



Evaluation of the Strengths and Difficulties Experienced by Adolescents with Chronic Diseases According to Some Variables

Kronik Hastalığı Olan Ergenlerin Deneyimledikleri Güç ve Güçlüklerin Bazı Değişkenlere Göre İncelenmesi

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Ankara University Faculty of Health Sciences, Department of Social Work, Ankara, Türkiye

ABSTRACT

Objectives: Many difficulties caused by chronic disease consolidate due to significant physical and psychological changes during adolescence. In this research, we aim to evaluate pediatric social work interventions by identifying various attributes of illness and socio-demographics that affect difficulties experienced by adolescents with chronic diseases.

Materials and Methods: The research is conducted by interviewing 127 adolescent patients between the ages of 10 and 19 suffering from chronic diseases and receiving inpatient treatment in four public hospitals operating in Ankara for at least a year. The data collection tools include a socio-demographic questionnaire, an illness related subjective appraisals scale, and the Strengths and Difficulties Questionnaire. Univariate logistic regression analysis is used to determine the variables affecting adolescent difficulties, whereas multivariate logistic regression analysis is used to determine variables affecting the high probability of experiencing difficulties.

Results: In this research, the rate of adolescents experiencing difficulties is high at 65.4%. Research shows that adolescents with chronic heart failure experience more difficulties compared to those with hypertension. This is also true for 9th-12th graders compared to 5th-8th graders, as well as for those who think that chronic diseases affect their relationships compared to those who do not.

Conclusion: It is important to determine the difficulties affecting the psychosocial adaptation of adolescents with chronic diseases since they provide an information base for interventions empowering adolescents. In this context, the research findings can not only provide an evidence base for social work but also for many fields, such as medicine, nursing, psychology, and child development.

Keywords: Adolescent, chronic illness, social work, social work interventions

ÖZ

Amaç: Kronik hastalığın neden olduğu pek çok güçlük, ergenlik döneminde yoğun yaşanan fiziksel ve psikolojik değişimler nedeniyle pekişmektedir. Bu araştırmada kronik hastalığa sahip ergenlerin yaşadıkları güçlükleri etkileyen sosyo-demografik ve hastalığa ilişkin bazı özellikleri belirleyerek pediatrik sosyal hizmet müdahalelerini bu bağlamda değerlendirmek amaçlanmıştır.

Gereç ve Yöntem: Araştırma, Ankara ilindeki 4 kamu hastanesinde yatarak tedavi gören 10-19 yaş aralığında en az bir yıldır kronik böbrek yetmezliği, kronik kalp yetmezliği, diyabet, astım, hipertansiyon hastalıklarından birine sahip 127 ergen ile yapılmıştır. Veri toplama aracı olarak sosyodemografik bilgi formu, hastalığa ilişkin öznel algılar ölçeği ve güçler ve güçlükler anketi kullanılmıştır. Ergenlerin yaşadıkları güçlükleri etkileyen değişkenleri belirlemek için tek değişkenli lojistik regresyon analizi, güçlük yaşamalarını yüksek olasılıkla etkileyen değişkenleri saptamak için ise çok değişkenli lojistik regresyon analizi yapılmıştır.

Bulgular: Bu araştırmada güçlük yaşayan ergenlerin oranı daha yüksektir (%65,4). Araştırma kronik kalp yetmezliği olan ergenlerin hipertansiyonu olanlara göre daha fazla güçlük yaşadıklarını göstermiştir. Benzer şekilde 9-12. sınıf aralığında olan ergenlerin 5-8. sınıf aralığında olanlara göre ve kronik hastalığın arkadaş ilişkilerini etkilediğini düşünenlerin düşünmeyenlere göre daha fazla güçlük yaşadıkları belirlenmiştir.

Sonuç: Kronik hastalığa sahip ergenlerin psikososyal uyumuna etki eden güçlüklerin ve bu güçlükleri etkilen özelliklerin belirlenmesi güçlenmelerini sağlayacak müdahalelere bilgi temeli sağlaması açısından önemlidir. Bu bağlamda mevcut araştırmanın bulguları sadece sosyal hizmet değil tıp, hemşirelik, psikoloji, çocuk gelişimi gibi pek çok alandaki profesyonellerin müdahalelerine kanıt temeli oluşturabilir.

