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Behavioral and emotional characteristics of children with functional nocturnal enuresis

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Problems related with the skill of adequately using the toilet is one to which parents pay special attention; if a child does not have toilet skills developed by the time it is expected by the parents, it becomes a source of significant stress for the entire family (Chamberlin, 1974; Mesibov, Schroeder &Wesson, 1977). The dysfunction mentioned above is often misunderstood; families hide this fact and avoid discussing it, resulting in no treatment for the child's problem. There are cases, when family members punish or mock the child with enuresis, which causes low self esteem of the child (Brightman, R, P., Baker B,L(1982).

Differences in emotional and behavioral characteristics among children with enuresis are often mentioned in research on functional nocturnal enuresis. It is important that the researchers name the dysfunction of enuresis as the cause of such difference. According to some scholars, behavioral or emotional characteristics of children with enuresis are no different from children without enuresis (Eric J. Mash, Russell A. Barkley; 1986). It is notable that this subject has not been widely researched. All of the research is clinical and therefore, the research sample is small, which reduces the probability of generalization of the findings. It must be considered, that each case of enuresis is individual (as well as each clinical case) and the causes are multidimensional. A child's social environment, attitude of the family towards the problem, and the child's personal characteristics may give different pictures.

According to data from the United States, approximately five to seven million American children have primary nocturnal enuresis. In many countries, every year thousands of families get consultations regarding enuresis(Williams, B.J., Forsyth, J.P. &Goodrick, 1998). The issue remains acute because of its frequency and social problems related to it.

The problem of enuresis probably is a cause of similar discomfort for Georgian children and their parents. With growing age, enuresis becomes not only a hygienic, but also psychosocial problem and causes Georgian families to seek medical help. However, there is no epidemiology of enuresis in Georgia, and no data on its prevalence and incidence.

The research interest is sparked by the attitude of Georgian parents during psychological consulting and interviewing. As functional nocturnal enuresis is a long-term dysfunction (until intervention/treatment), it is of interest to measure emotional and behavioral characteristics of Georgian children with enuresis. At the same time it is interesting to observe parents' opinion regarding their children's behavior and emotions.

The research idea arose during observation of children with enuresis and the style of behavior of their parents during clinical-psychological consultation. The majority of Georgian

parents during initial interview evaluated the problem as very serious and often accused their child of lack of attention or motivation. During immediate observation, it is clear that children's behavior is often insecure and they blame themselves—potentially as a result of parents' influence.

This fact created an assumption that Georgian parents overemphasize the problem of children's enuresis do not have a supportive attitude, often blaming/punishing them (parents almost never talk about the latter; equally rarely do children mention physical punishment). The second assumption presumed that, based on all of the above, children with enuresis should have low self-esteem and/or different behavioral profile. They are also presumably not comfortable at home, where their "night stories" become known to all family members. Therefore, it is interesting to study their emotional sphere.

Considering the actuality of this problem and the fact that no research has examined behavioral and emotional characteristics of children with functional nocturnal enuresis, the present research was planned. The findings of the research can be practically applied. Knowing the behavioral and emotional characteristics of the children with enuresis, should allow for better consultancy provision to the parents and, respectively, more adequate interventions can be planned.

Retaining, strengthening, and protective factors of the condition should be discussed in each clinical case, which is a necessary prerequisite for selecting adequate treatment method. The role of psychological education is also quite important for effective treatment. In order to provide correct psychological education, it is necessary to know behavioral parameters and emotional characteristics of children with enuresis. For the same reason, it is important to find out what relationship do Georgian parents have with their children with enuresis. Knowing this relationship in advance increases effectiveness of the intervention. Since no similar research has been conducted with Georgian child population, the present research is a certain novelty with practical importance.

Hypothesis, goals and objectives of the research

The goal of the research is to establish behavioral and emotional characteristics of children with functional nocturnal enuresis. Objectives of the research are:

- ✓ To determine emotional and behavioral characteristics of children with enuresis using "family picture" and compare it to the children without enuresis;
- ✓ To compare the evaluation of behavior of children with enuresis by their parents and conduct comparative analysis of the results with the survey of parents of children without enuresis.

Hypothesis is the following:

- 1) Children with enuresis have behavioral and emotional characteristics different from the children without enuresis.
- 2) Parents of children with enuresis do not assess their children's behavior appropriately.

