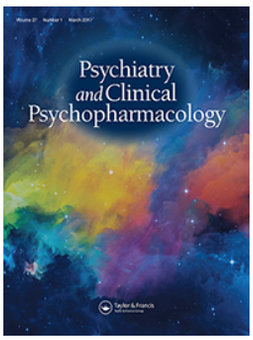

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Reliability, validity, and factorial structure of the Turkish version of the Bradford Somatic Inventory (Turkish BSI-44) in a university student sample

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ABSTRACT

Objective: Mumford and colleagues developed the Bradford Somatic Inventory (BSI) that examines the somatic symptoms of anxiety and depression, which has transcultural applications. The objective of the current study was to establish the psychometric properties and factorial validity of the Turkish version of the BSI-44 in a healthy Turkish population and obtain normative data.

Methods: The study was conducted at the Marmara University School of Medicine with a sample of 201 healthy students (18–30 years old). In order to estimate the test–retest reliability of the Turkish BSI, 53 participants from the original sample were asked to fill in the questionnaire one month after the initial testing. Socio-demographic data of the participants were collected and the Turkish BSI, Somatosensory Amplification Scale (SSAS), Whiteley Index (WI-7), and somatization subscale of the Symptom Check List (SCL-90-R) scales were administered. All statistical analysis were performed by using SPSS version 23 for Windows.

Results: The mean age of the study participants was 22.9 ± 1.95 years; 57.7% ($n = 116$) of participants were female; 42.3% ($n = 85$) were male. BSI scores were normally distributed. The scores of the BSI were categorized as high (>40), middle (26–40), and low (0–25); no statistically significant differences were found between males and females. The Cronbach's alpha coefficient for the scale was 0.90 and the test–retest correlation coefficient was found to be 0.75. A positive and statistically significant correlation was found between the Turkish BSI and the WI ($r = 0.38$, $p < .01$), the SSAS ($r = 0.48$, $p < .01$) and the SCL-90-R ($r = 0.79$, $p < .01$) scales. A principal components analysis was performed on the BSI responses of the participants, which yielded 14 factors with an eigenvalue greater than one, representing 65.2% of the total variance.

Conclusions: Our results suggested that the Turkish BSI was a valid and reliable tool with a robust factorial structure to use in clinical populations in Turkey.

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Somatization; Bradford Somatic Inventory; anxiety; depression; reliability; validity; factor structure

Introduction

Somatization, in general, is defined as the tendency to express emotional dysphoria with somatic symptoms [1]. Most people with psychiatric disorders express their mental distress by somatic symptoms rather than psychological symptoms [2]. It is clear that somatic symptoms are a very common way of presentation of psychiatric illness throughout the world [3].

Although somatization is seen with many psychiatric disorders, it is most commonly associated with anxiety and depression in psychiatric disorders [4–5]. There are many questionnaires and inventories that measure psychological symptoms in psychiatric situations, but none of them measures somatic symptoms of anxiety and depression [3]. Furthermore, many well-constructed scales consist of limited items about somatic symptoms of anxiety and depression. Other inventories including somatic symptoms, which have been developed in recent years, have been designed to be only proper to particular ethnic groups. Therefore, Mumford et al. determined the need for a scale that would measure somatic symptoms associated with psychiatric illness in detail and can be applied to multiple ethnic backgrounds. They emphasized the need for a systematic research to obtain a comprehensive list of somatic symptoms often seen in each group and build the scale with an appropriate construct to each ethnic group [3].

Mumford and colleagues developed the Bradford Somatic Inventory (BSI) that examines somatic symptoms of anxiety and depression and comprehends multiple ethnicities [3]. Symptoms of this scale were obtained from psychiatric case notes of Pakistani and British patients with a clinical diagnosis of anxiety, depression, hysteria, and hypochondriasis [3]. The inventory was constructed in two languages: Urdu and English. The pilot version of the BSI was checked

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against psychiatric case notes of patients in the other parts of the India–Pakistan subcontinent. The revised BSI covered 90% of all somatic symptoms registered in each centre. The linguistic equivalence of the Urdu and the English versions was established in a bilingual student population in Pakistan [3]. The conceptual equivalence of the BSI was explored using factor analysis of responses by functional patients presenting to medical clinics in Britain and Pakistan. Four principal factors including head, chest, abdomen, and fatigue were obtained from the results of the factor analysis [3]. In a British primary care population, Cronbach's alpha coefficient of the BSI was found to be 0.86 with good test–retest reliability [2].

