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EVALUATION OF ANXIETY LEVEL AND ATTITUDE TOWARDS PHYSICAL EDUCATION LESSON IN PARENTS OF CHILDREN WITH PES EQUINOVARUS

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ABSTRACT

The aim of this study is; to measure the attitudes of parents with children with congenital pes equinovarus towards the physical education class and to evaluate the anxiety level of participants, to measure the importance of physical activity for parents and the anxiety generated. This study was conducted with 213 parents of children with pes equinovarus. A survey form, Parents attitude scale towards physical education class (PASTPEC) and Beck anxiety scale (BAI) were applied to the families. Descriptive statistics were given with percentage and mean ± standart deviation (sd). The mean score taken from the BAI is 14.90±11.91. Accordingly, 64.8% of the participants had mild anxiety, 15.0% had moderate anxiety, and 20.2% had severe anxiety. PASTPEC mean total score is 89.58±10.83. 25.8% of the participants stated that their children did a different physical activity. When asked whether they had done any planned physical activity, 33.8% (n=72) answered positively. Severe anxiety is significantly lower in families whose children engage in activities on a regular basis. The frequency of anxiety is higher in those with low income status and those with low education status of their partner. PASTPEC score were found to be higher in those who did physical activity from parents, those with good income status, and those with high educational status of their spouse and themselves. The degree of pes equinovarus and the presence of other chronic diseases of the child do not change the attitude. The degree of pes equinovarus and whether the child has other chronic diseases did not have an effect on the severity of the parent's anxiety and PASTPEC score. The main influencing factors are education level and income status. The importance of social economic and social cultural levels of societies in terms of preventive medicine has also been shown in this study.

Keywords: Pes equinovarus, parents attitude, physical education class.

INTRODUCTION

Pes equinovarus (congenital club foot) is seen in 1-2 percent of every thousand live births. It is the most common congenital orthopedic anomaly among all. It is characterized by musculoskeletal dysplasia in the area below the knee (Us & Turgut, 2017). Deformity in the womb can be detected by ultrasonography followed by twelfth week of pregnancy. Radiological imaging, computed tomography, magnetic resonance imaging can also be used in diagnosis. This anomaly does not only affect foot position, but also affects the entire gait biomechanics (Ostadal et al., 2017). The most common cause in the etiology of pes equinovarus is idiopathic. However, it can also occur due to posture disorder in the mother's womb. In addition, Down Syndrome can be seen together with congenital and neurological diseases such as FreemanSheldon Syndrome (Us & Turgut, 2017). It has been suggested that fibroblasts and growth factors may play a role in the etiology (Ostadal M et al., 2017). Pes equinovarus in the clinic; plantar flexion is characterized by inversion of the heel and adduction of the foot. In half of the children, it is one-sided. Developmental hip dysplasia is more common in these children (Qureshi et al., 2022). The Dimeglio classification is used to decide the clinical severity and treatment options of pes equinovarus. Staging is conducted with scoring between 1-20. Stage 1 is classified as mild, Stage 2 as moderate, Stage 3 as severe, Stage 4 as very severe. Stage 1 is more than 90% correctable and mild. Stage 2 is 50% correctable, soft-hard, Stage 3 is partially correctable, hard-soft, Stage 4 is 10% correctable, hard (Dimeglio et al., 1995). Today, two basic methods are applied in treatment; physiotherapy and Ponseti method (Ostadal et al., 2017). The Ponseti method achieves treatment success in 85% of children with idiopathic pes equinovarus. However, it is not very effective if it is seen with congenital and neurological diseases (Mosca, 2014). Disability is a condition that causes limitation in the person's ability to do certain activities, difficulty in participating and interacting with the social environment. There are several types of disability. The most common classifications are; physically, mentally, hearing impaired, visually impaired, learning disabilities, pervasive developmental disorders (World Health Organisation Disability Report). A DALY (disability adjusted life years) is expressed as a person's loss of years of healthy life due to illness or early death. It is found by summing the number of premature deaths due to disease (YLL) and the number of years of life lost due to disease that cause disability (YLD) (World Health Organisation Disability Report). In the study conducted in 195 countries between 1990-2017 globally, it was reported that 1.3 million people were affected by musculoskeletal system diseases, approximately 121 thousand of them lost their lives due to this reason, and these diseases caused 138.7 million DALY's (Safiri et al, 2021).