Anahtar Kelimeler: Ergen, kronik hastalık, sosyal hizmet, sosyal hizmet müdahalesi

Address for Correspondence/Yazışma Adresi: Ecren Aydın Engin, MD, Ankara University Faculty of Health Sciences, Department of Social Work, Ankara, Türkiye

E-mail: ecrenaydin@gmail.com ORCID: orcid.org/0000-0003-1378-0096

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Introduction

Chronic disease in adolescents is defined as a medical condition either congenital or developed at any age, and is anticipated to last more than three months from the date of diagnosis.¹ Chronic risk factors affect 10% to 30% of all children and adolescents.² Chronic disease is a health problem that causes crises and threats in the lives of most children or adolescents, disrupting their psychosocial adaptation. The lasting nature of chronic diseases adversely affects adolescents not only physically but also socially and academically.^{3,4}

Adolescence is a period during which physical, social, and mental changes and progress take place. Adding chronic diseases to the mix may adversely affect psychosocial development and may deepen encountered problems. Emotional and behavioral responses to diseases during adolescence are more intense. During these period, physical changes, constant or long-term hospitalization, dietary restrictions, inadequate knowledge of the disease, separation from friends or school, low academic achievement, and lack of support from family or the social environment may cause adolescents to feel helpless.^{3,5,6} In addition, it is reported that adolescents' perceptions of the disease are influential on their psychosocial adaptation and determine the emotional and behavioral response.⁷ Adolescents can perceive the disease as a threat or a loss because it affects their normal developmental processes.⁸ Difficulties experienced during illness periods may trigger negative thoughts about the disease itself.⁹ All these factors may cause adolescents to feel helpless and may prevent the use of full-potential. For this reason, it is important to focus on social, physical, and psychological determinants while evaluating adolescent health.^{10,11} Evaluating these social determinants from admission to discharge is important in increasing quality of care. Interventions must be made by considering physical, emotional, and social changes in psychosocial adaptation, and adolescents must cope with illness. This multidimensional nature and the effects of chronic diseases require a multidisciplinary teamwork.

Social work, having intervention methods at micro, mezzo and macro levels, is a discipline that increases the problem-solving capabilities of individuals, families, groups, and societies, aiming to create the necessary conditions for empowering such groups.^{12,13} Pediatric social work, as a branch of social work, consists of social work practices offered to solve psychosocial and economic problems of children, adolescents and their families suffering from chronic or severe medical conditions. Pediatric social work is a discipline with a holistic view of the developmental, medical, and psychosocial needs of adolescents and their families. Thus, the aim is to help support and empower the adolescent and family.¹⁴

Empowerment is important for an adolescent to cope with difficulties and regain strength. In this sense, it is important to determine the factors influencing difficulties and to offer interventions aimed at empowering adolescents. The aim of this research is to explain the importance of pediatric social work interventions by determining the socio-demographic

and disease-related factors affecting difficulties experienced by adolescents with chronic diseases. For this purpose, the effects of strengths and difficulties levels, socio-demographic and disease related factors and subjective perceptions of disease on strength and difficulties of adolescent with chronic diseases.

Materials and Methods

Study Design and Participants

The research group consists of 127 adolescent patients between the ages of 10 and 19, suffering from chronic kidney failure, chronic heart failure, diabetes, asthma, and hypertension, and receiving inpatient treatment in public hospitals administered by the Ministry of Health of the Republic of Türkiye operating in Ankara for at least a year. Research was conducted in four public hospitals, allowing researchers access in 2019, the study was completed with the participation of 127 adolescent volunteers.

Research permission was obtained from the Ethical Committee of Ankara University (decision no: 8/107, date: 14.05.2018) and the Ankara Provincial Health Directorate as well as its ethical committees, as the research was performed in public hospitals. The researcher used the following data collection tools on adolescents who volunteered to participate in the study through verbal and written notification. Written parental consent was obtained for each adolescent.

Measurements

Socio-demographic and Disease Characteristics

Questions were formulated based on socio-demographic characteristics such as gender, age, school grade, place of residence, number of siblings, socioeconomic level of the family as well as disease-related characteristics defining features and course of the disease such as type of chronic disease, duration of treatment, frequency of hospitalization, school absenteeism, school achievement, negative effects of the disease.

