Journal of Dependence bağımlılık Dergisi

ARAŞTIRMA | RESEARCH
Bağımlılık Dergisi, 2023; 24(4):487-494
Doi: 10.51982/bagimli.1221294

Evaluation of the Opinions of the Parents with Disabled and Healthy Children about Third Hand Smoke

Engelli ve Sağlıklı Çocuğu Olan Ebeveynlerin Üçüncü El Sigara Kullanımına İlişkin Görüşlerinin Değerlendirilmesi

Serkan Köksoy [1], Belkıs Can [2]

1. Burdur Mehmet Akif Ersoy University, Burdur
2. Aydın Adnan Menderes University, Aydın

Abstract

Objective: The objectives of this study were to assess the opinions of parents with disabled children (PDC) and parents with healthy children (PHC) about thirdhand smoke (THS).
Method: This study was designed as a cross-sectional study. Study data were collected from the province of Burdur between October and November 2022. Data collection form consists of sociodemographic form, Beliefs about Thirdhand Smoke Scale (BATHS) and Fagerström Test for Nicotine Dependence (FTND).
Results: Totally 365 (100%) people participated in the study, 99 (27.1%) of which were PDC and 266 (72.9%) of which were PHC. A statistical difference was found between the BATHS health and BATHS persistence means of PDC and PHC. The existence of rules about not smoking in the environment they live in was in a way that there is a rule for 62 (63%) people, partially there is a rule for 10 (10%) people and no rule for 27 (27%) people for the PDC. For the PHC, it was 138 (51.9%), 43 (16.2%), and 85 (31.9%) (respectively).
Conclusion: The means of BATHS health and BATHS persistence in PDC were lower than the mean of PHC. In the whole population; BATHS (including its sub-dimensions) scores were associated with participants' economic and educational status. More than half of the population had rules prohibiting tobacco use in their residence. The existence of these rules was higher in PDC. In particular, the opinions of the PDC on THS should be intervened with basic public health approaches and they should be provided with sufficient information on the subject.

Keywords: Beliefs, parents, thirdhand smoke, tobacco smoke pollution, vulnerable populations

Öz

Amaç: Bu çalışmada engelli ve sağlıklı çocuklara sahip ebeveynlerin üçüncü el tütün dumanı ile ilgili görüşlerinin araştırılması amaçlanmıştır..
Yöntem: Bu çalışma kesitsel bir çalışma olarak tasarlanmıştır. Çalışma verileri Ekim ve Kasım 2022 tarihleri arasında Burdur ilinden toplanmıştır. Veri toplama formu sosyodemografik form, Üçüncü El Sigara Kullanımına İlişkin İnançlar Ölçeği (BATHS) ve Fagerström Nikotin Bağımlılığı Testi'nden (FTND) oluşmaktadır.
Bulgular: Çalışmaya 99(%27.1)'u engelli birey ebeveyni, 266(%72.9)'sı sağlıklı birey ebeveyni olmak üzere toplamda 365(%100) kişi katıldı. Engelli ve sağlıklı çocuklara sahip ebeveynlerin BATHS health ve BATHS persistence ortalamaları arasında istatistiki fark bulundu. Yaşadıkları ortamda (ev vb.) sigara içilmemesi ile ilgili kuralların varlığı ise engelli bireylere sahip ebeveynlerde kural var=62(%63), kısmen kural var=10(%10) ve kural yok=27(%27) kişiydi. Sağlıklı çocuklara sahip ebeveynlerde ise 138(%51.9), 43(%16.2), ve 85(%31.9) kişiydi (sırasıyla)..
Sonuç: Engelli bireylere sahip ebeveynlerde BATHSh ve BATHSp ortalamaları diğer grubun ortalamasına göre düşüktü ve bu durum aynı zamanda bir etki faktörüydü. Tüm popülasyonda; BATHS (alt boyutları dahil) puanları katılımcıların ekonomik durum ve öğrenim durumu ile ilişkiliydi. Popülasyonun yarısından fazlasının kaldıkları ortamda tütün kullanımını yasaklayan kurallar vardı. Bu kuralların varlığı engelli bireylere sahip ebeveynlerde daha yüksekti. Özellikle engelli bireylere sahip ebeveynlerin THS hakkındaki görüşlerine temel halk sağlığı yaklaşımları ile müdahale edilerek onların konu hakkında yeterli bilgiye ulaşmaları sağlanmalıdır.