There are nearly 8.5 million disabled individuals in our country. The problems of disabled people affect not only themselves but also their families, as a result, 35-40 million people are affected by this situation (Özgür, 2017). Common diseases that frequently cause disability and death are very important for public health. Therefore, disability is an important public health problem.

Anxiety is a common public health problem in the world like disability. To the DSM V, the diagnostic criteria for generalized anxiety disorder are; excessive anxiety and delusion for most of a period of at least 6 months, difficulty in controlling these delusions, accompanied by at least three of the following conditions; 1.

Restlessness or being on the toes for a while, 2. Do not get tired quickly, 3. Difficulty focusing, 4. Don't get angry easily, 5. Tension in the muscles, 6. Sleep disorders (APA, 2013). It has been stated that mothers with disabled children show cognitive, sensory and stress symptoms more than mothers with healthy children (Bilal & Dağ, 2005). Parents with disabled children may face some problems in their social lives. This increases the level of stress (Uskun & Gündoğar, 2010).

Children who requires special education due to their physical disabilities and health problems are generally divided into two categories: those with orthopedic disabilities and those without. Physical disabilities that affect a child's educational capacity can be caused by many reasons. Neurological problems, musculoskeletal disorders and other health deficiencies can be grouped. The human sceletal system consists of muscles, bones, joints and ligaments. Any defect or disease in these structures adversely affects the motility. As a result, functions such as walking, sitting, standing may not be performed, or limited a s a consequence (Uysal, 2018).

Individuals display physical, mental, psychological and social retardation, these deficiencies cause social and emotional problems and adversely affect self-development. Although there are cognitive and academic programs applied to complete development, play, movement, motor skills and physical competence are considered as an important prerequisite for full improvement (Ergun, 2017). Due to the fact that many disabled children growing up in limited environments cannot communicate healthly, their personality development is adversely affected compared to normal children (Çalışkan, 2011). Physical activity has an important role in the children with disabilities.

Physical activity is the body motion generated by skeletal muscles by spending energy (Yanardağ, 2017). Physical education consists of various activity programs, including motor skills, physical fitness, individual and team sports (Elliot et al., 2016). One of the important goals of physical education programs is to provide students with skills and behaviors (Block et al., 2016). Receiving the support of families in sports activities for disabled people offers the opportunity to see the existing talents of children (Çalışkan, 2011). In addition, the fact that disabled children have the ability to move on their own reduces the anxiety levels of families (İlhan, 2010). It is important for children with pes equinovarus to attend a physical education class for their social and physical development. Family support is important in ensuring this participation. The positive attitude of the family towards the physical education lesson increases the adaptation of the children to school and social life and has positive effects on their physical health.

In the light of this information, it is cotemplated that anxiety disorder may be more frequent in these parents where the attitude of the parents of children with pes equinovaru towards physical education is extremely important, and this study is planned to evaluate this subject. In the literature, the studies are limited on this subject. Studies on this subject have been carried out by different disciplines. In this study, we aimed to contrubite to the literature with a multidisiplinary approach.

METHOD

Research Design

This study employed the descriptive survey model, it is an observational study.

Population and Sampling of the Study

This study was conducted within 213 parents who were taken by appropriate sampling from the parents of approximately 1000 children with pes equinovarus aged 0-18 years. Parents who agreed to participate in our study were recruited. No sample was selected. There is no exclusion criteriain our study.