Research methodology

The research was conducted on two sample groups:

- 1. Experimental group consisted of 44 children with functional nocturnal enuresis aged 6-15 (15 girls and 29 boys) and their parents.
- 2. Control group consisted of 50 assumed healthy children aged 6-15 (20 girls and 30 boys) and their parents.

Research methodology:

1. Clinical interview

From the data collected from the interviews, the following were used for the research:

Demographic data – age, gender, age of problem onset.

(The age of problem onset would inform if enuresis was primary or secondary).

Family condition

Traditional nuclear family without conflict

Traditional nuclear family with conflict

Single-parent family (divorced parents)

Sleep pattern

Regular, normal sleep
Deep sleep
Inconsistent deep sleep

2. Family picture

Using "family picture" as a method of research is historically related to projective testing in psychology. Picture methods have become quite popular among practicing psychologists in the 1950's and 1960's. It is hard to say who the pioneer of using picture methods to determine personal characteristics and interpersonal relationships was, however several names stand out in the literature: Machover and Buk's fundamental works sparked interest to the projective methods (Machover K, 1949 and Buk J, 1948). Berns and Kaufman mention that the earliest reference to using "family picture" cited in literature was by W. Hulse in 1951 (Berns R. and Kaufman S., 1972).

Research on interpretation of "family picture" belongs mainly to practitioners, and therefore no well analyzed theoretical basis exists. Since interpretation is grounded in different theories and empirical research materials, it is of practical interest to analyze this method in such context. Research by Homentauskas (1985) proclaimed the family picture method as one that identifies the following factors: child's self-evaluation in the family child's emotions, child's relationship and interaction with the family as a whole and with separate members. These were the factors of interest during this work with children with enuresis, since, the hypothesis presumed that their self evaluation and interaction with family and family members should have been different.

During interpretation of the drawing, the following characteristics were considered:

- o Placement of family members on the picture
- o Placement of figures in space
- o Size of the figures
- o Arms
- o Legs
- o Mouth
- *Color of the picture*

Parameters for analizing Family Picture

Placement of family members in the picture

All members present

One parent missing

One sibling missing

The child (himself/herself) missing

Everyone missing

Atypical picture

Placement of figures in space

All members are on one plane

Every member of the family is on a different plane

The child (himself/herself) is isolated

One member of the family is isolated

Size of the figures

Figures are of the same size

One of the parents is dominant

The child (himself/herself) is too small

The child (himself/herself) is too big

<u>Arms</u>

Regular arms

Small arms and/or arms without hands

Long arms and hands with claws

No arms

Legs

Regular legs

Small legs

No legs

Mouth

Regular mouth

Large mouth and/or mouth with teeth

Small mouth or no mouth

Color of the picture

Colored picture

Black and white picture

3. Child Behavior Checklist by Achenbach (CBCL 4/18)

CBCL 4/18 – Child Behavior checklist is based on multivariable approach which envisages psychometric principles after the evaluation. We have used the parent form of the CBCL 4/18 – Child Behavior checklist and paid close attention to the preparation of a problem behavior evaluation matrix.

It is noteworthy that in the interests of the research, we have deemed valuable to count the sub-matrix points parallel to the CBCL problem behavior matrix total value, since these sub-matrices measure those emotional and behavioral characteristics that stand out during "family picture" interpretation. We assumed that data from the CBCL matrix would be in some correlation with some data interpreted from the "family picture."

Respectively, the data is grouped and processed according to the following matrices:

1. Internal; 7. Thought probles;

2. External; 8. Attention;

3. Withdrown; 9. Delinquent behavior;

4. Somatic complaints 10. Aggressive behavior;

5. Anxious/Depressed; 11. Sexual problems;

6. Social problems;

Description of findings

In order to identify the indirect relationship between the variables, χ^2 criteria were used for statistical processing of qualitative characteristics. ANOVA was used for quantitative characteristics. In case of significant relationship, strength was determined by Spearman correlation coefficient for the qualitative characteristics and Pearson's correlation coefficient for the quantitative characteristics. Risk factors of enuresis were also determined.

1. Results of clinical interviews

1.1 Gender

Gender in the experimental and control groups was distributed in the following way: 42.9% of the experimental group was female and 49.2% was male. In the control group females were 57.1%, while 50.8% was male.

Statistically significant difference by gender was not found. (see chart #1).