Anahtar kelimeler: Bağımlılık, engellilik, inançlar, üçüncü el duman, ebeveynler

Correspondence / Yazışma Adresi: Belkıs Can, Aydın Adnan Menderes University Nursing Faculty Public Health Nursing, Aydın,Türkiye
E-mail: belkisscan@gmail.com

Received /Gönderilme tarihi: 19.12.2022 Accepted /Kabul tarihi: 03.04.2023

Introduction

After the tobacco is lighted, a large number of chemical substances are released into the environment, and these substances pollute the breathable air in the environment for a long time as well as they remain on the items (1). The pollution of the fresh air in the environment by tobacco smoke is known as second-hand smoke (SHS), and then the individual's contact with items and air polluted by tobacco smoke is known as thirdhand smoke exposure (THS). Exposure to THS in any way, especially in childhood, increases the risk of disease. According to the literature, it has been stated that the surfaces in the homes of smokers are chemically polluted by smoke and that children are at risk of being exposed to these chemicals (2). According to WHO (2020) data, it has been estimated that SHS may be associated with 1.2 million deaths per year. In fact, it has been calculated that about half of the children breathe the air polluted with tobacco smoke, and that as a result, approximately 65 thousand of children died due to SHS-related diseases (3).

In addition to being a very complex concept, disability is an important determinant of an individual's life. According to the World Disability Report, approximately 15% of the world's population consists of individuals with one of several disabilities (4). Some disabled individuals may have health problems other than being disabled (obesity, hypertension, stroke, diabetes, etc.) (5). Having a disabled child can negatively affect the mental health of the parents. The care burden of the parents and the changing lifestyle in the family due to the disability of their child can often cause psychological problems such as depression, anxiety, and stress (6). It is thought that the interventions made to solve these problems had a positive effect on the health of the parents and that this situation could reflect positively on their children (7,8). Therefore, the mental health and health literacy level of parents with disabled children (PDC) are extremely important for their well-being and life quality.

In a study conducted in Germany, it was emphasized that the children whose parents smoke and disadvantaged groups should be defined as the “target group” in protecting them from tobacco smoke (9). Therefore, scientific researches on these target groups are very important. Although there are many studies of tobacco dependence and exposure, it has been observed that scientific studies that deal with both thirdhand tobacco smoke and PDC as well as PHC are very limited. In order to fill this gap in the literature, our study aimed to search the opinions of PDCs and PHCs about thirdhand tobacco smoke with various sociodemographic variables.

Methods

Sample

PDCs and PHCs (mother and/or father) of children under the age of 18 residing in Burdur province were included in this study. Study data were collected between October and November 2022. For PDC; Residence in the Burdur city center is defined as being a parent with a child under the age of 18 with any disabilities. (Autism, Orthopedic, Vision, Hearing, Language and Speech, Mental, chronic diseases, etc.). For PHC, it is defined as being a parent with a child under the age of 18 who resides in the same region as the PDC population and does not have any disabilities. The parents (very old age, illiteracy, mental health problems, having both disabled and healthy children, etc.) who could not give consent in any way and could not answer the study questions in both sample groups were excluded from the study. Also, in PDCs themselves those with disabilities (Autism, vision, hearing, speech, mental retardation, etc. in a level not to give consent) were not included in the study.

This study was designed as cross-sectional study. Simple random sampling was used as the sampling method. The data collected from the participants by the authors were collected in their social environments (out of school and outside working hours) and face-to-face interviews. All known rules for the COVID19 pandemic have been applied and necessary precautions have been taken. The G*power program was used for sample size (10). For the sample calculation, parameters similar to the sample calculation of a previous study were used (11). Accordingly, input data: effect size is entered as d=0.5, α=0.05, Power (1-β) =0.95,

allocation ratio n2/n1=1. Output data was calculated as t=1.7, df=174, sample size group 1=88, sample size group 2=88, Actual power=0.95 and total sample size=176.