Data Collection Tools

A questionnaire form including socio-demographic characteristics with 10 questions, parents attitude scale towards physical education class, Beck anxiety scale were applied to the families who agreed to participate in the study. Beck anxiety scale is a 21-question Likert-type scale. It is calculated from 0 to 63. The higher the score, the more severe the anxiety (Ulusoy et al.,1 998). On the Beck anxiety scale, a score of 0-7 indicates minimal, 8-15 indicates mild, 16-25 indicates moderate, and 26-63 indicates severe anxiety (Maust et al., 2012). In our study, 3 groups were taken because there was no area between 0-7 points. Parents attitude scale towards physical education class consists of 4 sub-dimensions. 1. Perceptual, 2. Functional, 3. Support, 4. Importance. On the five-point Likert-type scale, the highest score is 105 and the lowest is 21 (Öncü & Güven, 2011a). Ethics committee approval was obtained for this study from the Van Training and Research Hospital Clinical Researchs Local Ethics Commitee with the decision dated and numbered (01.02.2023, 2023/03-01).

Data Analysis

The data of the study were entered into the spss 21.00 package program and the descriptive statistics were given with percentage and mean ± sd. The conformity of continuous variables to the normal distribution was tested by Kolmogorov-Smirnov. Mann-Whitney U analysis was used for pairwise group comparisons and Kruskal Wallis Variance analysis was used for three or more group comparisons. As a result of Kruskal Wallis analysis, Mann-Whitney U was used in binary group comparisons and bonferroni correction was performed. The significance level was taken as $p<0.05$.

FINDINGS

This study was conducted in 213 people with children with pes equinovarus. The mean age of the parents who participated in our study was 32.97±6.17 (median 32, min.-max. 20-54). The total scale score of beck anxiety (median 11, min.-max. 0-55) of the study participants was 14.90±11.91. Cronbach α value of the beck anxiety score is 0,93. According to the Beck anxiety scale score, 64.8% (n=138) of the participants had mild anxiety, 15.0% (n=32) had moderate anxiety, and 20.2% (n=43) had severe anxiety.

The mean score they received on the parents attitude scale towards physical education class was 89.58±10.83 (median 91, min-max. 52-105). Cronbach's α value of the parents attitude scale towards physical education is 0,93. The mean perceptual dimension score of this scale was 36.23±4.65, the mean of functional dimension was 19.38±4.02, the mean of support dimension was 16.83±2.33, and the mean of importance dimension was 17.04±2.59. The cronbach's α values of the subdimensions are 0,95,0,88,0,81,0,87 respectively. 28.2% (n=60) of the participants worked in the private sector, 39.9% (n=85) worked in the public sector, and 31.9% (n=68) were housewives. 14.6% (n=31) of the children had mild grade, 46.0% (n=98) had moderate grade, and 39.4% (n=84) had severe pes echinovarus. 8.0% (n=17) of the children of the study participants had a different chronic disease. Of the participants in the study, 4.3% (n=9) received primary education, 30.0% (n=64) received high school, 57.7% (n=123) received undergraduate, and 8.0% (n=17) received graduate education. When asked about the education of partners, 11.7% (n=25) answered primary education, 32.9% (n=70) high school, 42.7% (n=91) undergraduate, and 12.7% (n=27) graduate. 4.7% (n=10) of the participants stated their income status as poor, 74.6% (n=159) as medium, and 20.7% (n=44) as good.

Table 1. Evaluation of the Status of Participants and Children Performing Regular Physical Activity

Variables	**Yes**		**No**	
	N	**%***	**N**	**%***
Regular physical activity status of parent	72	33,8	141	66,2
Regular physical activity status of the child	55	25,8	158	74,2

*row percentages.

According to Table 1, 25.8% (n=55) of the participants stated that their children performed a different physical activity. When asked whether they had practiced any planned physical activity, 33.8% (n=72) answered positively.