Chart №1

Gender		Gro	χ^2	
		Control	Experimental	
Female	N	20	15	
	%	57,1%	42,9%	
Male	N	30	29	0.350
	%	50,8%	49,2%	0,350 p>0,05
Total	N	50	44	
	%	53,2%	46,8%	

1..2 Age

Experimental and control groups were divided in two age categories. Experimental group included 28 children with enuresis from 6-9 and 16 children aged 10-15. Control group included children without enuresis, practically healthy, 24 children aged from 6-9 and 26 children aged 10-15. Difference by age is also statistically insignificant..

Chart №2

A go groung		Gro	$ \chi^2$	
Age groups		Control	Experimental	~
6 - 9	N	24	28	
	%	46,2%	53,8%	
10 - 15	N	26	16	2,315
	%	61,9%	38,1%	p>0,05
Total	N	50	44	
	%	53,2%	46,8%	

1.3 Age when the problem starts

During the interview, the age of problem onset was considered. This data allowed the separation of children with primary and secondary nocturnal enuresis. It was found that primary nocturnal enuresis was a problem for 33 (75%) of the children in the experimental group and secondary nocturnal enuresis was the case with 11 (25%) children.

1.4 Unity of the family

It was found that family situation in terms of unity or conflict is not in a reliable connection with enuresis (see chart #3).

Chart №3

Family unity		Gro	χ^2	
Family unity		Control	Experimental	,~
Traditional nuclear family	n	42	33	
laminy	%	56,0%	44,0%	
Traditional nuclear family with conflict	n	6	7	
lamily with conflict	%	46,2%	53,8%	1.447
Single-parent family	n	2	4	p>0.05
	%	33,3%	66,7%	
Total	n	50	44	
	%	53,2%	46,8%	

1.5 Night sleep pattern

Minor positive correlation was found between the depth of sleep and enuresis. (see chart #4). Probability of enuresis is three times higher among children who have deep sleep or inconsistent deep sleep. Analysis of the remains has shown that children with normal sleep pattern usually don't have enuresis. (z = 2.9; p<0.05). While children who sleep deep, often have enuresis (z = 2.8; p<0.05). Respectively, deep sleep is a risk factor for enuresis. OR=3,375[CI 1,444-7,891].

Chart №4

Sleep pattern		Gı	roups	χ^2	Correlation
		Control	Experimental		Spearman's rho
Normal sleep	n	34	17		
	%	66,7%	33,3%		
Deep sleep	n	15	26		
	%	36,6%	63,4%	8,269* p<0,05	0,286** p<0,01
Inconsistent Deep sleep	n	1	1		
	%	50,0%	50,0%		
Total	n	50	44		
	%	53,2%	46,8%		

2. Results of the family picture

Statistically significant difference was found only by several parameters.

2.1 By location of the family members the difference between the control and experimental groups was statistically significant (see chart #5). Medium positive correlation was identified. Respectively, the children without enuresis (z = 3.6; p<0.01) draw all members of the family more

Location of family		Gro	oups	χ^2	Correlation
members		Control	Experimental	7	Spearman's rho
All members of the	n	43	23		
family	%	65,2%	34,8%		
One parent missing	n	3	2		
	%	60,0%	40,0%		
A sibling missing	n	2	4	16,642*	0,398** p<0,01
	%	33,3%	66,7%	p<0,05	
Missing	n	1	5		
himself/herself		16,7%	83,3%		
	%				

often, while children without enuresis draw pictures with family where they're missing (z = 1,9; p<0.05) or the picture is atypical (z=3.1; p<0.01).

Chart №5

2.2 Size of figures and enuresis has weak positive correlation. Drawing himself/herself small or too large has a reliable correlation with having enuresis. (z = 2,0; p<0,05).

Chart №6

Size of figures		Groups		χ^2	Correlation
Size of figures		Control	Experimental		Spearman's rho
Figures of the same	n	43	30		
size	%	58,9%	41,1%		
One parent is	n	7	1	11,121*	0,091*
dominant	%	87,5%	12,5%		
Himself/herself is	n	0	3	p<0,05	P<0,05
small	%	,0%	100,0%		
Himself/herself is too	n	0	3		
big	%	,0%	100,0%		

2.3 By the size and shape of arms the data was statistically significant was found that if a child has enuresis, there is a higher probability that s/he will draw small arms without hands, long arms with claws or figures without arms in the family picture. OR=7,342 [CI 2,824 -19,08]. (see chart 7 and chart 8)