Procedure

Ethics approval (01.12.2021-2021/419) from Burdur Mehmet Akif Ersoy University Non-Interventional Clinical Research Ethics Committee and necessary permission from the relevant public institution for data collection were obtained. Permission of the FTND and BATHS scales was obtained from the authors who published their Turkish versions via e-mail. Informed voluntary consent form was read by the authors before the participant filled in the parts related to the scale. The fact that the participant filled out the entire form voluntarily or the fact that he/she had the authors filled it out was accepted as giving consent. The Declaration of Helsinki was followed during the data collection.

Data collection consisted of three main parts. These were sociodemographic, Beliefs about Third-Hand Smoke Scale (BATHS), Fagerström Test for Nicotine Dependence (FTND) and The Heaviness of Smoking Index (HSI).

Measures

Sociodemographic Form

This form was compiled by the authors from the current literature in accordance with the design of the study. This form consists of questions such as age, gender, marital status, economic status, disability status of the child etc.

Beliefs about Thirdhand Smoke Scale (BATHS)

This scale has 9 items and a five-point Likert form (Strongly Disagree=1, Disagree=2, Not Sure=3, Agree=4, and Strongly Disagree=5). The BATHS scale (BATHSt) has two sub-dimensions namely BATHS health (BATHSh) and BATHS persistence (BATHSp). The scale explains 97% of the total variance. While the mean of items 1th, 2nd, 3rd, 7th and 8th are taken for BATHSh, the mean of items 4th, 5th, 6th and 9th are taken for BATHSp. In the original study, while the Cronbach's alpha (α) value of the scale was 0.91 in the whole scale, it was α:0.88 in both sub-dimensions (12). Turkish validity and reliability analysis of the scale was conducted. In confirmatory factor analysis, the values were found as RMSEA 0.123, SRMR 0.076, CFI 0.94 and TLI 0.9. While it was found as α:0.9 in the whole scale, it was calculated as BATHSh α:0.81 and BATHSp α:0.86 (13).

Fagerström Test for Nicotine Dependence (FTND)

It is a one-dimensional scale consisting of 6 questions to detect nicotine dependence (14). The scores received from the scale range between 0 and 10. It is evaluated as <5p=low dependency, 5p=moderate dependency, and 5p>high dependency. The α value of the scale was 0.56 (15).

The Heaviness of Smoking Index (HSI)

The HSI is determined by adding the scores received from the first (How soon after you wake up do you smoke your first cigarette?) and fourth questions (How many cigarettes per day do you smoke?) of the FTND. 749 people participated in the original research. According to the findings of this study, HSI was found to have good sensitivity (79.5%) and specificity (96.5%). Cohen's kappa value calculated between FTND and HSI was found to be 0.74. HSI has shown high performance in both male and female, thus reported to be suitable for epidemiological studies. (16).

Statistical Analysis

SPSS (V.24) package program was used in the analysis of the data. The descriptive parameters of sociodemographic variables (age, gender, economic status, employment status, education level, and smoking status) were given as the number of participants (n), percentage (%) and mean and standard

deviation (Mean ± SD) of the scales. The comparison of the mean of the scale of the groups (PDC and PHC) was made by student t test (t), ANOVA (f), post hoc Tukey test (There is no statistical difference between same letters, and there is statistical difference between different letters). For the normal distribution, the Skewness and Kurtosis values suggested by Kim (2013) were accepted (17). Statistical significance was accepted as $p<0.05$.

Results

Totally 365 (100%) parents 99 (27.1%) of which were PDC and 266 (72.9%) of which were PHC participated in the study. Data from 14 participants from PDC and 8 participants from PHC were not included in the study due to exclusion criteria. The mean age of the participants was 40.9±6.5 years. While the mean number of children in PHC was 2.1±0.6 person, it was 1.2±0.5 in PDC. The mean disability percentage of the disabled children of the PDC was 79.3±14.1. In the whole population, the mean of BATHSt was found as 4.1±0.8 (α:0.93), the mean of BATHSp was 3.8±0.9 (α:0.89), and the mean of BATHSh was 3.9±0.9 (α:0.87).

Inter-scale correlation between BATHSp and BATHSh was found as r:+0.75 ($p<0.001$), FTND and BATHSp was r: -0.24 (p:0.004), FTND and BATHSh was r: -0.24 (p:0.004) and FTND (α:61) and HSI was r: +0.94 ($p<0.001$).