The BSI consists of 46 items, 2 items applying to men only. It inquires about a wide range of somatic symptoms during the previous month and if the subject has experienced a particular symptom, and whether the symptom has occurred on more or less than 15 days during the month [3]. The BSI was constructed simultaneously in Urdu and English and has been translated into several languages, namely, Arabic, Bengali, Chinese, French, Italian, Polish, Romanian, Russian, Spanish [6–8], German, and Turkish [9]. Normative data and psychometric properties of the Russian version have been reported [10].

The objective of the current study was to establish the psychometric properties and factorial validity of the Turkish version of the BSI-44 (two items for men only in the original form were excluded) in a healthy Turkish population and obtain normative data for future clinical and epidemiological studies in psychiatric patients in Turkey.

Methods

Participants

The study was conducted at the Marmara University School of Medicine with a sample of 201 healthy students (85 males, 116 females, mean age 22.9 ± 1.95 years, range 18–30). To estimate the test–retest reliability of the Turkish BSI, 53 participants from the original sample were asked to fill in the questionnaire one month after the initial testing (see Appendix). The study participants were aged 18–30 years old; able to read and write Turkish; and free of psychiatric disorders such as psychosis, autism, mental retardation, and substance abuse. Participants who had neurological disorders such as cerebrovascular disorders, convulsions, meningitis, or encephalitis, with any history of abnormal computed tomography or magnetic resonance imaging scans, or who were on psychotropic medications were excluded.

The current study was approved by the Ethics Committee of Marmara University Hospital and all the subjects gave written informed consent before participation.

Psychometric measurements

Socio-demographic Data Form. This form (prepared by the researchers) includes demographic variables, including gender, marital status, alcohol use, substance usage, psychiatric diseases, and medical diseases.

Bradford Somatic Inventory (BSI-44). BSI is a 44-item inventory for psychosomatically expressed psychological distress. It has cross-cultural validity as shown by studies carried out in Great Britain, Pakistan, India, Nepal, and Russia. The BSI asks the subject about a wide range of somatic symptoms during the previous month, and whether or not the subject has experienced a particular symptom, on more or fewer than 15 days during the month (scoring 1 or 2, respectively). For the present purpose, the scoring was based on Mumford, where a score >40 was considered to be high range; 26–40, middle range; and 0–25, low range.

Somatosensory Amplification Scale (SSAS). The SSAS is a 10-item scale developed by Barsky et al. [11] and its validity and reliability have been demonstrated. Respondents score each item from 1 (not at all true) to 5 (extremely true). Most items describe a physical discomfort, which does not indicate a disease. In the original version, by adding the scores, a total amplification score is obtained (ranging from 10 to 50). Its adaptation into the Turkish form was shown by Gulec et al. and the Turkish version of the SSAS had good internal reliability with a Cronbach's alpha of 0.80 [12].

Whiteley Index (WI-7). The WI is a widely used instrument developed by Pilowsky which finds hypochondriac worries and beliefs [13]. Factor analysis of the WI yielded three separate factors: disease fear, disease conviction, and bodily preoccupation. The WI has been widely used in studies of hypochondriasis and provides a useful screening measure [14]. The Turkish version of the WI-7 which has been prepared by Gulec et al. showed good reliability in the Turkish population, with a Cronbach's alpha of 0.76 [15].

SCL-90-R somatization subscale. The somatization subscale of the SCL-90-R is a multidimensional self-report measure of psychopathology widely employed in psychiatric and medical populations with well-established reliability and validity [16]. The SCL-90-R somatization subscale is a 12-item list of common somatic symptoms and has been demonstrated to be reliable in the Turkish population, with Cronbach's alpha = 0.75 [17].