Chart № 7

		Gro	oups	χ^2	Correlation
Arms		Control	Experimental	,,,	Spearman's rho
	n	31	8		
Regular arms Small arms and/or no hands	%	79,5%	20,5%		
Long arms with claws	n	14	13		
	%	51,9%	48,1%	14,007* p<0,005	0,4** P<0,001
	n	4	5	p<0,000	1 <0,001
Arms	%	44,4%	55,6%		
D 1	n	1	6		
Regular arms	%	14,3%	85,7%		

Chart №8

	(Groups
Arms	Control	Experimental
Regular arms	3,3 p<0,05	-3,3
Small arms and/or no hands	-1,2	1,2
Long arms with claws	-1,1	1,1
No arms	-2,6	2,6 p<0,05

2.4 Mouth

Analysis of the shape and size of the mouth in the "family picture" showed high positive correlation (see chart #9). Analysis of the remains showed, that children without enuresis draw regular size mouth (z = 5.3; p<0.01), while children with enuresis draw a very small mouth or figures without a mouth (z = 5,1; p<0,01). The risk indicator is also interesting OR=24,933 [CI 8,245-75,40].

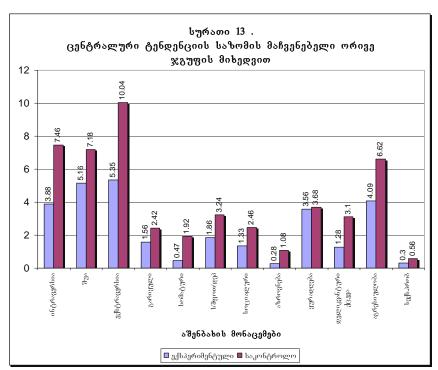
Chart #9

mouth		g	groups	χ^2	Correlation
		Control	experimental	70	Spearman's rho
Regular	n	44	10		
	%	81,5%	18,5%		
Large and/or with teeth	n	2	3	28,828*	0,593**
	%	40,0%	60,0%	p<0,001	p<0,001
No or very small mouth	n	4	19		
moun	%	17,4%	82,6%		

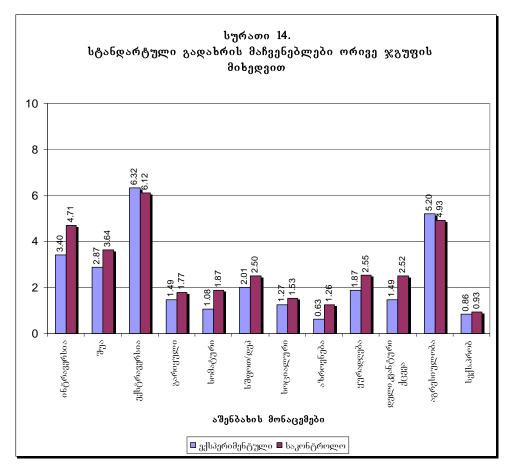
It was found that the scales are highly consistent $\alpha = 0.90$. If we consider the value of the coefficient, it can be said that the clinical results are significant.

CBCL behavioural profile in the experimental and control groups was distributed in the following way (graph 1, graph 2).

Graph 1



Graph 2



As for the difference between the children with and without enuresis per CBCL profile results, it is reflected well in Chart #10. While comparing these two groups, there is low positive correlation. Respectively, the parents of children without enuresis evaluate their children as more aggressive, anxious, delinquent, having problems with thinking and social skills, while parents of children with enuresis give them lower points for the same parameters – as if they're excusing them.

Chart № 10

	Factor		0.	.,	_	
		mean	St.err	df	F	р
Internalizig	Has enuresis	4,36	,70			
	Does not have enuresis	7,46	,67	1	10,267	,002
Total prob	Has enuresis	5,55	,57			
	Does not have enuresis	7,18	,51	1	4,522	,036
Externalizing	Has enuresis	6,11	1,21			
	Does not have enuresis	10,04	,87	1	7,187	,009
Withdrawn	Has enuresis	1,70	,27			052
	Does not have enuresis	2,42	,25	1	3,836	,053
Somatic	Has enuresis	,57	,19			
	Does not have enuresis	1,92	,26	1	16,362	,000
Anxious/depr	Has enuresis	2,11	,39			
essed	Does not have enuresis	3,24	,35	1	4,587	,035
Social	Has enuresis	1,45	,23			
problems	Does not have enuresis	2,46	,22	1	10,204	,002
Thought	Has enuresis	,36	,13			
Problems	Does not have enuresis	1,08	,18	1	10,244	,002
Attention	Has enuresis	3,73	,33			,924
	Does not have enuresis	3,68	,36	1	,009	,324
Delinquent	Has enuresis	1,50	,31			
	Does not have enuresis	3,10	,36	1	11,124	,001
Aggressive	Has enuresis	4,64	,95			000
	Does not have	6,62	,70	1	2,938	,090
	enuresis	0,02	,70			
Sex Problrms	Has enuresis	,32	,13			,195
	Does not have enuresis	,56	,13	1	1,705	,195