The prevalence of tobacco dependence in the whole population was 41.1% (n=150), it was 122 45.9% (n=122) in PHC and 28.3% (n=28) in PDC.

While the existence of rules about not smoking in the environment they live in (home, etc.) was in a way that there is a rule for 62 (63%) people, partially there is a rule for 10 (10%) people and no rules for 27 (27%) people for PDC, it was 138 (51.9%) people, 43 (16.2%) people, and 85 (31.9%) people (respectively) for PHC. It was found as 200 (54.8%), 53 (14.5%) and 112 (30.7%) people (respectively) in the whole population. A statistical difference was found between the BATHSh and BATHSp means of PDC and PHC ($p<0.001$), but no statistical difference was found between FTND and HSI ($p>0.05$) (Table 1).

Table 1. BATHS and FTND findings of PDC and PHC

Group Statistics	Variable	n(%)	Mean	Test	p	Lower	Upper
$BATHS_t$	PDC	99(27.1)	4±0.9	t: -0.44	0.635	-0.2	0.1
	PHC	266(72.9)	4±0.7				
$BATHS_P$	PDC	99(27.1)	3.1±1.1	t: -8.7	<0.001	-1.1	-0.7
	PHC	266(72.9)	4.1±0.8				
$BATHS_h$	PDC	99(27.1)	3.3±0.9	t: -8.5	<0.001	-1	-0.6
	PHC	266(72.9)	4.1±0.8				
FTND	PDC	28(28.3)	3.8±3.2	t: -0.4	0.708	-1.4	1
	PHC	122(45.9)	4±2.8				
HSI	PDC	28(28.3)	2.3±2.1	t: -0.5	0.634	-0.9	0.6
	PHC	122(45.9)	2.4±1.7				

t: student t test, BATHS: Beliefs about Thirdhand Smoke Scale, $BATHS_t$: BATHS total, $BATHS_p$: BATHS persistence, $BATHS_h$: BATHS health, PDC: Parents with disabled child, PHC: Parents with healthy child, FTND: Fagerström Test for Nicotine Dependence, HSI: The Heaviness of Smoking Index.

A statistical difference was found between FTND, HSI and gender variable in the whole population ($p<0.001$). There was a statistical difference between the dependent variable of BATHSp, BATHSh, FTND, HSI and economic status and educational status ($p<0.05$) (Table 2). The total percentage (%) of the questions that form the expressions "Not Sure-NS", "Disagree-D" and "Strongly Disagree-SD" in the likert part of the BATHS scale were distributed to PDC and PHC. While it was found as Q1=5%, Q2=5%, Q3=20%, Q4=30%, Q5=36%, Q6=19%, Q7=40%, Q8=44% and Q9=35% in PDC, it was found as 6.4%, 8.9%, 21.4%, 21.8%, 35.2%, 17.6%, 41.7%, 47% and 27.3% (scale questions, respectively) in PHC (Table 3).

