators (pp. 125-198) the presentation of the results actually begins. They are detailed, well illustrated and graphically objectify all the questions posed in the "Questionnaire for measuring the importance of early childhood development (ECD) in the parental community."

The **abstract** faithfully reproduces the content of the dissertation. It has been prepared in a volume of 92 standard pages and consists of the obligatory components in 10 parts, which present exactly the structure and the content, the contributions and the publications on the dissertation.

In connection with the dissertation, Dr. Valtcheva presents 4 real publications that meet the criteria set out in the Regulations for the development of the academic staff of MU-Varna. The articles were published after presentations at conferences in two international and one Bulgarian magazine. I believe that these publications and participations really present the achievements of the doctoral student and contribute to their promotion among the scientific community.

Getting acquainted with the dissertation of Dr. Valtcheva, I was extremely impressed. Dr. Valtcheva has conducted a large-scale study in terms of volume and significance, in which she actively participated personally. She made an in-depth and accurate analysis of the attitude of the parent community in Bulgaria related to ECD.

This analysis provides opportunities to develop recommendations for the data from this study to be used to form specific national policies to establish basic awareness of all segments of society about the importance of ECD working in six areas: parents, extended family, future parents, specialists, non-specialists, engaged in the cause of ECD and popularization of the problem.

I find the topic developed by Dr. Valtcheva extremely relevant and timely. Despite the technical remarks on the volume and design of the dissertation, the content of the dissertation is legitimate and thoroughly developed, well illustrated and presented in good professional language.

All this gives me reason to positively evaluate the dissertation "Early Childhood Development: Features and Prevention of Disorders" at MU-Varna and to give my positive vote for the award of Assistant Professor Dr. Ekaterina Ivanova Valtcheva to educational and scientific degree "Doctor".

In conclusion, the dissertation meets the requirements of the Law for the Development of the Academic Staff of the Republic of Bulgaria. The work is presented in a finished and well-formed form.

18.05.2022
Sofia

Scientific jury member:

(Prof. Boriana Slancheva, MD, PhD)