Statistical analysis

Data analysis was performed using SPSS for Windows Version 23.0 (SPSS Inc., Chicago, Illinois, USA). Cronbach's alpha coefficients were calculated for each item to identify the internal consistency of the Turkish BSI. Correlation analysis between test and retest data were performed using Pearson's correlation coefficients. To

compare the average mean of the categorized BSI in terms of gender, a crosstab analysis was used. Convergent and discriminant validity were examined by correlation coefficients between the BSI scale scores and total WI, total SSAS, and total SCL somatization subscale scores. Based on the theoretical structure, exploratory factorial analyzes were performed. Principal factor analyzes with Promax rotations were used. A p-value less than .05 was considered statistically significant.

Results

Socio-demographic characteristics of sample

The mean age of the study participants was 22.9 ± 1.95 years (X ± SD); 57.7% ($n = 116$) of the participants were female; 42.3% ($n = 85$) were male. The majority of the participants in the study were single (99.5%) and no one was married, and one participant was divorced. In all, 54.2% of the sample had never used alcohol before, and 38.3% were using alcohol. In the sample, 190 (94.5%) participants have no psychiatric diseases, but 5.5% were suffering from at least one. The socio-demographic characteristics of the participants are presented in Table 1.

Prevalence of somatization

The scores of the BSI were categorized as 40 and above as high, 26–40 as middle, and 0–25 as low range, and crosstab analysis used. We did not find any statistically significant differences between males and females in terms of the categorized scores ($p = .452$). Table 2 shows the frequencies and percentage scores on the BSI of the whole sample as well as for males and females separately. Only 1% of the sample scored in the high range, who are all females. That means 2 women and no men had a score of 40 or higher. In all, 14.9% of the whole sample scored in the middle range. Again, females (15.5%) outnumbered the males (14.1%). The majority of the subjects (84.1%) were in the low range. Here males (85.9%) outnumbered females (82.8%). These results revealed that although women in the sample showed a trend towards somatization, no statistically significant differences in the mean BSI scores were found between men and women ($\chi^2 = 1.587$, df = 2, $p = .452$).

Table 1. Socio-demographic characteristics of the sample.

	N	%
Gender		
Female	116	57.7
Male	85	42.3
Marital status		
Single	200	99.5
Married	0	0.0
Divorced	1	0.5
Alcohol usage		
Never	109	54.2
Past use	15	7.5
Currently using	77	38.3
Substance usage		
Never	191	95
Past use	10	5.0
Currently using	0	0.0
Psychiatric disease		
Present	11	5.5
Absent	190	94.5
Medical disease		
Present	23	11.4
Absent	178	88.6

Table 2. Summary of the crosstab analysis for gender and categorized BSI scores.

	Gender		
Categorized BSI	Male	Female	Total
High range	0% (0)	1.7% (2)	1% (2)
Middle range	14.1% (12)	15.5% (18)	14.9% (30)
Low range	85.9% (73)	82.8% (96)	84.1% (169)

Note: Frequencies are shown in parentheses.

Internal consistency

The Cronbach's alpha coefficient for the Turkish BSI was found to be 0.90.

Test–retest reliability of the Turkish BSI

There was a period of one month between test and retest administrations and 53 students participated in the retest procedure. Total BSI scores were found to be highly correlated with total retest BSI scores ($r = 0.75$, $p < .001$). The highest correlation coefficient was found for *Hands or feet pins and needles* ($r = 0.77$, $p < .001$) and the lowest correlation coefficient was found for *Trembling or shaking* ($r = -0.03$, $p > .05$). Results of correlation coefficients between test and retest scores of all items are presented in Table 3 in detail.

Convergent validity

Convergent validity was examined by correlation coefficients between the BSI scale scores and total WI, total SSAS, and total SCL somatization subscale scores. A positive and statistically significant correlation was found between total BSI and total WI ($r = 0.384$, $p < .001$), total SSAS ($r = 0.482$, $p < .001$), and SCL somatization subscale ($r = 0.793$, $p < .001$). Correlations between the Turkish BSI, age, and other scales are presented in Table 4.

Factor structure of the Turkish BSI

To examine the factor structure of the BSI scale, an exploratory factor analysis (EFA) was performed using various methods. Kaiser–Meyer–Olkin (KMO)

Table 3. Test–retest correlations for the Turkish BSI after 1 month ($n = 50$).

