

## ORIGINAL RESEARCH ARTICLE

# The level of depression in parents of children with physiologic immaturity

Nevzat Shemsedini, Donjeta Spahiu, Bujar Obertinca\*

Heimerer College, 10000 Pristina, Kosovo

\* Corresponding author: Bujar Obertinca, bujar.obertinca@kolegji-heimerer.eu

### ABSTRACT

**Study:** The study aimed to identify the actuality of prone depression. At its center is the level of depression, which is what analyzes those who want to have children with physical immaturity, as well as the techniques needed for his issues, seeing him related to a range of issues: what is this physiological immaturity, why there is a need to get accurate information about it, the psychological state of parents with children with physiological immaturity and coping with it, and the impact of children with physiological immaturity on other family members. **Purpose:** The objectives of the study dealing with depression related to depression were to find gender differences in the level of depression in children with physiological immaturity, for the reason that some of them are those whose targets hypothesized that children with physiological immaturity are at a moderate level” and the second hypothesis: “Women as parents have a higher level of depression than men as parents. **Methodology:** A sample of 70 participants was independently surveyed, and the measuring instrument was Beck’s inventory for depression as well as demographic data to determine the gender of participants. Before determining the inventory, the parents were explained the purpose of realizing that some of the data that will be obtained will remain anonymous and confidential. The data from the results supports our hypothesis: physiological immaturity is moderate. As well as *t*-test analysis, it was shown that the female gender has a higher level of depression than the male gender. **Results:** To derive the results obtained from the paper, we used the *t*-test analysis, which showed that there are differences between women (between 21.79 + 5.2) and men (between 17.91 + 6.1) in terms of the level of depression. It seems that women showed higher levels of depression ( $t = -2.844, p = 0.006$ ).

**Keywords:** depression; parents; physiological immaturity; symptoms; children

## 1. Introduction

“Family is the natural and fundamental group of society and has the right of protection prof society and the state.”

Universal Declaration of Human Rights

The decision to become a parent and start a family is a fundamental right and brings joy, meaning, and fulfillment to many who start it. It is also a choice that conveys responsibility, both to the parents and their family in terms of meeting the needs of each of its members and also to the wider community to support these processes and the unit as a whole. Parental depression can increase a family’s vulnerability and create risk for all family members<sup>[1]</sup>. Rates of depression among parents can vary from 10%–42%<sup>[2]</sup>. with mothers

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outnumbering fathers by approximately 2 to 1<sup>[3,4]</sup>.

To this end, professionals working with adults experiencing mental illness must devote adequate attention and resources to identifying, understanding, and strengthening potentially vulnerable family units. Parental depression has experienced a sustained focus among researchers for at least the past 20–30 years, as evidenced by the many review papers and special journal issues devoted to this topic<sup>[5]</sup>. A parent's ability to enjoy and maintain close personal relationships with their children can be compromised by depressive symptoms<sup>[6]</sup>. Some have suggested that parenting practices, along with marital discord, have the greatest effect on child outcomes<sup>[7]</sup>. For example, among 697 fathers and 1320 mothers from a community sample, parents who were depressed were less likely to play with, read to, or cuddle with their children and were more likely to report frustration with the parenting process compared to those without emotion<sup>[8]</sup>. Others have reported that children of depressed parents are more likely to be exposed to higher levels of irritability and anger than those of nondepressed parents<sup>[9]</sup>. Parents appear to benefit from behavioral interventions. Mothers' depression scores decreased significantly after participating in a self-directed intervention for child behavior problems<sup>[10,11]</sup>. Hammen asserts that parental behaviors associated with depression are experienced as stressful by children, who then use maladaptive coping strategies and develop internalizing and externalizing behavior problems<sup>[12,13]</sup>.