Illness Related Subjective Appraisals Scale

The form prepared by Gökler¹⁵ is designed to understand how the adolescent perceives the disease and treatment. The Cronbach alpha value of the 11-question form is 0.86. Research scale has three subdimensions: life threat perception, perceptions of the effect of disease on family members, and family life. Answers to questions on a 3-point Likert scale are scored between 0 to 2 and the maximum achievable score is 22. High points received on the scale indicate a high level of disease perception by the adolescent. Cronbach's alpha value for this study is 0.75.

Strengths and Difficulties Questionnaire

The questionnaire evaluating emotional indicators of children and adolescents was developed by Goodman¹⁶ and adapted to Turkish by Güvenir et al.¹⁷ This questionnaire contains 25 questions querying negative and positive behavioral characteristics, and consists of 5 factors such as conduct problems, hyperactivity/inattention, emotional symptoms,

peer relationship problems and prosocial behavior. Each factor is self-evaluated, and the total of the first four factors gives us the “total difficulties score”. The total number of points that can be obtained from the questionnaire ranges from 0 to 40, and higher points indicate an increase in problematic behaviors of the child. Cronbach’s value of 0.86 is achieved for the questionnaire in a reliability analysis of the study. Cronbach’s Alpha value for this study is 0.60.

Statistical Analysis

SPSS 22 (IBM Inc., Armonk, NY) was used for data analysis. The chi-squared test is the appropriate statistical analysis for comparing groups based on variables of measured data. The Pearson test, Yates’ Correction formula, and Fisher’s test are used to study differences between strengths and difficulties of adolescents based on socio-demographic and disease characteristics. Univariate regression analysis is used to study the effects of significant independent variables on adolescents’ strengths and difficulties. Multivariate regression analysis is used to determine variables affecting the high probability of experiencing difficulties. According to multivariate logistic regression model results, and in cases where at least one independent variable does not have an effect on the dependent variable, variable selection and multivariate logistic regression analysis were performed using the Forward LR method. Margin of error is calculated as 5%.

Results

Among adolescents, 55.1% are female and 44.9% male. 46.5% of adolescents are between ages 12-14, whereas 53.5% are between ages 15-18. 44.9% of adolescents are in 5th-8th grade, and 55.1% in 9th-12th grade. Among adolescents, 18.1% suffer from asthma, 23.6% suffer from diabetes, 16.5% suffer from hypertension, 23.6% suffer from chronic kidney failure, and 18.1% suffer from chronic heart failure. 56.7% have a record of school absenteeism compared to 43.3% which maintain attendance. The number of adolescents thinking that their disease affects their school achievement (49.6%) and those that do not (50.4%) is close. Results indicate that among adolescents, the chronic disease cycle affects participation in social activities (31.2%), emotional state (26.8%), physical condition (17%), friendships (10.5%), family and immediate environment relations (10.1% and 2.9%, respectively), and the immediate environment (2.9%).

As can be seen in Table 1, adolescents increasingly experience hyperactivity/inattention and peer relationship problems. Approximately half of adolescents are likely to experience emotional problems. In this research, the rate of adolescents experiencing difficulties is higher (65.4%).

There is a statistically significant relationship between emotional and behavioral problem scores of adolescents and perceptions of life threat ($p < 0.05$, Table 2). Half of adolescents with high life threat perceptions also suffer from emotional problems. Adolescents with low perceptions of life threats develop more behavioral problems compared to those with higher perception levels.

According to univariate logistic regression analysis results (Table 3), the type of chronic disease, school absenteeism due to disease, impact of disease on school achievement, age, school grade level, thoughts of the chronic disease cycle affecting friendships, and emotional state affect experiencing difficulties. These factors were statistically significant ($p < 0.05$). As a result of univariate logistic regression analysis, it is necessary to include all independent variables affecting the dependent variable in the model and perform a multivariate logistic regression analysis.

In the multivariate regression analysis (Table 4), contrary to univariate regression analysis results, only type of chronic disease, school grade level, and thoughts of disease negatively affecting friendships have an effect on experiencing difficulties ($p < 0.05$).

The Forward LR method is used as the variable selection method to decide whether to include non-significant variables in the model. Thus, variables in the model such as type of chronic disease, school grade level, and thoughts that chronic disease cycle influences friendships have an effect on experiencing difficulties ($p < 0.05$). Adolescents with chronic heart failure have a higher probability to experience difficulties compared to those with hypertension [odds ratio (OR): 0.244, 95% confidence interval (CI): 0.060-0.990]. Adolescents in 9th-12th grade have a higher probability of experiencing difficulties compared to those in 5th-8th grade (OR: 0.179, 95% CI: 0.069-0.464). In addition, adolescents with thoughts that chronic disease cycle has a negative effect on friendships have a higher probability of experiencing difficulties compared to those without such thoughts (OR: 7.464, 95% CI: 1.806-30.838).

