Outcome Of Regular Well-Child Follow-up From Birth On Adolescent Well-Being

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Introduction and Objectives: The effectiveness of preventive health services applied in childhood and adolescence is known; there is a limited number of studies on the physical and mental health conditions, family communication, and the reflections during the adolescence period of individuals who continued their well-child visits in childhood.[1-3] The aim of this study was to investigate the outcome of regular well-child follow-up from birth on physiological and psychosocial characteristics in adolescence.

Material and Methods: Our study was conducted with the children followed up regularly in İstanbul University Well-Child Outpatient Clinic and continued to be followed up at the Unit of the Adolescent Health Outpatient Clinic (AHOC) (Group 1) and with the children who were followed up at the Unit of the AHOC without a regular Well-Child follow-up (Group 2). Personal data files between September 2015 and January 2023 were evaluated retrospectively. Height, weight, and body mass index SDS values, if any, hemoglobulin, hematocrit, vitamin B12, total cholesterol, HDL cholesterol values, and psychosocial assessment (by HEEADSSS screening tool) were recorded. All data analysis was performed with the IBM SPSS v.28, and values of p<0.05 were considered significant.

Results: Group 1 (n =138) constituted 51.5 % of all the children, and Group 2 (n=130) 48.5 %. There was no difference between the groups regarding the education levels of the mothers and fathers. The mean age of the first administration to the Unit of AHOC was significantly lower in Group 1 than in Group 2. Weight and BMI SDS values were higher in Group 2 (p=0.001, p=0.001, respectively), but there was no significant difference between the groups regarding height SDS. In the comparisons of the laboratory data, the frequency of anemia was statistically higher in Group 2 (p=0.040); the mean score of vitamin B12 value was significantly higher in Group 1 (p=0.032). However, no significant difference was found between the groups regarding lipid values. When psychosocial assessments (HEEADSSS) were compared between the groups, the risks in the areas of the home, education, nutritional behavior, and suicide were found to be significantly higher in group 2 (p=0.005, p=0.001, p<0.001, p<0.001; respectively). There was no difference between the groups in comparing regular physical activity and safety. Comparisons according to the demographic and psychosocial characteristics were stated in Table 1.

Conclusion: Our study's results emphasise that regular child health follow-up from birth positively affects adolescent health and care. These positive outcomes consist of both physiological and psychosocial characteristics.

Table 1: Comparisons of groups according to the demographic and psychosocial characteristics

	Group-1 (n=138)	Group-2 (n=130)	P
Age (years)			
mean±SD	10.09±0.94	11.51±1.96	<0,001[a]
Median (min-max)	10 (8-15)	11.00 (8-17)	
Weight SDS			
mean±SD	0.47±1.16	1,08±1,54	0.001[b]
median (min-max)	0.58(-2.76-3.43)	0,94 (-3.33-4.98)	
Height SDS			
mean±SD	0.51±1.12	0.46 ±1.13	0.724[b]
median (min-max)	0.44 (-2.22-3.42)	0.44 (-3.39-3.71)	
BMI SDS			
mean±SD	0.30±1.22	0.95 ±1.43	0.001[a]
median (min-max)	0.42 (-3.49-2.67)	0.89 (-2.34-4.21)	
Maternal education (years)	n (%)	n (%)	
None	2 (1.6)	3 (2.5)	
0-5	32 (25)	30 (25.2)	
5-8	8 (6.3)	13 (10.9)	0.184[c]
8-11	30 (23.4)	37 (31.1)	
>=12	56 (43.8)	36 (30.3)	
Paternal education (years)	n(%)	n(%)	
None	-	-	
0-5	22(17.2)	30 (26.1)	
5-8	10 (7.8)	8 (7)	0.164[c]
8-11	34 (26.6)	36 (31.3)	
>=12	62 (48.4)	41 (35.7)	
Anemia n(%)	4 (3.3)	11 (11.1)	0.040[c]
Ferritin levels (ml/ng) (Group1 n:78, Group2 n:57)			0.076[a]
mean±SD	36.55±41.45	54.81±79.47	
median (min-max)	27 (1.40-342)	35 (6-428)	
Vitamin B12 (pg/ml) (Group 1 n:95, Group 2 n:77)			0.032[a]
mean±SD	508.74±361.84	421.41±181.60	
median (min-max)	478 (151-2889)	385 (181-1157)	
Non HDL cholesterol n (%)	15 (21.7)	9 (15.8)	0.536[c]
LDL cholesterol n (%)	10 (14.9)	5 (9.1)	0.484[c]
HDL cholesterol n(%)	7 (10.1)	10 (17.5)	0.343[c]
HEEADSSS	n (%)	n (%)	
Risk in Home	26 (18.8)	44 (33.8)	0,005[c]
Risk in Education	4 (17.4)	19(14,6)	0,001[c]
Risk in Eating Behavior	30 (21.7)	67 (51.5)	<0,001[c]
Activities	75 (54.3)	69(53.1)	0,835[c]
Use of Tobacco/Alcohol/Drug	0 (0)	4 (3.1)	-
Sexual Behavior risk	0 (0)	1(0.8)	-
Suicide risk	2 (1,4)	23 (17.7)*	<0,001[c]
Insecurity	15 (10.9)	24 (18.5)	0,112[c]

[a]Mann Whitney U; [b]Independent sample T test; [c] Chi-square test
*Four of 23 have a high risk of suicide

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