Pearson Correlation

Int.			
Int.			
D 0,002 Total prob r 0,216(*) D 0,036 Ext. r 0,269(**) D 0,009 Withdrawn r 0,200 D 0,053 Somatic r 0,389(**) D 0,000 Anxious depressed r 0,218(*) D 0,035 Social problems r 0,316(**) D 0,002 Thought problems r 0,317(**) D 0,002 Attention problems r 0,010 D 0,924 Attention problems r 0,010 D 0,924 Company to the problems r 0,010 D 0,002 Company to the problems r 0,010 Compa		N	94
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Withdrawn r 0,200 p p ,053 Somatic r 0,389(** p ,000 Anxious depressed r 0,218(*) p p ,035 Social problems r 0,316(**) p p ,002 Attention problems r -0,010 p p ,924	Ext.	r	0,269(**
Withdrawn r 0,200 p p ,053 Somatic r 0,389(**) p ,000 Anxious depressed r 0,218(*) p ,035 Social problems r 0,316(**) p ,002 Thought problems r 0,317(**) p ,002 Attention problems r -0,010 p ,924)
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Somatic r 0,389(**) p ,000 Anxious depressed r 0,218(*) p ,035 Social problems r 0,316(**) p ,002 Thought problems r 0,317(**) p ,002 Attention problems r -0,010 p ,924	Withdrawn	r	0,200
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Anxious depressed r 0,218(*) p ,035 Social problems r 0,316(**) p ,002 Thought problems r 0,317(**) p ,002 Attention problems r -0,010 p ,924	Somatic	r	0,389(**
Anxious depressed r 0,218(*) p ,035 Social problems r 0,316(**) p ,002 Thought problems r 0,317(**) p ,002 Attention problems r -0,010 p ,924)
p		р	,000
Social problems	Anxious depressed	r	0,218(*)
p ,002 Thought problems r 0,317(**) p ,002		р	,035
Thought problems r 0,317(**) p ,002 Attention problems r -0,010 p ,924	Social problems	r	0,316(**
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Attention problems r -0,010 p ,924	Thought problems	r	0,317(**
Attention problems r -0,010 p ,924)
p ,924		р	,002
p ,924	Attention problems	r	
		р	,924
Delinquent Behaviour r 0,328(**	Delinquent Behaviour	r	0,328(**
)
		р	,001
	Aggressive Behaviour	r	0,176
		р	,090
Sex Problems r 0,135	Sex Problems	r	0,135
p 195		р	,195

^{**} p< 0.01 level (2-tailed).

Discussion of findings

Research often suggests that boys are twice as prone to having the problem of enuresis. As a result of the research, it can be stated that in Georgian context girls and boys are equally represented as having functional nocturnal enuresis.

The data collected during the interviews regarding the "age of problem onset" provided information on the form of the enuresis. This data informed on whether the functional nocturnal enuresis was primary or secondary. Seventy-five percent of the experimental group reported

p< 0.05 level (2-tailed).

primary nocturnal enuresis, while 25% had secondary nocturnal enuresis. Results of the statistical analysis do not allow us to state that primary functional nocturnal enuresis is more common among Georgian children.

From the characteristics of family condition, the following groups were identified: traditional nuclear family; traditional nuclear family with conflict; single-parent family. Experimental and control groups did not show difference according to these parameters. Respectively, it was found that a child may or may not have enuresis regardless of the family situation.

Significant difference was found in terms of the night sleep pattern among the experimental and control groups. It has to be mentioned that 60% of the experimental group sleeps deep, while this index is two times less in the control group. The importance of correlation between nocturnal enuresis and night sleep pattern is often mentioned in the literature. It was found, that children with functional nocturnal enuresis sleep quite deep. This is the reason that their brain does not process the stimulus from their bladder being full in time. This information is very important for parents' education and effective planning of treatment processes.