Discussion

Adolescents with chronic disease experience many physical, psychological, and social difficulties, and the disease cycle mostly negatively affects their lives. This situation changes according to how an adolescent perceives the disease. The results of this study indicate that those experiencing hyperactivity/inattention and peer relationship problems are a majority and almost half of adolescents suffer from emotional problems. In addition, more than half of adolescents (65.4%) experience difficulties. Sürer

Table 1. Breakdown of adolescents with chronic diseases, based on low or high scale of strengths and difficulties and subdimension measurement score averages

Strengths and difficulties questionnaire	Low		High	
	n	%	n	%
Prosocial behaviour	4	3.1	123	96.9
Hyperactivity/inattention	43	33.9	84	66.1
Emotional symptoms	70	55.1	57	44.9
Conducts problems	120	94.5	7	5.5
Peer relationship problems	45	35.4	82	64.6
Total difficulties score	44	34.6	83	65.4

Adanır et al.¹⁸, in their research involving adolescents with beta thalassemia, concluded that adolescents have a higher total difficulties score and experience peer relationship problems and emotional problems more frequently.

Generally, chronic diseases can have different effects on adolescents, although biopsychosocial disorders are heavily observed in patients with chronic heart failure.¹⁹ These adolescents show higher neurodevelopmental difficulties, hyperactivity/inattention disorder, behavioral problems, and academic failures.²⁰ For this reason, there are parallels in this study with research in the literature where those with chronic heart failures have a higher probability of experiencing difficulty compared to hypertension patients.^{21,22}

One of the important results of the research is the indication that 5th-8th graders are experiencing more emotional problems and difficulties compared to 9th-12th graders. Adolescents in 9th-12th grade are generally at a mid-pubertal stage. In this stage, due to the intensity of developmental features of adolescence, relations with social environment, individualization, and independence gain importance. Experience with a chronic disease at this stage results in many restrictions and dependence in the life of an adolescent. Combatting disease, and thus adapting to new arrangements, and changes in body image and rejection by peers may cause stress in adolescents. In this stage, if an adolescent fails to achieve the developmental characteristics of his/her age, they may experience emotional difficulties such as anxiety or depression due to negative body perceptions.²³ Studies indicating that emotional difficulties are perceived more with age are consistent with such results. Accordingly, emotional problems and difficulties, which especially increase with age among 9th-12th graders, show parallelism with some of the research results in the literature.²⁴

This research has shown that half of adolescents with high life threat perceptions have greater emotional problems than their peers. There is an indication that life threat perception

is correlated with depression and anxiety.¹⁵ Physical and emotional difficulties experienced during chronic disease cycle, such as isolation from family, friends and social environment, restrictions on freedom, and perception of disease as a life-threatening element may increase adolescents' tendency to possess negative thoughts. The perceptions of disease may cause stress and ultimately emotional distress. In addition, emotions of inadequacy, desperation, and weakness accompanying these thoughts may bring beliefs that the adolescent is losing control over his/her life. Similarly, Üstün²⁵ found that emotional indicators increase as the life threat perception rises among children diagnosed with type 1 diabetes. Another important result of this research is that adolescents with low perceptions of life threat develop more behavioral problems compared to those with high perceptions of life threat. It can be argued that the reason an adolescent does not adapt to new living and treatment arrangements, since the disease is not perceived as life-threatening. Adolescents may show risk-taking behaviours when combating their diseases. Failure to adhere to diet and monitor blood sugar can be given as examples of such behaviours. In some adolescents, anger, conflict, and defiance may accompany changes associated with chronic disease. Adolescents may exhibit externalization behaviors such as violence.²⁶ Yıldız Akkuş and Bütün Ayhan²⁷ found that children with chronic disease exhibit significant behavioural problems.