Table 2. Comparison of Anxiety Levels and Socio-demographic Characteristics of the Participants

Variables		**Anxiety levels**						
		Mild		**Mid**		**Severe**		**x^2, p**
		N	%*	N	%*	N	%*	
Educational status	Elementary	4	44,4	2	22,2	3	33,3	3,63, 0,721
	High school	44	68,8	8	12,5	12	18,8	
	Graduate	79	64,2	18	14,6	26	21,1	
	Postgraduate	11	64,7	4	23,5	2	11,8	
Partner educational status	Elementary	15	60,0	3	12,0	7	28,0	14,61, 0,023
	High school	49	70,0	3	4,3	18	25,7	
	Graduate	55	60,4	22	24,2	14	15,4	
	Postgraduate	19	70,4	4	14,8	4	14,8	
Regular physical activity	Yes	49	68,1	12	16,6	11	15,3	1,67, 0,432
	No	89	63,1	20	14,2	32	22,7	
Child's regular physical activity	Yes	44	80,0	5	9,1	6	10,9	7,54, 0,023
	No	94	59,5	27	17,1	37	23,4	
Income status	Poor	3	30,0	1	10,0	6	60,0	13,26, 0,014
	Mid	101	63,5	26	16,4	32	20,1	
	High	34	77,3	5	11,4	5	11,4	

*row percentages.

In Table 2, some characteristics of the participants and their anxiety levels were compared. When the education level of the participants and their anxiety levels were compared, there was no significant variance between the groups (p›0.05). However, when the education level of the spouses and the anxiety levels of the

participants are compared; Severe anxiety was measured significantly higher in those with high school education than undergraduate education (p=0.002). Regular physical activity does not affect the severity of anxiety (p›0.05). However, severe anxiety was significantly lower in families whose children regularly engaged in activity (p=0.023). When income status and anxiety were compared, anxiety intensity was found to be significantly higher in those with poor income status than in those with medium and good income status (p=0.010, p=0.002, respectively). There was no difference in anxiety severity between those with mid and high income status (p›0.05).

Table 3. Comparison of the Children's Pes Equinovarus Grade with the Anxiety Levels of the Participants

Variables		**Anxiety levels**						
		Mild		**Moderate**		**Severe**		**x^2, p**
		N	%*	N	%*	N	%*	
Pes equinovarus degree	Mild	21	67,7	4	12,9	6	19,4	7,08, 0,132
	Moderate	71	72,4	10	10,3	17	17,3	
	Severe/very severe	46	54,8	18	21,4	20	23,8	

*row percentages

In Table 3, the degree of pes equinovarus of the children and the anxiety levels of the participants were compared. There was no significant variance between the groups (p›0.05).

Table 4. Comparison of Parents Attitude Scale Towards Physical Education Class Scores and Physical Activity Status of the Participants and their Children

Variables		**N**	**Mean Rank**	**Total**	**U**	**p**
Child's regular activity						
Perceptual	Yes	55	118,16	6499,00	3731,00	0,092
	No	158	103,11	16292,00		
Functional	Yes	55	117,97	6488,50	3741,50	0,125
	No	158	103,18	16302,50		
Support	Yes	55	103,77	5707,50	4167,50	0,645
	No	158	108,12	17083,50		
Importance	Yes	55	110,65	6086,00	4144,00	0,597
	No	158	105,73	16705,00		
Total	Yes	55	115,98	6379,50	3850,00	0,203
	No	158	103,82	16411,50		
Regular physical activity						
Perceptual	Yes	72	129,77	9343,50	3436,50	0,000
	No	141	95,37	13447,50		
Functional	Yes	72	118,49	8531,50	4248,50	0,050
	No	141	101,13	14259,50		
Support	Yes	72	124,34	8952,50	3827,50	0,003
	No	141	98,15	13838,50		
Importance	Yes	72	120,19	8653,50	4126,50	0,027
	No	141	100,27	14137,50		
Total	Yes	72	127,97	9213,50	3566,50	0,000
	No	141	96,20	13577,50		

No significant differences were measured between the child's ability to do physical activity or status and the parents' attitude towards the physical education class score. The scale total score and subscale scores are higher in those who do regular physical activity than those who do not.