The data on family members' location on the picture gave us statistically significant difference. It is noteworthy that only 52.3% of the experimental group members draw absolutely all members of the family, while in the control group this index is at 86%. According to the variations available in the literature regarding interpretation of the "family picture", decrease in number of family members indicates certain problems. Children decrease the number of family members and "forget" to draw those that are emotionally less attractive for them or with those that they are in conflict. It has to be mentioned that a child without emotional problems draws all members of the family. It is interesting that parameter "one parent missing" is higher in the control group. So, more often it is the children without enuresis that do not draw one parent. At the same time, children with enuresis have higher index by the parameter of "sibling missing". It can be explained in the following way – when a child does not draw someone, it shows his/her negative feeling towards that particular member of the family. In case of children with enuresis there may be frequent mocking by the siblings which would cause certain attitude of the child. It is also possible that if siblings do not have enuresis, this causes the child to separate them as different and therefore does not place them in the picture. Particular attention must be paid to the parameter "him/herself missing". The data from experimental group is 11.4% while in control group this data is at 2%. When a child does not draw himself in the family picture, this stresses two factors: one – that the child does not feel comfortable in the family and two – his/her self-esteem may be quite low.

Parameter "nobody present" also shows significant difference by groups: experimental group – 11.4% and control group 0%. When children do not draw people at all is a way of defense mechanism. Such protective mechanisms are quite rare among children's drawings and points toward – 1. Traumatic experience in relation with the family; 2. Feeling of abandonment, rejection; 3. Lack of sense of security and high level of anxiety. Respectively, it can be concluded that children with enuresis are often feeling rejected or abandoned; they have higher levels of anxiety and feel not so secure in their environment.

According to the index of atypical picture, experimental group stands out again. These pictures usually have people unrelated to family or something completely different (nature, flowers, animals); while interpreting atypical picture the same issues will stand out as is the case with picture where "nobody is present".

Indices of distribution of figures on the plane are the same for children with and without enuresis. When children put the figures on one line and in the same plane, it indicates that they do not have significant issues. Such distribution was dominant in both groups. It is also worth attention that children with enuresis draw themselves isolated as often as children without enuresis (and this indicator is quite low in both groups). Also, in the questionnaire along the question of withdrawn parents give low scores to their children. Thus, it can be stated that Georgian children are generally less withdrawal, however, children with enuresis still have a problem with this and interpretation of other parts of the picture affirms this.

The statements above confirm first part of our hypothesis – that children with enuresis are different from the children without enuresis by certain emotional characteristics. In this case these characteristics are low self-esteem and high level of anxiety.

According to the size of the figures the difference is reliable in the experimental and control groups. Children in both groups draw figures of the same size in most cases – 80-86%. Respectively, children from Georgian families reflect less on dominance of one family member. It has to be stressed that only children with enuresis draw themselves as too small or too big. In the control group this indicator was equal to zero. Increase/decrease of oneself in the picture allows concluding that children with enuresis have comparatively lower self-esteem. Self evaluation problem is also prominent when child draws him/herself as too big in size.

According to the size and shape of arms/hands on the picture, the difference allows for very interesting conclusions. Children with enuresis draw arms without hands or very small arms more often. When a child "forgets" to draw his/her own arms, when s/he drew arms for everyone else, it points to insecurity. If this is accompanied with drawing of own figure with small proportions, this means that s/he considers won self as having less importance in the family, has a feeling that the surrounding members of the family are overbearing and overly controlling of him/her. Respectively, it was found that children with enuresis are less self-confident, and consider themselves of less importance in the family.

There were pictures where children drew long arms and/or hands with claws and therefore emphasize their aggression. Thus, it can be stated that there are more insecure, withdrawal and aggressive among children with enuresis than among those without this problem.

Careful interpretation of the legs must be paid attention. In their drawings, children (especially girls) draw long dresses where you cannot see legs. During research there was equal number of figures without legs or with small legs in both groups and percentage index was quite low. High percentage index was for "regular" legs. Difference between the experimental and control groups according to the shape and size of the legs was insignificant. Therefore, it is hard to make a specific conclusion.

Size and shape of mouths was highly significant. Very few of the children with enuresis drew regular sized mouth. Most often their drawings had very small or no mouth. Such mouth points to a communication problem. Problems of self-evaluation, isolation or rejection may be considered. Enuresis impacts some some children's self-evaluation. Because of this problem they may be less social and more isolated.