Depressive symptoms may also influence parenting style in terms of rejection, control, and warmth<sup>[14]</sup>. Parental warmth and involvement were negatively associated with rates of externalizing behaviors in children of depressed parents<sup>[15]</sup>, while longitudinal ratings of parental rejection of children were associated with insecurity in close adult relationships<sup>[16]</sup>. Children who report negative attachment to their parents also report greater levels of depressive symptoms following increased levels of their parents' depression, indicating that their parenting style may also make them more vulnerable to the effects of depression theirs<sup>[17]</sup>. Other studies have reported that depressed parents risk the opposite extreme of over-involvement. Radke-Yarrow discusses the tendency for some depressed mothers to view their children as a source of comfort, forming overly close and emotional relationships with their children<sup>[18–20]</sup>.

Theories regarding the transmission of risk to children and families exposed to parental depression have guided a variety of interventions aimed at protecting them. However, it is not yet clear what constitutes the essential components of the intervention needed to effect change and whether some components are more effective than others in helping families to ameliorate child risk and improve the parenting experience. Furthermore, a better understanding of the ways in which families respond to and apply the skills and lessons learned from interventions and how families work together in the context of parental depression is a valuable next step to modernizing an approach based on evidence of best practice. Rather than a sequential story, we hope that the results of each study will provide unique and complementary information on how to better understand and support families where one parent has depression.

Depression is a psychological disorder that can be categorized by the experience of a certain set of symptoms on most days for at least two weeks. These symptoms include, but are not limited to: a loss of interest in things that once brought pleasure; difficulty sleeping; fatigue; and feelings of sadness, worthlessness, and hopelessness<sup>[21,22]</sup>. Importantly, although depression is often considered to be an emotional state, it also affects one's executive functioning, perceptions, attention, and cognitions<sup>[23]</sup>. Thus, depression can affect a person's thoughts, perspectives, and behaviors through a variety of mechanisms. Furthermore, although depression is often considered and treated as an individual mental health issue, research makes it clear that depression is an essentially relational condition that affects one's interactions and relationships with others<sup>[24]</sup>. As a relational condition, it becomes important to understand the role that depression can play within the family context.

In particular, the impact of depression on parenting and parent-child interactions has been of interest in recent child development research<sup>[25]</sup>. This may be due to the prevalence of depression as well as the fact that levels of depression tend to be higher in age groups that are more likely to have children<sup>[26,27]</sup>. Research conducted over the past several decades suggests that children of parents with mental health problems are at higher risk for a variety of social, emotional, and physical problems<sup>[28–32]</sup>. For example, parental depression has been found to be a risk factor for a variety of poor physical, social, and emotional outcomes in children and adolescents<sup>[33]</sup>. Studies have also found that children with depressed mothers are at risk of experiencing insecure attachments, developing depression, and having less than optimal cognitive development. Furthermore, within the current literature on parental depression, some studies have examined depressed versus non-depressed parents based on clinical levels of depression<sup>[34]</sup>, and other studies have examined a continuum of parental depressive symptoms<sup>[35]</sup>. The research reviewed will include findings from both types of studies; however, it is important to note that the current study will examine current levels of depressive symptoms in parents of children with physiological immaturity.

### **The purpose of the research**

Children's mental health has long been a subject of great interest to researchers and clinicians, due to its harmonious and long-term impact on children's development and psychological health. However, in Kosovo, these studies have rarely had as a sample a group of children with physiological immaturity; therefore, this current study aims to make it authentic. The purpose of this study is to see if there is a high, moderate, or low level of depression in parents of children with physiological immaturity. Therefore, the objectives of this study were: 1). To test the level of depression in parents. 2). To find gender differences in the level of depression in parents of children with physiological immaturity. The research is based on two hypotheses: H1: The level of depression in parents of children with mental retardation is moderate. H2: Female parents have a higher level of depression than male parents.