Table 5. Comparison of Parents' Education Levels and Parents Attitude Scale Towards Physical Education Class Score

Variables		N	Mean Rank	x^2	p
Educational status					
Perceptual	Elementary	9	46,00	16,31	0,001
	High school	64	103,64		
	Graduate	123	108,38		
	Postgraduate	17	141,97		
Functional dimension	Elementary	9	62,33	6,18	0,106
	High school	64	115,63		
	Graduate	123	106,50		
	Postgraduate	17	101,79		
Support	Elementary	9	60,83	8,97	0,032
	High school	64	105,67		
	Graduate	123	107,21		
	Postgraduate	17	134,94		
Importance	Elementary	9	87,56	2,05	0,568
	High school	64	108,30		
	Graduate	123	105,74		
	Postgraduate	17	121,50		
Total	Elementary	9	51,00	9,36	0,024
	High school	64	110,32		
	Graduate	123	106,65		
	Postgraduate	17	126,65		
Partner's educational status					
Perceptual	Elementary	25	82,66	11,71	0,008
	High school	70	96,89		
	Graduate	91	115,39		
	Postgraduate	27	127,46		
Functional	Elementary	25	88,12	9,59	0,024
	High school	70	111,49		
	Graduate	91	116,35		
	Postgraduate	27	81,35		
Support	Elementary	25	97,62	3,41	0,332
	High school	70	104,75		
	Graduate	91	114,96		
	Postgraduate	27	94,70		
Importance	Elementary	25	102,40	0,90	0,825
	High school	70	107,84		
	Graduate	91	110,03		
	Postgraduate	27	98,87		
Total	Elementary	25	88,90	5,07	0,162
	High school	70	104,39		
	Graduate	91	116,62		
	Postgraduate	27	98,11		

The comparison of parents' education levels and Parents Attitude Scale Towards Physical Education Class score is given in Table 5. Binary group comparisons were made in the groups with significant differences (perceptual, support, total). The total score and all subscale scores were significantly lower in those with primary education levels compared to other groups. In the educational status of the partners, the perceptual and functional subscale score of those who graduated from primary and high school was found to be significantly lower than those of undergraduate and graduate students.

Table 6. Comparison of Children's Pes Equinovarus Grade and Parents Attitude Scale Towards Physical Education Class Score.

Variables		N	Mean Rank	x^2	p
Perceptual	Mild	31	100,92	1,87	0,392
	Moderate	98	103,18		
	Severe/very severe	84	113,70		
Functional	Mild	31	110,34	5,38	0,065
	Moderate	98	96,77		
	Severe/very severe	84	117,70		
Support	Mild	31	101,98	4,65	0,097
	Moderate	98	98,17		
	Severe/very severe	84	117,98		
Importance	Mild	31	92,82	5,18	0,752
	Moderate	98	102,18		
	Severe/very severe	84	117,85		
Total	Mild	31	98,61	4,86	0,884
	Moderate	98	99,78		
	Severe/very severe	84	118,52		

A comparison of the degree of pes equinovarus of children and parents attitude scale towards physical education class score is given in Table 6. No significant differences were found between the groups.

Table 7. Comparison of Parents' Income Status and Parents Attitude Scale Towards Physical Education Class Score

Variables		N	Mean Rank	x^2	p
Perceptual	Low	10	84,00	8,12	0,012
	Mid	159	102,66		
	High	44	127,91		
Functional	Low	10	106,70	0,78	0,965
	Mid	159	107,64		
	High	44	104,74		
Support	Low	10	83,85	2,13	0,346
	Mid	159	106,44		
	High	44	114,27		
Importance	Low	10	110,40	0,46	0,978
	Mid	159	106,60		
	High	44	107,68		
Total	Low	10	88,35	2,07	0,356
	Mid	159	105,52		
	High	44	116,59		

The comparison of the income status of parents and parents attitude scale towards physical education class score is given in Table 7. When pairwise comparisons are made between the groups, the perceptual subscale score is significantly higher in those with high income status than in those with poor and medium income status.