In comparison with children without enuresis, children with this issue have higher index of "aggressive mouth". This is a large mouth with teeth. It has to be mentioned that even though children with enuresis show aggression on the pictures, they are still with lower self-esteem and have more problems with isolation. This is emphasized by discussing the pictures with one specific parameter. E.g. in experimental group 9.4% of the children drew a large mouth with teeth; 59.4% did not draw a mouth at all or drew a very small one.

It is noteworthy, that parents of children without enuresis are much more critical of their children's behavioral parameters, than those with enuresis. However, neither group's data is beyond the norm. The behavioral profile is not close to clinical bounds.

According to the index of internalized behavior, experimental and control groups differ. The index of internalization is higher in the control group. Internalization index is the sum of points on the isolation, somatic complaints and anxious /depressed scales. Respectively, parents of the control group evaluated their children as isolated, having somatic issues, and signs of depression and anxiety more.

Social problems, thinking skills and attention are summed up in the middle scale. According to this index also, children without enuresis are characterized with more outstanding tendencies. This leads to assumption that parent of a child with enuresis, who is at the clinic because of the child's enuresis, takes the child as "problematic" because of the enuresis. Therefore, is more subjective and evaluates the child's thinking skills, attention and social communication problems as less problematic.

According to the index of externalized behavior, control group has comparatively higher results. Parents of children without enuresis give their children higher points in delinquent and aggressive behavior parameters.

The data from the parents in the scales the parameters of which are also identified in the "family picture" deserves special attention. For example, isolation was definitely higher in the children with enuresis according to the "family picture". At the same time, parents identify them as less isolated. This leads to the assumption that parents of the children with enuresis are not objective while assessing their children due to some reasons, or they do not understand their children's problem as the children feel it.

5. Somatic Complaints

There is a difference in terms of somatic complaints scale as well. Parents of the children in the control group give their children much higher points in the following symptoms: dizziness, nausea, headache, stomach ache. Parents of the children with enuresis mention these problems much more rarely.

It is also interesting that control group has a higher index by this parameter as well. Despite the fact that the pictures clearly show that children with enuresis feel lonelier, more insecure and abandoned, their parents give low points for these parameters on the scale. This seems to imply that enuresis as a problem has a completely different meaning to the parent than to the child. With children enuresis is related to their self-esteem, sense of isolation, inability to establish their place in the family.

According to the data from the scale of social communication, parents of children without enuresis are more critical of their children. They believe that their children act more childlike compared to their age, cannot establish relationships with other children, and are often mocked. It is interesting that the drawings by the children with enuresis points more towards these parameters, while their parents do not give them high scores in the list of behavioral parameters.

According to the index of problems with thinking skills, the questionnaires filled out by the parents of children without enuresis count much higher points. They believe that their children often are absentminded, lose belongings, repeat certain behavior and act strange. These problems are rarely emphasized by the parents of children with enuresis.

The difference between the evaluation of children with and without enuresis by their parents

according to the scale of attention is statistically insignificant. Therefore, it is difficult to make a conclusion based on the results of this scale. However, the measure of central tendency is the same for both groups.

It was found that parents of children without enuresis describe their children as prone to delinquent behavior more often. These children are more likely to feel innocent after misbehaving, they tell lies, associate themselves with peer group of negative social values, use obscene language. Lack of these parameters among children without enuresis demonstrates that they are not prone to delinquent behavior. This can also be presumed based on the fact that such characteristics are not dominant in their drawings.

Children without enuresis are also ahead of children with enuresis according to the index of aggressive behavior. They are more likely to engage in fight, physically attack others, yell, are stubborn and hard to convince, they talk much and are moody. Children with enuresis also have similar behavior, but more rarely.

Index of sexual problems is very low in both control and experimental groups.

Functional nocturnal enuresis can exist with a child until any age – if it is primary and can occur at any age if it is secondary. It is hard to say that there is equal number of boys and girls with enuresis among Georgian population due to the small sample size of this research (clinical sample). For the same reason it is also hard to say whether primary or secondary enuresis is more common among Georgian population. Family stability does not appear to influence the existence or lack of enuresis. Sleep pattern is in direct correlation with functional nocturnal enuresis. Vast majority of children with nocturnal enuresis sleeps deep, which causes the problem of waking up at night. Because of deep sleep, the child does not feel the fullness of bladder and wets the bed. This information is important for parents' education and planning of effective intervention.