## **2. Methodology**

The research was carried out in Kosovo, namely in Pristina, and aimed to measure the level of depression in parents of children with physiological immaturity and to find gender differences in the level of depression in parents of children with physiological immaturity. As for the research method, during this study the quantitative method was used where the study data were collected through the questionnaire. Meanwhile, Beck's Inverter was used as a measuring instrument for depression. The first part of the questionnaire contained demographic questions asking for age, gender, while the second part included the actual questionnaire. Quantitative, descriptive, statistical and analysis methods were also used for this research.

### **2.1. Questionnaire characteristics**

Data were collected through a structured, anonymous, self-administered questionnaire, including socio-demographic characteristics (age, marital status and gender); and Beck's Depression Inventory-II (BDI II) – BDI-II<sup>[36]</sup>, which is a standard and proven psychometric instrument that shows high reliability, ability to discriminate between subjects with and without depression, with improved validity substantive and structural. Based on available psychometric evidence, the BDI-II can be viewed as a low-cost questionnaire for measuring depression severity, with broad applicability for research and clinical practice worldwide. The BDI assesses 21 symptoms of depression, 15 of which cover emotions, four cover behavioral changes, and six somatic symptoms. Each symptom is rated on a four-point intensity scale and the scores are summed to give a total ranging from 0 to 63, and divided into four levels: from 0 to 13 minimal level of depression, from 14 to 19 mild level, from 20 to 28 moderate level and from 29 to 63 high level of depression. Of the 21 articles, 13 form

an abbreviated version, as shown in the list below. The 21 items cover sadness, pessimism, past failure, loss of pleasure, feelings of guilt, feelings of punishment (dislike of self), self-criticism (suicidal thoughts or wishes), crying (agitation, loss of interest), indecisiveness, feeling worthless, loss of energy, changes in sleep patterns (irritability), changes in appetite, difficulty concentrating (fatigue or exhaustion), and loss of interest in sex.

From the results presented in the tables below, we can see that the measuring instrument which measures depression satisfies the important condition for the application of the measuring instrument, respectively the reliability values for Cronbach’s Alpha method  $\alpha = 0.89$  and Gutman = 0.85 reach the reliability values  $\alpha = 0.80$ .

## 2.2. Participants

70 parents aged 26–58 were part of this research. Their average age was 40.7 years while the standard deviation + 7.4. The parents were selected based on the children’s diagnosis, i.e., those parents whose children were diagnosed with physiological immaturity through tests carried out mainly in the KKUK (University Clinical Center of Kosovo)—Department of Child Psychiatry, but also in private offices where tests are applied to measure intellectual capacities. The sample consists of 50% women and 50% men so that gender differences can also be seen. 66.7% of them had secondary education while 33.3% had higher education. The questionnaire was administered after the purpose of the study was explained to the parents and after their consent was obtained, we completed the questionnaire.

**Table 1** shows that a total of 35% or 50% female parents and 35% or 50% male parents participated in the study. So here we see that we have an equal distribution of the sample between the female and male genders.

**Table 1.** Tabular representation of the number of participants in the study, their gender and relative percentage.

	Frequency	Percentage	
Valid	Female	35	50%
	Male	35	50%
	Total	70	100.0

## 2.3. Procedure

In the beginning, permission was obtained from the Center for the Development and Education of Children with Special Needs, the Knowledge Center in Pristina, for the realization of the research. After the approval and permission from the center in question, we have started the realization of the research with the parents of the children who bring their children to this center. The research was carried out in order to discover the level of depression of parents whose children have been diagnosed with physiological immaturity and the gender differences in relation to that level. The selection of the sample was not problematic because the majority of the sample was taken from the client registration diary of the center for the development and education of children with special needs: “Kendra Dija”. The parents were very cooperative and this came as a result of the good cooperation they had with the institutions in the past and in the present. Before the distribution of the questionnaires, the parents were told the purpose of this research and they were told that the data obtained will remain completely anonymous and confidential. After receiving consent from the parents, they started filling out the questionnaire and for any ambiguity they were free to ask for additional clarifications. Filling out the questionnaires took 30 days. After the administration of the questionnaires, the data analysis was carried out using the SPSS (Statistical Package for Social Science) program.