Table 2. Comparison of the whole population with sociodemographic variables

Variable		n(%)	Mean	Test	p
BATHSp (n:365)	Female	182(49.9)	4.1±0.9	t: 1.2	0.216
	Male	183(51.1)	4±0.9		
BATHSh (n:365)	Female	182(49.9)	4.2±0.8	t: 1.1	0.271
	Male	183(51.1)	4.1±0.8		
FTND (n:150)	Female	49(32.7)	1±2.2	t: -4.9	<0.001
	Male	101(67.3)	2.3±3		
HSI (n:150)	Female	49(32.7)	0.6±1.3	t: -5	<0.001
	Male	101(67.3)	1.4±1		
BATHSp (n:365)	Employed	249(62.2)	3.8±0.9	t: 1.1	0.256
	Unemployed	116(37.8)	3.7±1		
BATHSh (n:365)	Employed	249(62.2)	3.9±0.9	t: 1.9	0.057
	Unemployed	116(37.8)	3.7±1		
FTND (n:150)	Employed	117(78)	4±2.8	t: 0.7	0.501
	Unemployed	33(22)	3.6±3		
HIS (n:150)	Employed	117(78)	2.5±1.8	t: 0.8	0.436
	Unemployed	33(22)	2.2±1.8		
BATHSp (n:365)	I=E	256(70.1)	3.9±0.9a	f: 5.7	0.004
	I<E	73(20)	3.5±1b		
	I>E	36(9.9)	4±1a		
BATHSh (n:365)	I=E	256(70.1)	3.9±0.9a	f: 3.6	0.027
	I<E	73(20)	3.6±0.8b		
	I>E	36(9.9)	4±0.9a		
FTND (n:150)	I=E	105(70)	5±3a	f: 3.3	<0.001
	I<E	35(23.3)	3.4±3b		
	I>E	10(6.7)	3.8±2.5a		
HSI (n:150)	I=E	105(70)	3.1±1.9a	f: 4.3	<0.001
	I<E	35(23.3)	1.9±1.8b		
	I>E	10(6.7)	2.4±1.6a		
BATHSp(n:365)	Primary Education	82(22.5)	3.4±1.1a	f: 13.1	<0.001
	Secondary Education	121(33.2)	3.7±1a		
	Higher Education	162(44.3)	4.1±0.8b		
BATHSh (n:365)	Primary Education	82(22.5)	3.6±1a	f: 8	<0.001
	Secondary Education	121(33.2)	3.8±0.9a		
	Higher Education	162(44.3)	4.1±0.8b		
FTND (n:150)	Primary Education	32(21.3)	5±3a	f: 3.3	0.04
	Secondary Education	50(33.3)	3.4±3b		
	Higher Education	68(45.4)	3.8±2.5b		
HSI (n:150)	Primary Education	32(21.3)	3.1±1.9a	f: 4.3	0.015
	Secondary Education	50(33.3)	1.9±1.8b		
	Higher Education	68(45.4)	2.4±1.6b		
BATHSp	Smoking	150(41.1)	3.7±0.9	t:-1.3	0.21
	Not Smoking	215(58.9)	3.9±1		
BATHSh	Smoking	150(41.1)	3.9±0.8	t:0.09	0.92
	Not Smoking	215(58.9)	3.9±1		

t: student t test, f: ANOVA, Letters in mean: posthoc Tukey, BATHS: Beliefs about Thirdhand Smoke Scale, FTND: Fagerström Test for Nicotine Dependence, HSI: The Heaviness of Smoking Index, I: Income, E: Expense

Table 3. The distribution of $BATHS_t$ answer

$BATHS_t$S	SD		D		NS		A		SA	
	PDC	PHC	PDC	PHC	PDC	PHC	PDC	PHC	PDC	PHC
Q1	1(1)	4(1.5)	1(1)	3(1.1)	3(3)	10(3.8)	29(29)	63(23.6)	65(66)	186(70)
Q2	1(1)	4(1.5)	1(1)	5(1.8)	3(3)	15(5.6)	35(35)	95(35.7)	59(60)	147(55.4)
Q3	3(3)	3(1.1)	2(2)	13(4.9)	12(12)	41(15.4)	35(35)	93(34.9)	47(48)	116(43.7)
Q4	5(5)	2(0.8)	7(7)	16(6)	18(18)	40(15)	30(30)	104(39.1)	39(40)	104(39.1)
Q5	6(6)	5(1.8)	9(9)	15(5.6)	21(21)	74(27.8)	21(21)	87(32.9)	42(43)	85(31.9)
Q6	4(4)	3(1.1)	9(9)	10(3.8)	6(6)	34(12.7)	30(30)	101(37.9)	50(51)	118(44.5)
Q7	4(4)	6(2.3)	20(20)	20(7.5)	16(16)	85(31.9)	18(18)	83(31.3)	41(42)	72(27)
Q8	4(4)	8(3)	25(25)	26(9.8)	15(15)	91(34.2)	19(19)	79(29.7)	36(37)	62(23.3)
Q9	9(9)	7(2.6)	15(15)	11(4.1)	11(11)	55(20.6)	27(27)	110(41.4)	37(38)	83(31.3)

n (%), $BATHS_t$: BATHS total, Q: Question, SD: Strongly Disagree, D: Disagree, NS: Not Sure, A: Agree, SA: Strongly Agree