Acceptance and rejection by peers are key determinants in emotional and behavioural development and adaptation.^{28,29} Delays in physical growth and sexual maturity, changes in physical appearance due to chronic disease, as well as prolonged hospitalization, may negatively affect adolescents' relationships with friends. This situation may cause social isolation and deterioration of the sense of belonging. Also, these adolescents, due to their physical features, may be subject to peer bullying and social exclusion, experience problems with intimacy, or show signs of low self-esteem.³ Similar to Sürer Adanır et al.¹⁸ and Sandstrom and Schanberg³⁰ research conclusions, this study

Table 2. Comparison of low/high life threat perception averages of adolescents with chronic diseases, strengths and difficulties scale and low/high subdimensions measurement score averages

Factors	Group	Low	High	Cramer V	p
Prosocial behaviour	Low	7.14% (1)	92.86% (13)	0.080	0.377F
	High	2.65% (3)	97.35% (110)		
Hyperactivity/inattention	Low	21.43% (3)	78.57% (11)	0.092	0.380F
	High	35.40% (40)	64.60% (73)		
Emotional symptoms	Low	92.86% (13)	7.14% (1)	0.267	0.006Y
	High	50.44% (57)	49.56% (56)		
Conducts problems	Low	78.57% (11)	21.43% (3)	0.246	0.029F
	High	96.46% (109)	3.54% (4)		
Peer relationship problems	Low	57.14% (8)	42.86% (6)	0.160	0.083F
	High	32.74% (37)	67.26% (76)		
Total difficulties score	Low	42.86% (6)	57.14% (8)	0.061	0.556F
	High	33.63% (38)	66.37% (75)		

F: Fisher test, Y: Yates correction

has shown that negative effect of chronic disease on friendships and experiencing higher difficulties may be connected with these reasons.

Adolescents participating in the study show a high level of difficulty. In this sense, intervention by pediatric social workers with a holistic approach for combating difficulties arising from biopsychosocial changes is important. With reference to the social work approach known as “individual within the environment”, connections must be established with networks such as family and school, and the intervention process must start by taking into account “child’s higher benefit”. Bearing in mind that adolescents with chronic heart failure, 9th-12th graders, and those with thoughts that the disease negatively affects friendships experience greater emotional difficulties, it is important that interventions towards this group are planned from their condition. Accordingly, while taking into account

the developmental stage necessities of the adolescent, a social worker must evaluate negative factors, of relations, and effects of the social environment of the disease. We must determine psychosocial necessities and must focus on supportive interventions, such as the development of problem-solving skills. It is necessary to employ a multidisciplinary approach in the diagnosis and treatment process of psychiatric problems that adolescents with chronic diseases may experience. A social worker can be useful in identifying and resolving problems related to psychosocial factors.

Since adolescents with high life threat perceptions experience higher emotional difficulty compared to those with lower levels, it is important to determine negative perceptions which may disrupt adaptation to treatment. A social workers may intervene through psychological support, in order to change perceptions causing emotional difficulty in adolescents. A

Table 3. Univariate logistic regression analysis based on independent variables affecting the state of higher probability of total difficulty experience rate

Variable	Coefficients	β	SE	Wald	OR	p	95% CI	
							Lower	Upper
Chronic illness	Ref (chronic heart failure)							
	Asthma	-0.179	0.600	0.090	0.836	0.765	0.258	2.706
	Diabetes	0.405	0.584	0.482	1.500	0.488	0.477	4.714
	Hypertension	-0.730	0.614	1.412	0.482	0.235	0.145	1.606
	Chronic kidney failure	1.430	0.686	4.341	4.179	0.037	1.089	16.040
Invariant	0.442	0.427	1.069	1.556	0.301	-	-	
School absenteeism	Ref (no)							
	Yes	0.844	0.381	4.913	2.325	0.027	1.103	4.901
	Invariant	0.182	0.271	0.453	1.200	0.501	-	-
School achievement	Ref (no)							
	Yes	0.975	0.388	6.315	2.651	0.012	1.239	5.672
	Invariant	0.188	0.251	0.561	1.207	0.454	-	-
Age	Ref (15-18)							
	12-14	-1.228	0.392	9.839	0.293	0.002	0.136	0.631
	Invariant	1.262	0.292	18.627	3.533	0.000	-	-
Class	Ref (9-12)							
	5-8	-1.334	0.394	11.484	0.263	0.001	0.122	0.570
	Invariant	1.299	0.291	19.896	3.667	<0.001	-	-
Friendship relations	Ref (no)							
	Yes	1.830	0.643	8.094	6.234	0.004	1.767	21.992
	Constant	0.329	0.205	2.589	1.390	0.108	-	-
Emotional state	Ref (no)							
	Yes	0.950	0.383	6.154	2.585	0.013	1.221	5.473
	Invariant	0.113	0.275	0.170	1.120	0.680	-	-
Other state and relationships	Ref (no)							
	Yes	-21.933	20096.485	0.000	3E-10	0.999	0.000	-
	Invariant	0.730	0.192	14.382	2.075	<0.001	-	-