Item	r_{tt}	p	Item	r_{tt}	p
Severe headaches	0.683	<.001	Urine frequency	0.344	.012
Stomach fluttering	0.476	<.001	Low back trouble	0.620	<.001
Neck pain or tension	0.341	.012	Stomach swollen or bloated	0.451	.001
Skin burning	0.290	.035	Head heavy	0.278	.044
Head constriction	0.186	.181	Tired all the time	0.505	<.001
Chest pain	0.398	.003	Leg pain	0.269	.052
Dry mouth	0.277	.045	Nausea	0.428	.001
Misty vision	0.677	<.001	Head about to burst	0.410	.002
Stomach burning	0.480	<.001	Breathing difficulty	0.189	.176
Weakness or energy	0.619	<.001	Tingling all over	−0.049	.730
Head hot or burning	0.266	.054	Constipation	0.642	<.001
Sweating a lot	0.625	<.001	Bowel frequency	0.160	.252
Chest pressure	0.039	.783	Palms sweating	0.495	<.001
Abdominal ache	0.404	.003	Throat lump	0.637	<.001
Choking sensation	0.433	.001	Giddy or dizzy	0.352	.010
Hands or feet pins and needles	0.765	<.001	Bitter taste	0.388	.004
Total body aches and pains	0.266	.054	Whole body heavy	0.341	.012
Heat inside body	0.428	.001	Urine burning	0.365	.007
Palpitations	0.492	<.001	Buzzing in ears or head	0.288	.037
Eyes painful or burning	0.633	<.001	Heart weak or sinking	0.397	.003
Indigestion	0.538	<.001	Excessive wind or gas	0.499	<.001
Trembling or shaking	−0.027	.845	Hands or feet cold	0.436	.001
			BSI total	0.745	<.001

Note: r_{tt}: test–retest correlation coefficient.

Measure of Sampling Adequacy and Bartlett's test of Sphericity were performed. In this study, KMO Sampling Adequacy was found to be 0.798 and Bartlett's test of Sphericity χ^2 was found to be 2984.688.

A principal components analysis was performed on the BSI responses of the participants, which yielded 14 factors with an eigenvalue greater than one, representing 65.2% of the total variance. In this factorial structure, 17 items (Items 8, 11, 17, 21, 24, 25, 26, 28, 30, 34, 36, 37, 38, 39, 41, 42, and 43) loaded onto more than one factor, and 1 item (Item 7) failed to load at least 0.4 on any factors. However, in the original study of the scale, it was reported that an eight-factor structure provided a strong fit. An eight-factor solution was rotated by using Promax rotation and minimized the number of variables that have high loadings on any one factor. When all the rotated solution was examined, the eight factors accounted for 49.75% of the total variance. The eight-factor solution presented in Tables 5 and 6 compares the eight-factor solutions of the Turkish, English, and Urdu versions.

Discussion

In this study, we aimed to examine the validity, reliability, and factor structure of the BSI in a Turkish sample. The main findings of the present study confirmed that the Turkish BSI was observed to have stable and reliable psychometric properties.

Table 4. Correlations between the Turkish BSI, age, and other scales.

Scales	Total BSI	Total WI	Total SSAS	Total SCL	Age
Total BSI		0.384**	0.482**	0.793**	−0.138
Total WI			0.369**	0.371**	−0.058
Total SSAS				0.382**	−0.089
Total SCL					−0.024
Age					

**Correlation is significant at the 0.01 level (two-tailed).

When the socio-demographic data are taken into consideration, no significant differences were observed between the male and female participants in terms of total BSI scores and there were no statistically significant correlations between age and BSI scores. In our sample, although the average mean BSI scores of women were higher than the men's, this difference was not statistically significant. Studies in the literature show that somatic disorders are affected by social position and are mostly seen in communities with lower urbanization and literacy level, and they are more common among women than men [18]. A study conducted by Aragona et al. [7] using the BSI-21 reported that female gender was a significant predictor of the frequency of 12 out of 21 symptoms and female participants showed significantly higher scores on the BSI-21 than men. However, studies that examined the relationship between age and somatic disorders were consistent with our findings [7,19]. Somatization has been reported to be more frequent among married females, aged 20–30 years, who are housewives [20]. But no women in this category participated in our study. Therefore, it can be speculated that our findings may have been affected by the marital status, education level, and/or the nature of our sample.