CONCLUSION and DISCUSSION

In our study, the mean total score of the participants in Beck anxiety scale was found to be 14.90. In Tura's study of those with disabled children (2017), the mean anxiety score of mothers was found to be 18.07. In a study conducted by Uğuz et al., (2004) in mothers of children with mental and/or physical disabilities, they found the mean anxiety score of 32.66 in those with disabled children and 9.86 in the control group. One reason why the Beck anxiety scale score was lower in our study may be that the majority of children in our study had only pes equinovarus. In Kaymaz's study conducted (2015), the mean total score of anxiety in

mothers with children with cerebral palsy was found to be 13.05. This conclusion is consistent with our findings.

In the study conducted by Suna & Özkan (2022), the mean total score taken from the parents attitude scale towards physical education class was found to be 75.83. In our study, the mean score score was 89.58. In Suna & Özkan's study, perceptual sub-factor score mean was 21.79, functional sub-factor score mean was 20.88, support sub-factor score mean was 16.59, importance sub-factor score mean was 16.58. In our study, the mean perceptual dimension score of the scale was 36.23, the mean of functional dimension was 19.38, the mean of support dimension was 16.83, and the mean of importance dimension was found to be 17.04. The presence of a special group of parents in our study, the frequent cooperation with physiotherapists and physicians due to the child's orthopedic disability, and their acting in accordance with their recommendations may have made them more aware of this issue.

In our study, when the education level of the participants and their anxiety levels were compared, there was no significant variance between the groups. In the study conducted by Akturk & Aylaz (2017), it was stated that maternal education level did not affect several anxiety. In Becan's (2017) study on families of visually impaired children, it was stated that the education status of the parents did not affect the anxiety score. In the study conducted by Uskun & Gündoğar (2010) on the families of disabled children, no relationship was found between education level and anxiety. In Kaymaz's study conducted (2015), no relationship was found between education and anxiety. In the study conducted by Turan et al., (2022) in patients with orthopedic diseases, the level of anxiety increases as the education level of the parent increases. In the study conducted by Bumin et al., (2008) in families with disabled children, it is stated that the level of anxiety decreases as the level of education increases. Different studies have obtained different results. There can be many factors that cause anxiety in daily life. In addition, other variables other than the child's discomfort (for example, co-morbidity, severity of the disease, the child's level of dependence, treatment response, self-care skills, etc.) can affect the anxiety level of the parents. Factors such as whether the child receives education or not, the place of education can affect the social life for families positively or negatively. This may either lead to an increase or decrease on the level of anxiety.

A (2013) study by Anderson & Shivakumar indicates that those who engaged in regular physical activity had fewer anxiety symptoms. Teixeira et al., (2013) study also stated that anxiety levels were lower in those who did regular physical activity. In our study, regular physical activity of people did not affect the severity of anxiety. This may be because only 1/3 of the study participants conducted physical activity on a regular cadence.

In our study, anxiety levels were found to be lower in parents whose children did regular physical activity. In an experimental study conducted by İlhan in 2010 in families of children with intellectual disabilities, a decrease in

anxiety levels was observed in the families of children who were given regular physical activity. This conclusion is consistent with the literature. Physical activity is known to have positive effects on mental health.

In the study conducted by Turan et al., (2022) among with orthopedic problems, no correlation was detected between income status and anxiety levels. In a study conducted in the families of children with disabilities, Akturk & Aylaz (2017) observed that anxiety levels were higher in those with low income status than in middle and good ones. In our study, anxiety severity was found to be significantly higher in those with poor income status than in those with medium and good income. There is no difference in anxiety severity between those with middle income status and those with good income. It is natural for families with poor income status to be concerned about the special requirements of the disabled child, such as treatment costs, surgery, etc. This anxiety can increase anxiety levels on a certain level.