Discussion

According to the findings of our study, the internal consistency value of BATHS (including all sub-dimensions), BATHSt, BATHSp and BATHSh mean were close and consistent with the findings of both the study in which the scale was developed and the study adapted into Turkish (12,13). At the same time, the internal consistency finding of the FTND scale was close to and above of the finding of the article in which the study was adapted into Turkish (15). When the findings related to BATHS (including its sub-dimensions) and FTND that we obtained from our study are evaluated in terms of all participants, it can be said that the scales are very suitable and useful measurement tools for this sociodemographic structure. In our study although the mean values of BATHSt, BATHSp and BATHSh in the whole population were close to the mean values of the developed and adapted scale, the mean values of BATHSh and BATHSp in PDC were lower compared to PHC ($p<0.001$) (Table 1). It is possible to say that the general population has sufficient information about BATHS only by looking at the scale mean. However, according to the findings of this study, it can be said that disadvantaged groups such as PDC do not have sufficient information about the subject. In addition, according to the distribution given in Table 3, the distribution in both PDC and PHC, namely the inadequacy of the information, explains this situation a little more. In a study, more than half of the participants with tobacco dependence thought that their children were not passive smokers (18). This thought suggests that parents have low awareness of tobacco smoke exposure and do not have enough information about the negative effects of tobacco smoke. In the whole population, it is possible to say that BATHS (including its sub-dimensions) scores are associated with the economic status and educational status of the participants, and that it is consistent with previous studies in the literature (19,20).

There are various studies showing the existence of rules regarding the prohibition of tobacco use in living spaces. The existence of these rules was 54.8% in the whole population. In the previous studies, it was found to be 42% in Kuwait, 59.2% in England, 60.2% in the United States, 67.8% in Canada and 66.2% in Australia (19,21). The diversity of rules prohibiting tobacco use may be related to the level of development, cultural differences and health literacy of countries. The finding of the existence of rules prohibiting tobacco in PDC's living spaces (63%) is one of the highest percentages available in the literature. The existence of the rules prohibiting tobacco in more than half of the PDC, but the fact that the means of BATHSh and BATHSp are low compared to PHC show that there is not enough and sustainable awareness.

The prevalence of tobacco dependence can vary from country to country and culture to culture. In our study, the prevalence of tobacco dependence in PDC was lower than in the other group. In a study on tobacco dependence of disabled individuals, it was shown that the prevalence was higher than healthy individuals (22). In addition, it has been reported that the risk of tobacco addiction is high in children with health

problems such as attention deficit and hyperactivity disorder (23). Therefore, it should be thought that lower calculated frequency may be associated with a higher risk.

This study has some limitations. The limitations of this study are that the data of the study were based on the self-reports of the participants, that THS exposure was not measured by biological indicators, that it was conducted in a single center, and that it was studied on a limited sample group (for PDC).

In conclusion, means of BATHSh and BATHSp in PDC were lower compared to the mean of the other group. In the whole population; BATHS (including its sub-dimensions) scores were associated with participants' economic and educational status. More than half of the population had rules prohibiting tobacco use in their residence. The existence of these rules was higher in parents with people with disabled individuals. In particular, the opinions of the parents on THS should be intervened with basic public health approaches and they should be provided with sufficient information on the subject.