Although women in the sample showed a trend towards somatization, the difference between men and women was not statistically significant in terms of categorized BSI scores. However, in the sample, two women scored in the high range, while all men scored in the middle or low ranges. Therefore, an important implication may be that as found in most other studies in the literature, women are more

Table 5. Factor structure of the Turkish BSI.

Eigenvalue		5.438	5.425	3.195	3.315	3.113	4.924	3.680	2.317
Cumulative variation		19.936	25.719	30.779	35.545	39.946	43.750	46.801	9.754
	Item	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7	Factor 8
Abdomen	BSI25	0.694							
	BSI21	0.690					0.455		
	BSI29	0.685							
	BSI14	0.668							
	BSI43	0.655							
	BSI9	0.625							
	BSI34	0.555							
	BSI2	0.537			0.459				
Panic	BSI37		0.674						
	BSI18		0.665						
	BSI39	0.429	0.608	0.480					
	BSI38	0.457	0.568						
	BSI11		0.565						
	BSI44		0.495						
	BSI35		0.450						
	BSI12		0.426						
	BSI16		0.419						
Fatigue	BSI10			0.791					
	BSI27			0.773					
	BSI17			0.509					
Chest	BSI13				0.774				
	BSI19				0.671				
	BSI6				0.665				
	BSI42		0.417		0.633				
Head	BSI1					0.743			
	BSI5					0.734			
	BSI26		0.413			0.637			
	BSI30					0.619			
Frequency	BSI20						0.625		
	BSI22						0.585		
	BSI31				0.413		0.583		
	BSI32						0.572	0.413	
	BSI24						0.548		
	BSI28			0.483			0.493		
	BSI8		0.405				0.475		
	BSI23						0.452		
Globus	BSI15							0.722	
	BSI36		0.438					0.595	
	BSI41		0.424					0.594	
	BSI40							0.591	
Heat	BSI4								0.486
	BSI3								0.462

Note: Values below 0.40 were not shown.

susceptible to somatization than men [21]. Another study conducted by Al-Lawati et al. also found similar results to our crosstab analysis for gender and categorized BSI scores [19]. However, in our study, this gender difference was not very clear and this may be mostly because we conducted our study with healthy participants and our small sample size was small.

Cronbach's alpha coefficient of the Turkish BSI was as high enough as in Mumford's original study [2]. In Mumford et al.'s original study, the internal consistency reliability coefficient of the BSI was 0.86 and in the present study, it is found to be 0.90. Due to the fact that the Cronbach's alpha coefficient was high enough (>0.60) in scale, the internal consistency of the Turkish BSI was considered to be sufficient. The present study also confirmed that the Turkish BSI has good test–retest reliability due to the fact that similar correlations were observed across a one-month interval, indicating the stability of the measure over time.

In our sample, the Turkish BSI was found to be positively correlated with the SSAS, which is a self-evaluating scale for measuring amplification during somatization, WI-7 which measures hypochondriac worries and beliefs, and the Somatization subscale of the SCL-90-R. The participants who received higher scores in the Turkish BSI also received higher scores in these scales that are specifically developed to examine somatic symptoms. These results confirmed that the Turkish BSI has a good convergent validity.

In the present study, in order to find out the number of dimensions and which items construct each factor, the EFA method was used. EFA can be quite useful for assessing the extent to which a set of items assesses a particular content domain and it is commonly used to reduce the set of observed variables to a smaller, more parsimonious set of variables [22].

The initial principal components analysis yielded 14 factors with an eigenvalue greater than one, representing 65.2% of the total variance. In the study of the original scale, 13 factors with an eigenvalue greater than one, representing 65.8% of the total variance, were yielded [2]. These results confirmed that the factorial

Table 6. Factor structure of the BSI in Turkey, Britain, and Pakistan.