## 2.4. Ethical consideration

Regarding the ethical consideration, the parents were informed that they would be free to ask any

questions regarding the questionnaire and the purpose of the research. They were also informed that parents who did not feel comfortable completing the questions could withdraw from the research at any time. The parents were informed that the questionnaire is anonymous, the data are confidential and will never be published for different interests that would harm them. Also, the parents who were selected for the research had enough time to complete all the questions.

### 2.5. Statistical analysis

The Statistical Package for Social Sciences Software (SPSS version 21.0) was used for data analysis.

## 3. Results

### Study results

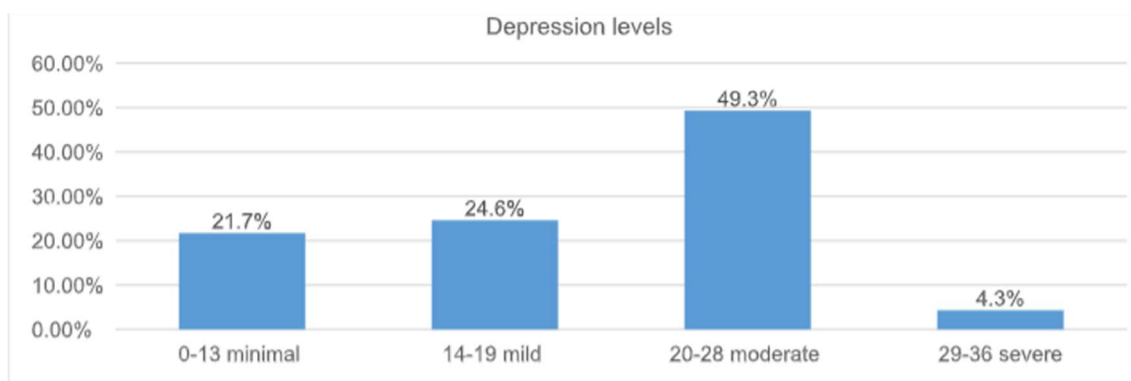
This paragraph presents the results of this paper obtained through the questionnaires used in line with the goals and hypotheses of this study. The results are descriptive and are presented through graphs, tables and inferential analyzes that show differences or changes between groups. As for the differences between the groups and the level of depression of the two variables of education and age groups, we performed the *t*-test and ANOVA analysis, but we did not find significant differences.

In **Figure 1**, we have presented the levels of depression categorized, where it can be seen that 49.3% of the respondents showed moderate levels of depression, 24.6% mild levels, 21.7% minimal levels and 8.6% severe levels of depression.

**Figure 2** shows the age group in proportion to the levels of depression, where it can be seen that 55.6% of the 25–35 age group have moderate levels, 38.9% mild levels and 5.6% minimal levels. While in the 36–45 age group, 54.8% showed moderate levels of depression, 25.8% minimal levels and 6.5% severe levels. 35% of the age group over 65 years showed moderate levels of depression, from 30% to mild and minimal levels, while only 5% showed severe levels of depression.

**Figure 3** shows the levels of education in proportion to the levels of depression, where it can be seen that 65.2% of the respondents with a high level of education showed moderate levels of depression, with 13% showing mild and minimal levels and 8.7 % severe levels of depression. While 41.3% of respondents with a medium level of education showed moderate levels of depression, 30.4% mild levels, 26.1% minimal levels and only 2.2% severe levels of depression.

In **Figure 4**, females showed moderate levels of depression with 70.6%, mild levels 17.6%, 8.8% minimal levels and only 2.9% severe levels of depression. 34.3% of male respondents showed minimal levels of depression, 31.4% mild levels, 28.6% moderate levels and 5.7% severe levels.