In our study, the child's pes equinovarus degree does not affect the parent's anxiety severity. In Kaymaz's study (2015), no correlation was detected between the degree of disability and anxiety. In the study conducted by Haberal et al., (2020) anxiety levels were found to be higher in the families of children with inward flattening than those without. According to these results, the presence of the disease is effective in increasing anxiety. However, the severity of the disease does not show much effect.

In our study, there was no significant variance between the child's physical activity or non-physical activity and the parents' attitude towards the physical education class. In the study conducted by Yaşar & Öztürk (2018), the sports status of the students and the attitudes of the parents towards physical education were compared. Perceptual, support, importance sub-dimension scores were found to be higher in the families of children who played sports. In the study conducted by Öncü and Güven (2011b), the attitudes of the parents of the children playing in the school team towards physical education were found to be more positive. The fact that our sample group is children with certain diagnoses and the low rate of regular physical activity may have affected our result.

In the study conducted by Öncü & Güven (2011b), parents' sports activities positively affected the parents attitude towards physical education class. In the study conducted by Atan et al., (2018) the total, perceptual, support and importance score of parents who do sports is significantly higher than those who do not. In the study conducted by Yaldız & Özbek (2018), total scale score, functional, support, importance sub-factor scores were found to be more positive in sports. In the study conducted by Suna & Özkan (2022), functional, support, importance and total score were found to be higher in sports compared to the other group. In the study conducted by Yılmaz (2018), perceptual and support sub-factor scores were found to be higher in those who did sports than in those who did not. In our study, the results are similar. The total and subscores of the parents attitude scale towards physical education class were found to be significantly higher in parents who did physical activity than those who did not do physical activity. It is quite natural for people who do regular sports to develop a positive attitude towards physical education and sports.

In the study conducted by Öncü & Güven (2011b), it was stated that the level of education of parents did not affect the parents attitude towards physical education class. In the study conducted by Atan et al., (2018) it was found that the parent's educational status did not affect the total and subscale scores of the scale. In the study conducted by Yılmaz (2018), education status does not affect the scale scores. In the study of Yaldız & Özbek (2018), the perceptual sub-factor score of parents who graduated from high school was found to be higher than that of primary school graduates. In the study conducted by Suna & Özkan (2022), the perceptual and support sub-factor score increases as the level of education increases. In our study, perceptual, support sub-factor scores and total scores were found to be significantly higher in high school, undergraduate and graduate education level compared to primary school graduates. It is a known fact that sports increase the physical, psychological and social well-being of people. This awareness is high in people with high level of education. The results are consistent with the literature.

In the study conducted by Suna & Özkan (2022), no significant variance was detected between the groups when the income status and the parents attitude towards the physical education class score compared. In the study conducted by Yılmaz (2018), income level, total score and sub-factor scores were found to be positively correlated. In our study, the perceptual subscale score was significantly higher in those with high income status than those with poor and medium income status. The limited access of people with low income status to sports opportunities may adversely affect their attitudes on this issue. In addition, priorities may differ in individuals with low socioeconomic status.

The degree of pes equinovarus and whether the child has other chronic diseases did not have an effect on the severity of the parent's anxiety and parents attitude scale towards physical education class score. The main influencing factors are education level and income status. The importance of social economic and social cultural levels of societies in terms of preventive medicine has also been shown in this study.

RECOMMENDATIONS

The study was conducted only with parents of children with pes equinovarus. Studies in different groups are needed. For example, studies can be conducted on children with other orthopedic disabilities. It is recommended to use preventive medicine practises effectively. Education should be given to parents of children with special needs. This training should be on the benefits of physical education and sports. It is known that anxiety decreases significantly in individuals who do sports. Therefore, it is important that children with special needs are directed to do physical activity together with their parents

ETHICAL TEXT

In this article, journal writing rules, publication principles, research and publication ethics rules, journal ethics rules were followed. Responsibilities for any violations that may arise regarding the article, belong to the author(s). Ethical approval was obtained for the study with the decision of Van Training and Research Hospital Clinical Researchs Local Ethics Commitee dated 01.02.2023 and numbered 2023/03-01.

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