	Item numbers		
Factor	Turkey	Britain	Pakistan
Head	**1**, **5**, **26**, **30**	**1**, **5**, 8, 20, **26**, **30**, 37	**1** ,**5**, 8, 11, 20, **26**, **30**, 37, 39, 41
Chest	**6**, **13**, **19**, **42**	**6**, **13**, **19**, 31, **42**	3, **6**, **13**, **19**, 32, **42**,
Abdomen	2, **9**, **14**, **21**, **25**, 29, 34, **43**	**9**, **14**, **21**, **25**, 33, **43**	2, **9**, **14**, **21**, **25**, 33, **43**
Fatigue	**10**,**1727**	3, **10**, 16, **17**, 24, **27**, 28	**10**, **17**, 24, **27**
Heat	3, **4**	**4**, 11, 41	**4**, 11, 18, 35, 41,
Globus	**15**, **36**, 40, 41	7, **15**, **36**	15, 31, **36**
Frequency	8, 20, 22, **23**, 24, 28, 31, 32	8, **23**, 29, 32, 34, 39	**23**, 34, 40
Panic	11, **12**, 16, 18, 37, 38, 39, 44, 35	**12**, 22, 38	7, **12**, 16, 19, 22, 32, 35, 44

Note: BSI items loading 0.4 or above on each of the eight factors. Common ingredients forming the same factor in the three versions are bolded.

structures of the Turkish BSI and the original scale were similar. However, as the changes in the gradient suggested the extraction of eight factors, an eight-factor solution was rotated by using Promax rotation and hence minimized the number of variables that have high loadings on any one factor. When all the rotated solution was examined, the eight factors accounted for 49.75% of the total variance. Similarly, in the study of the original scale, the eight-factor solution accounted for 53.0% of the total variance. Similarly, in the Urdu version of the BSI that was administered on 259 patients in Pakistan, the principal components analysis yielded 13 factors with an eigenvalue of greater than one, accounting for 65.6% of the total variance as it is very similar to the English version. The eigenvalues for successive factors were displayed in a scree plot, which was used graphically determine the optimal number of factors to retain and suggested the extraction of six, seven, or eight factors [2]. The eight-factor solutions of the Turkish, British, and Pakistani samples yielded four similar factors: head, abdomen, chest, and fatigue. However, similarly, in all three versions the remaining factors were not stable across the solutions.

An important difference between our study and the original scale study in terms of factorial analysis is that, unlike Mumford et al. [2], we used a Promax rotation instead of Varimax to obtain an eight-factor solution because the results of this oblique rotation were a set of loadings that typically reflect simple structure better than the Varimax rotation, especially when the latent traits are highly correlated [23]. In general, Varimax rotation in EFA is used when it is assumed that the factors extracted are not correlated with each other. However, Promax or other oblique rotations are generally used when it is assumed that they are orthogonal and correlated well.

The results reported in this study should be considered in light of certain limitations. First, the sample in this study was recruited from volunteer college students with a limited age range. This may to some extent affect the results and limit the generalization of the results to other samples. Another limitation is the fact that the cross-sectional nature of the study would not allow us to link the causality. Further prospective, longitudinal studies would help to establish a probabilistic causal relationship.

In conclusion, the Turkish version of the BSI had sound psychometric properties in our sample of Turkish healthy volunteers, including its internal consistency, test–retest reliability, concurrent validity, and factorial structure. The Turkish BSI will be useful for future studies in different countries to help better understand normalcy and psychopathology including somatization to examine the biological, social, and psychological differences in people from different cultures.

Disclosure statement

No potential conflict of interest was reported by the authors.

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Appendix

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Bradford bedensel belirti envanteri

Anketi Nasıl Dolduracaksınız:

Son bir ay içinde herhangi bir bedensel belirtinizin olup olmadığını öğrenmek istiyoruz. Lütfen aşağıdaki tüm sorular için en uygun seçeneği işaretleyin. Burada yalnızca son bir aydaki belirtilerinizi öğrenmek istiyoruz, daha önce ya da geçmişte varolanları değil. Tüm soruları yanıtlamaya çalışmanız çok önemlidir. Yardımlarınız ve katkınız için içtenlikle teşekkür ederiz.