**Figure 1.** Categorized depression levels.

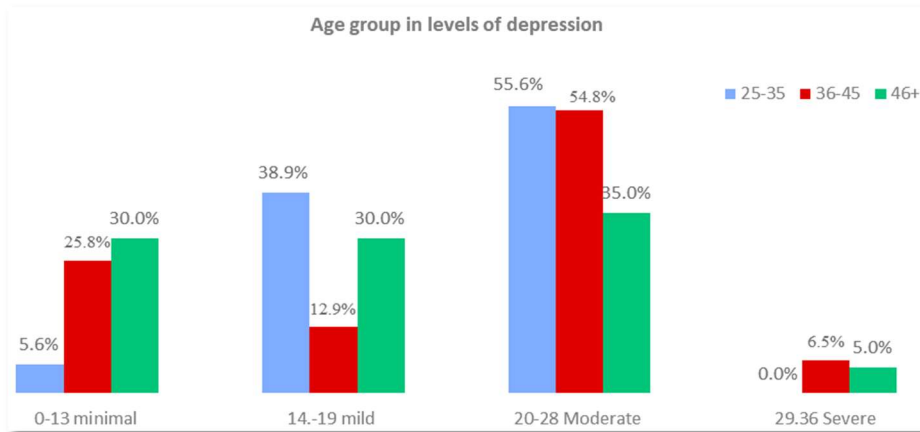


Figure 2. Age group in proportion to the level of depression.

### Academic level in comparison to depression levels

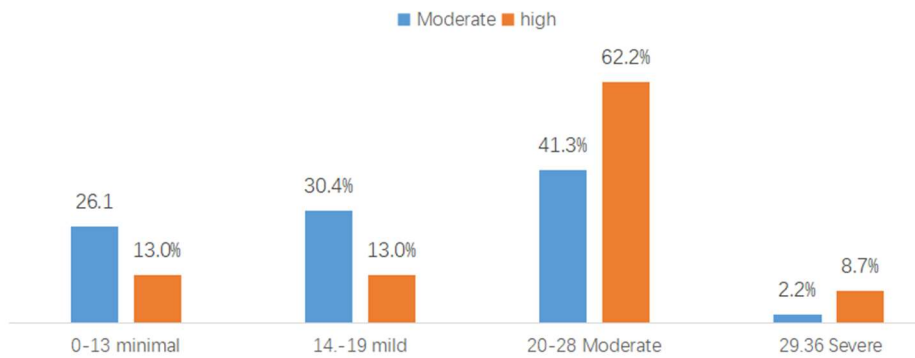


Figure 3. The level of education in proportion to the level of depression.

### Gender in proportion to depression levels

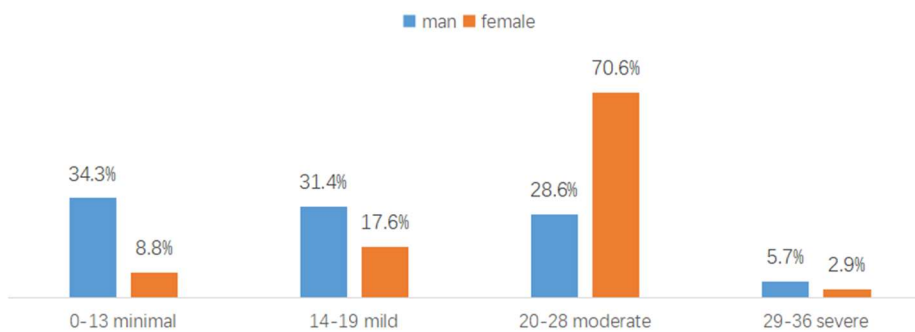


Figure 4. Gender in proportion to the level of depression.

In Table 2, the *t*-test analysis has shown significant differences between women (between 21.79 + 5.2) and men (between 17.91 + 6.1) regarding the level of depression where it can be seen that women have shown higher levels of depression,  $t = -2.844$ ,  $p = 0.006$ .