According to the "family picture", four parameters give significant difference: placement of family members on the paper; size of the figures; arms; mouth. During interpretation these parameters point to the following behavioral characteristics: low self-esteem, feeling of discomfort in own family (has not found a place in the family), insecurity, isolation/withdrawan, aggressiveness. Placement of the family members on the picture shows that children with enuresis often do not draw themselves among their family. This is a clear indication of their low self-esteem, feeling of isolation, abandonment and lack of a place in the family. On the scale of isolation, these children's parents do not evaluate them as isolated. It is clear that the child's self assessment is different from that of the parent. Children with enuresis often draw themselves as very small or very big. This demonstrates the problem of self-evaluation. Parents often have no

indication of this problem, which is proven by the questionnaire results of the behavioral profile. It is important to know that children with enuresis have comparatively low self-esteem than their healthy peers in order to correctly manage the consultation-intervention process. It is especially necessary to inform the parents to be particularly supportive and abstain from unnecessary criticism and punishing the child for enuresis. Otherwise their children's self esteem problems may only deepen. The insecurity and self esteem issues were clearly articulated during interpretation of the drawings. Data is significant according to the shape and size of arms (very small arms or no arms). It has to be considered how normal are the mechanisms for fighting this problem with this kind of child and who should be active from the adults in helping the child overcome the problem (enuresis). Not drawing a mouth or drawing a very small one gave significant indication of low self-esteem, isolation and withdrawal. Comparing the behavioral profiles allows to conclude that parents of Georgian children with and without enuresis evaluate their children by behavioral characteristics in different ways. In both cases evaluation remains in the boundaries of the norm, and respectively, behavior of both groups is within the norm. However, there is one difference: parents with enuresis are much more loyal in evaluation of their children than those, without enuresis. They seem to spare their "problem children". This is particularly important to emphasize, because behavioral and emotional indicators of children with enuresis are different according to the drawings. In their drawings they show isolation, introversion, do not have the feeling of having a place in the family, have low self-esteem, are insecure and aggressive. Their parents do not mention isolation, emotional problems, and problems with social communication, aggression and anxity/depression on the scales.

Therefore it can be concluded:

Georgian children with enuresis have different behavioral and emotional characteristics than their peers without enuresis. This proves the first part of research hypothesis.

Parents of children with enuresis evaluate their children inaccurately and less problematically than the children really are. This is contrary to the second part of the research hypothesis.

Based on the results of the research it can be concluded, that children with enuresis are different from their peers without enuresis by following characteristics:

- 1. Ninety-five per cent of the children with enuresis have deep sleep and it can be said that this sleep pattern is in a way a risk factor for enuresis.
- 2. In drawing a "family picture", children with enuresis do not draw all members of the family. A child, who feels emotionally balanced and happy in the family, draws all

members. In the control group, all children without enuresis drew all family members. Skewed depiction of real family composition is always a cause for attention, since it usually hides emotional conflict and unhappiness of the child with the family relations. Since the parents, who come to the consultation clearly express dissatisfaction by their child and blame them for not having developed proper habits, it is probable that children with enuresis are victims of conflict, humiliation, and lack of support at home. Their emotional condition and understanding of their self in the family is erroneous. This is clearly seen in their drawings.

- 3. The form in which children with enuresis depict themselves in the "family picture" also drew attention. Unlike their healthy peers in the control group, they draw themselves as very small or very big – respectively they do not have a correct self-evaluation. Children with enuresis do not see themselves as a proper member of their family. They have a feeling that the people around them oppress and control them. Respectively, there is a high level of feeling isolated and anxiety.
- 4. The data from the control group shows that children with enuresis draw themselves with very small arms or no arms. This is an indication of child's insecurity and low selfesteem. Besides, children with enuresis drew themselves with long arms and hands with claws. Respectively, they are either more aggressive than their healthy peers or are trying to compensate for their weakness in such a way.
- 5. Description of the results shows that children with enuresis often draw figures with very small or no mouths. Mouth, face and existence/inexistence of facial features give important information regarding problems with social communication. It is important to consider, that children in general are prone to drawing people with smiling faces. If child draws a figure with a small mouth or no mouth at all, this shows a problem of communication. This also points to low self-esteem, isolation. Respectively, children with enuresis have problems with self-evaluation, they feel isolated and abandend in their own families.

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