ÖLÇEĞİN GEÇERLİ OLABİLMESİ İÇİN TÜM MADDELERİN DOLDURULMASINA ÖZEN GÖSTERİNİZ

Son bir ay boyunca …	Yok	Geçen ay15 Gündendaha AZ var	Geçen ay15 Gündendaha ÇOK var
1. Şiddetli baş ağrılarınız oldu mu?	☐	☐	☐
2. Midenizde çarpıntı ya da hareket eden bir şeyhissi oldu mu?	☐	☐	☐
3. Boynunuz ve omzunuzda ağrı veya gerginlik hissettiniz mi?	☐	☐	☐
4. Cildinizde yanma ya da kaşıntı hissi oldu mu?	☐	☐	☐
5. Kafanız, dışarıdan sımsıkı bir şekilde bastırılıyormuş gibi bir sıkışma hissi oldu mu?	☐	☐	☐
6. Göğsünüzde ya da kalbinizde sancı hissettiniz mi?	☐	☐	☐
7. Ağzınızda ya da boğazınızda kuruluk hissi oldu mu ?	☐	☐	☐
8. Gözlerinizin önünde kararma ya da sislenme oldu mu?	☐	☐	☐
9. Midenizde yanma hissettiniz mi?	☐	☐	☐
10. Çoğu zaman enerji eksikliği (zayıflık) hissettiğiniz oldu mu?	☐	☐	☐
11. Başınızda sıcaklık ya da yanma hissi oldu mu?	☐	☐	☐
12. Çoğu kez terlediğiniz oldu mu?	☐	☐	☐
13. Göğsünüzde ya da kalbinizde basınç ya da gerginlik hissettiniz mi?	☐	☐	☐
14. Karnınızda ağrı ya da rahatsızlıktan muzdarip oldunuz mu?	☐	☐	☐
15. Boğazınızda boğulma hissi oldu mu?	☐	☐	☐
16. Ellerinizde ya da ayaklarınızda iğnelenme ya da uyuşma hissi oldu mu?	☐	☐	☐
17. Bedeninizin her yerinde ağrı hissettiniz mi?	☐	☐	☐
18. Bedeninizde sıcaklık hissettiğiniz oldu mu?	☐	☐	☐
19. Çarpıntılarınızın (kalp çarpıntısı) farkına vardınız mı?	☐	☐	☐
20. Gözlerinizde ağrı ya da yanma hissettiniz mi?	☐	☐	☐
21. Hazımsızlık yaşadınız mı?	☐	☐	☐
22. Titreme ve sarsıntı hissettiniz mi?	☐	☐	☐
23. Daha sık idrara çıktığınız oldu mu?	☐	☐	☐
24. Belinizden sorununuz oldu mu?	☐	☐	☐
25. Karnınızda şişkinlik ya da kabarma hissi oldu mu?	☐	☐	☐
26. Başınızda ağırlık hissi oldu mu?	☐	☐	☐
27. Çalışmadığınız zamanlarda bile yorgunluk hissettiniz mi?	☐	☐	☐
28. Bacaklarınızda ağrı hissettiğiniz oldu mu?	☐	☐	☐
29. Midenizde rahatsızlık (bulantı) hissettiniz mi?	☐	☐	☐
30. Kafanızın içinde sanki patlayacakmışçasına bir basınç hissine kapıldınız mı?	☐	☐	☐
31. Dinlenirken bile solunum güçlüğünüz oldu mu?	☐	☐	☐
32. Bedeninizin her yerinde karıncalanma (iğnelenme) hissettiniz mi?	☐	☐	☐
33. Kabızlıktan rahatsız oldunuz mu?	☐	☐	☐
34. Her zamankinden daha sık barsaklarınızı boşaltmak (tuvalete gitmek) istediğiniz oldu mu?	☐	☐	☐
35. Avuçlarınızda çok terleme oldu mu?	☐	☐	☐
36. Boğazınızda sanki bir yumru varmış gibi yutma güçlüğü yaşadınız mı?	☐	☐	☐
37. Baş dönmesi ya da sersemleme hissi oldu mu?	☐	☐	☐
38. Ağzınızda acı bir tat hissi oldu mu?	☐	☐	☐
39. Tüm bedeninizde ağırlık hissi oldu mu?	☐	☐	☐
40. İdrar yaparken yanma hissi oldu mu?	☐	☐	☐
41. Kulaklarızda ya da kafanızın içinde bir uğultu işittiniz mi?	☐	☐	☐
42. Kalbinizde zayıflık ya da batma hissi oldu mu?	☐	☐	☐
43. Aşırı gaz ya da geğirme hissi oldu mu?	☐	☐	☐
44. Ellerinizde ya da ayaklarınızda soğukluk hissettiniz mi?	☐	☐	☐