Table 2. Differences between women and men regarding the level of depression (*t*-test).

	<i>n</i>	Mean	<i>SD</i>	<i>T</i>	<i>df</i>	<i>p</i>
Male	35	17.91	6.1	-2.844	67	0.006
Female	34	21.79	5.2			

## 4. Discussion

The main goal of this paper was to identify the level of depression experienced by parents of children with physiological immaturity. Therefore, this study had two main pillars on which it was worked until its results. The first pillar was to test the level of depression in the parents of these children, i.e., children with physiological immaturity. Whereas the second pillar was to find gender differences among these parents, that is, to see which of the parents (male or female) has a higher level of depression. In order to arrive at results consistent with these goals, we established two hypotheses. The first hypothesis was that “the level of depression in the parents of children with physiological immaturity is a moderate level” so we believed that the parents of these children would have a moderate level of depression, as we know that it is not easy to deal with the challenges of caring for these children. Meanwhile, the second hypothesis was that “female parents have a higher level of depression than male parents”, so we believed that female parents, in this case mothers, tend to have a higher level of depression, since attachment to children is bigger and the daily stay with them is higher compared to male parents or fathers.

The hypotheses of this study can be said to have come true almost completely since our results show such a thing and we will try to present it as follows. The first hypothesis was that parents of children with physiological immaturity have a moderate level of depression, to achieve this result we used Beck’s instrument and following the instructions of this instrument we also achieved the result as seen in **Figure 1** here are the levels of depression divided into its levels. We can see that over 49% or almost half of the parents had presented a moderate level of depression, so through these results we have managed to prove our hypothesis, since the other levels of the degree of depression were significantly lower, exactly with 24.6% were in mild levels of depression, 21.7% minimal levels and 8.6% severe levels of depression.

Moreover, we can also say that the second hypothesis has been fully confirmed, since our results show such a thing. The second hypothesis was that female parents or mothers show higher levels of depression than male parents or fathers. To measure this hypothesis we used statistical analysis for differences of two groups or *t*-test. This analysis has shown significant differences between women (between 21.79 + 5.2) and men (between 17.91 + 6.1) regarding the level of depression,  $t = -2.844$ ,  $p = 0.006$ , so it is observed that women or mothers have shown average higher level of depression compared to male parents or the father

The results of our research are in line with many researches carried out in the past from around the world. But we will mention the research carried out by Moses<sup>[37,38]</sup>, where he shows that over 60% of parents who have a child with physiological immaturity, create stress, constant worry, fear of the future and many other symptoms that send to depression<sup>[39]</sup>. So here is the explanation for our results, because as we know, facing these challenges in Kosovo, especially when you have a child with physiological immaturity, is extremely difficult. Therefore, our results also show almost the same data, where it can be seen that over 50% of the parents interviewed for our research were in moderate and severe levels of depression.

The reasons for such experiences of parents can be different, however there are many researchers who try to find some of the causes that lead to such a state of mental health. A rather interesting research by Judge<sup>[40]</sup> shows a number of reasons why parents may face such emotional problems that lead to depression. In many different countries of the world that are in transition, the stigmatization of these parents who have such a child is quite widespread, so these parents every day have to face the pressure from the social circle to manage to carry out their daily theirs and especially the help towards their children<sup>[40]</sup>. Re-examining the statements from this research, we can confidently say that Kosovar parents face similar problems almost every day, we can even argue this with our results where we see that over 60% of parents feel pessimistic, so they do not hesitate to have a positive energy to continue their future.