SE: Standard error, OR: Odds ratio, CI: Confidence level

Table 4. Multivariate regression analysis based on independent variables affecting the state of higher probability of total difficulty experience rate

Variable	Coefficients	β	SE	Wald	OR	p	95% CI	
							Lower	Upper
Multiple Chronic illness	Ref (chronic heart failure)							
	Asthma	0.483	0.712	0.459	1.620	0.498	0.401	6.541
	Diabetes	-0.129	0.671	0.037	0.879	0.847	0.236	3.273
	Hypertension	-1.575	0.750	4.414	0.207	0.036	0.048	0.900
	Chronic kidney failure	0.796	0.804	0.980	2.217	0.322	0.458	10.721
School absenteeism	Ref (no)							
	Yes	-0.702	0.711	0.976	0.496	0.323	0.123	1.996
School achievement	Ref (no)							
	Yes	0.387	0.718	0.291	1.473	0.590	0.361	6.017
Age	Ref (15-18)							
	12-14	1.333	1.370	0.947	3.794	0.330	0.259	55.608
Class	Ref (9-12)							
	5-8	-3.002	1.416	4.490	0.050	0.034	0.003	0.798
Friendship relations	Ref (no)							
	Yes	2.300	0.771	8.886	9.970	0.003	2.198	45.222
Emotional state	Ref (no)							
	Yes	0.736	0.510	2.082	2.088	0.149	0.768	5.679
-	Invariant		0.950	0.723	1.726	2.585	0.189	-
End Chronic illness	Ref (chronic heart failure)							
	Asthma	0.260	0.665	0.153	1.297	0.696	0.352	4.778
	Diabetes	-0.085	0.666	0.016	0.919	0.899	0.249	3.391
	Hypertension	-1.410	0.714	3.899	0.244	0.048	0.060	0.990
	Chronic kidney failure	0.761	0.761	1.000	2.139	0.317	0.482	9.498
Class	Ref (9-12)							
	5-8	-1.721	0.487	12.506	0.179	<0.001	0.069	0.464
Friendship relations	Ref (no)							
	Yes	2.010	0.724	7.711	7.464	0.005	1.806	30.838
-	Invariant		1.256	0.565	4.949	3.512	0.026	-

SE: Standard error, OR: Odds ratio, CI: Confidence interval

social worker may execute an intervention process to prevent emotional difficulties by informing adolescents about necessary treatment processes, rules, as well as resources and services needed. Group study among adolescents may prove to be an effective intervention method in putting forward perceptions and beliefs of the disease. These goals may be achieved by coping with negative feelings, behavioural adaptation through acknowledgement of disease, increasing self-sufficiency, and highlighting success by distinguishing strengths.

Study Limitations

An important limitation of the research is that the study was conducted in four public hospitals. However, the researcher was able to obtain permission from the institution where she worked to attend clinical practice one day a week. The lower than

expected age range and number of inpatient adolescents with chronic disease proves an important limitation to the research. For the above reasons, the quantitative data collection process took longer than expected, continuing for approximately one year throughout 2019.

Conclusion

Considering that adolescents in 9th-12th grades with the belief that disease negatively affects friendships experience greater emotional difficulties, psychosocial support and education studies can be undertaken in systems such as family, school, and the health system where adolescents interact. Providing a basis of information for pediatric social work interventions involves focusing on the strengths and difficulties experienced

by adolescents with chronic disease. Thus, it is anticipated that awareness will be achieved for evidence-based interventions by social workers working in the adolescent health and welfare area.

Ethics

Ethics Committee Approval: Research permission was obtained from the Ethical Committee of Ankara University (decision no: 8/107, date: 14.05.2018).

Informed Consent: Written parental consent was obtained for each adolescent.

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Footnotes

Authorship Contributions

Concept: E.A.E., F.Y., Design: E.A.E., F.Y., Data Collection or Processing: E.A.E., Analysis or Interpretation: E.A.E., F.Y., Literature Search: E.A.E., Writing: E.A.E.

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