References

1. Matt GE, Quintana PJ, Hovell MF, et al. Households contaminated by environmental tobacco smoke: sources of infant exposures. Tob Control 2004; 13(1): 29-37.
2. Matt GE, Quintana PJ, Destaillats H, et al. Thirdhand tobacco smoke: emerging evidence and arguments for a multidisciplinary research agenda. Environ Health Perspect 2011; 119(9): 1218-1226.
3. World Health Organization (WHO) https://www.who.int/healthtopics/tobacco#tab=tab_1 (2020). Accessed Date: 28.06.2022
4. The Lancet Global Health. Disability: Measurement matters. Lancet Glob Health 2021; 9(8): e1028.
5. Emerson E, Madden R, Graham H, et al. The health of disabled people and the social determinants of health. Public Health 2011; 125(3): 145-147.
6. Sharma R, Singh H, Murti M, et al. Depression and anxiety in parents of children and adolescents with intellectual disability. Ind Psychiatry J 2021; 30(2): 291-298.
7. Bourke-Taylor HM, Joyce KS, Morgan P, et al. Maternal and child factors associated with the health-promoting behaviors of mothers of children with a developmental disability. Res Dev Disabil 2021; 118: 104069.
8. Bourke-Taylor HM, Joyce KS, et al. Mental health and health behavior changes for mothers of children with a disability: effectiveness of a health and wellbeing workshop. J Autism Dev Disord 2022; 52(2): 508-521.
9. Kuntz B, Lampert T. Social disparities in parental smoking and young children's exposure to secondhand smoke at home: a time-trend analysis of repeated cross-sectional data from the German KiGGS study between 2003-2006 and 2009-2012. BMC Public Health 2016; 16: 485.
10. Faul F, Erdfelder E, Lang AG, Buchner A. G*Power 3: a flexible statistical power analysis program for the social, behavioral, and biomedical sciences. Behav Res Methods 2007; 39(2): 175-191.
11. Stolwyk RJ, Low T, Gooden JR, et al. A longitudinal examination of the frequency and correlates of self-reported neurobehavioural disability following stroke. Disabil Rehabil 2022; 44(12): 2823-2831.
12. Haardörfer R, Berg CJ, Escoffery C, et al. Development of a scale assessing beliefs about thirdhand smoke (BATHS). Tob Induc Dis 2017; 15: 4.
13. Çadirci D, Terzi NK, Terzi R, Gökşin Cihan F. Validity and reliability of Turkish version of beliefs about third-hand smoke scale: BATHS-T. Cent Eur J Public Health 2021; 29(1): 56-61.
14. Heatherton TF, Kozlowski LT, Frecker RC. The fagerström test for nicotine dependence: a revision of the fagerström tolerance questionnaire. Br. J. Addict 1991; 86: 1119-1127.
15. Uysal MA, Kadakal F, Karşidağ C, et al. Fagerstrom test for nicotine dependence: reliability in a Turkish sample and factor analysis. Tuberk Toraks 2004; 52(2): 115–121.
16. Chabrol H, Niezborala M, Chastan E, de Leon J. Comparison of the Heavy Smoking Index and of the Fagerstrom Test for Nicotine Dependence in a sample of 749 cigarette smokers. Addict Behav. 2005; 30(7):1474-1477.
17. Kim HY. Statistical notes for clinical researchers: assessing normal distribution (2) using skewness and kurtosis. Restor Dent Endod 2013; 38(1): 52–54.
18. de Carvalho Ribeiro FA, de Moraes MK, de Morais Caixeta JC, et al. Perception of parents about second hand smoke on the health of their children: an ethnographic study. Rev Paul Pediatr 2015; 33(4): 394-399.
19. Shehab K, Ziyab AH. Beliefs of parents in Kuwait about thirdhand smoke and its relation to home smoking rules: A cross-sectional study. Tob Induc Dis 2021; 19: 66.

20. Xie Z, Chen M, Fu Z, et al. Thirdhand smoke beliefs and behaviors among families of primary school children in Shanghai. Tob Induc Dis 2021; 19: 10.
21. Nahhas GJ, Braak D, Cummings KM, et al. Rules about smoking and vaping in the home: findings from the 2016 International Tobacco Control Four Country Smoking and Vaping Survey. Addiction 2019; 114(Suppl 1): 107-114.
22. Casseus M, Cooney JM, Wackowski OA. Tobacco use, dependence, and age of initiation among youths with cognitive disability. J Pediatr 2022; 247:102-108.e8.
23. Kalyva E. Prevalence and influences on self-reported smoking among adolescents with mild learning disabilities, attention deficit hyperactivity disorder, and their typically developing peers. J Intellect Dev Disabil 2007; 11(3): 267-279.

Yazar Katkıları: Tüm yazarlar ICMJE'in bir yazarda bulunmasını önerdiği tüm ölçütleri karşılamışlardır
Etik Onay: Bu çalışma için ilgili Etik Kuruldan etik onay alınmıştır.
Hakem Değerlendirmesi: Dış bağımsız.
Çıkar Çatışması: Yazarlar çıkar çatışması olmadığını beyan etmişlerdir.
Finansal Destek: Yazarlar finansal destek beyan etmemişlerdir.

Author Contributions: All authors met criteria recommended by ICMJE for being an author
Ethical Approval: Ethical approval was obtained for this study from relevant Ethics Committee.
Peer-review: Externally peer-reviewed.
Conflict of Interest: The authors have declared that there is no conflict of interest.
Financial Disclosure: Authors declared no financialsupport