Accepting children as they are is extremely important, not only for parent-child relationships and the development of parents, but also for the parents themselves, i.e., for their mental health. From our results we see that over 60% of children feel guilty for what has happened and therefore we believe that these parents have a hard time accepting their child as they are, and this can have a huge impact on their mental health<sup>[41]</sup>, in their research, show that most parents who have not managed to accept their child and cooperate with them, create a very stressful situation for themselves, which in many cases leads to depression. It is natural to have difficulties in acceptance, since the whole course of the parents' lives will change in those moments when they realize that they will have a child with physiological immaturity, however, if the parents are also involved in this journey, there will be improvements and progress in the child and the parents will have an emotional and mental stability, so they will be able to cooperate with their child<sup>[42]</sup>.

Our *t*-test results, as we have shown above, show that female parents, i.e., mothers, show a higher degree of depression than fathers. There are few researches carried out in the world where the purpose was to make a difference between the sexes, however we mention the research of Lyons-Ruth et al.<sup>[8]</sup> which is in the same line with our research even though the differences were minimal, in the research of with over 2000 male and female respondents, he observed that mothers experience more of their own state of depression, reflecting this directly on their children. According to them, the mother is more connected to their children, stays with them longer and takes care of them more, so it is natural that there are more experiences and emotional damage of mothers compared to fathers. We argue similarly, since it is known that even in Kosovo, mothers take care of their children more, stay more time with them at home, and necessarily the impact will be greater on the mother.

When we analyze **Figure 3** of the age groups in relation to the level of depression, we see very interesting results. Moreover, we see that although the youngest age group of parents (25–35 years old) showed more depression at moderate levels with 55% and mild with 38%, while we have no cases of severe depression. So, from this result they understand that parents who are younger in age show levels of depression up to a degree but manage to manage it by not sending it to the most severe degree. Similarly, it did not happen with the age group 36–45 years where we see that this age group is most affected by depression based on the results of our research, where we see that over 50% have moderate levels of depression and in addition about 6% of this age group has severe levels of depression. We believe that the reasons for such a thing may also be the recent effects of Covid-19, where many parents have lost their jobs, the opportunity to help their children, isolation for a long time, etc., so this can be one of the reasons why this age group has shown higher levels of depression, even Brooks et al.<sup>[43]</sup> conducted a study on the psychological consequences and the impact of Covid-19 on mental health, where they pointed out that the longest severe isolation, inadequate supplies, difficulties in obtaining medical care and medicines, heavy financial losses and loss of jobs sent many people into high levels of depression<sup>[44–47]</sup>.

## 5. Recommendations

Based on the literature review and the findings of our research, we recommend:

- We recommend that adequate and special programs be developed to inform, advise, and help all parents who have one or more children with physiological retardation throughout Kosovo<sup>[48]</sup>.
- We recommend that special schools be created that would accept these children or that these children be sent to attached classes in order to ease the burden on the parents and not have forced care throughout the day<sup>[49–53]</sup>.
- We recommend urgently creating a team of different psychologists who would contact or consult with all these parents, with the aim of helping to overcome this condition and reduce the level of depression among them.



- We recommend that all these parents be trained by clinical psychologists in order to successfully face all the challenges that come from the continuous care of these children<sup>[54,55]</sup>.

## 6. Study limits and restrictions

The research work for this thesis was limited by several factors<sup>[56–63]</sup>:

- The questionnaire was intended for both parents to complete for themselves, which they were reluctant to do.
- The small sample size represents another limitation in this study<sup>[64–71]</sup>. A larger sample number, I believe, would provide deeper and more complete results related to the research topic.
- The financial cost is the limiting factor for more detailed research with wider involvement.
- The epidemic situation has also been a part of the limitations of the rese.

## Author contributions

Conceptualization, NS and DS; methodology, NS and BO; software, NS and DS; validation, NS, BO and DS; formal analysis, NS and DS; investigation, BO and DS; resources, NS, BO and DS; data curation, NS, BO and DS; writing—original draft preparation, NS and DS; writing—review and editing, BO; visualization, NS, BO and DS; supervision, NS; project administration, NS, BO and DS. All authors have read and agreed to the published version of the manuscript.

## Conflict of interest

The authors declare no conflict of interest.

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