

Clinical Characteristics of Malingering Among Arrested and Convicted Male Cases That are Sent For Treatment



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SUMMARY

Objective: The purpose of this study is to investigate the predictive variables of malingering among arrested/convicted cases as well as the clinical characteristics of malingerers.

Method: This study includes 70 arrested /convicted male cases internalized for treatment. A form to collect clinical or sociodemographic data, Structured Clinical Interview for DSM-IV Disorders (SCID I), Structured Clinical Interview for DSM-III-R (SCID II), Symptom Check-list (SCL-90-R), and Rey Memory Test (RMT) are applied. Two independent psychiatrists, who were not a part of the study, diagnosed malingering.

Results: Arrested cases reported mostly psychotic like symptoms, while convicted cases reported mostly depression like symptoms. RMT is helpful in regards to malingering, and SCL-90-R psychotic symptom and paranoid symptom subscale scores were both correlated negatively when compared to the RMT scores by malingerers. Axis-I or Axis-II diagnosis were found to be more predictive than other clinical variables in determining malingering.

Conclusion: This study indicates that clinicians have to consider malingering in regards to arrested and convicted cases applied for treatment, and they must perform the differential diagnosis with care. Large sample studies conducted with arrested and convicted cases, as well as surveys of grouping cases according to expertise and treatment services, may provide additional data related to malingering.

Keywords: Prisoners, Malingering, Mental Disorders.

INTRODUCTION

Malingering (simulation) can be defined as any person who consults a physician, or who is referred to a physician, while pretending to be sick even if he or she is not sick, or that person exaggerates their existing disease symptoms on a deliberate basis because of external stimuli such as being relieved of any obligations or responsibilities, avoiding punishment, or achieving drugs (Mason et al. 2013, DSM-IV TR). People more frequently engage in the simulation of mental illnesses, since the subjective complaints of bodily complaints are also accompanied by objective symptoms (Soysal 2007). The most

simulated psychiatric states are mental retardation, dementia or cognitive disorder, amnesia, psychosis with delusions, depression, and post-traumatic stress disorder (Rogers et al. 2014, Mills and Lipian 2007, Singh et al. 2007, Cekirdek 2003). Collection of data from various fields (military service, business life, social relations, previous medical records, criminal records, etc.) about the person allows one to reveal the exaggerative symptoms considered to be inconsistent with the story of the relevant person, and to establish a final diagnosis (Easton and Akerhurst 2011, Malone and Lange 2007).

It has also been stated by various researchers that malingering behavior, frequently encountered at forensic psychiatry

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clinics, is related to the personality pattern of the offenders, in particular, to antisocial personality structure (Edens et al. 2007, Palermo et al. 1996, Gacono et al. 1995). As a result of the studies carried out on the prisoners, it was discovered that the rate of malingering was 32-66.5% (Mc Dermott and Sokolov 2009, James and Glaze 2006, Rogers et al. 1998, Pollock et al. 1997, Walters et al. 1988). Walters (2006) has indicated seven reasons that are an incentive for malingering, which are as follows: indemnity and pay back, postponement of execution, the desire to stay alone, change of location, obtaining of priority, attention getting, and entertainment. Resnick (2008) has stated that the strongest reason is the request of the prisoners to spend their time at psychiatry clinics, which are more comfortable.

METHOD

This study was conducted at a medical service, which is connected to the forensic psychiatry unit of the Bakirkoy Mazhar Osman Training and Research Hospital for Psychiatric and Neurological Diseases. The external security is provided by gendarmerie and the internal security was provided by the guardians of the penal institution. Furthermore, the medical service has 42 beds for males and 8 beds for females, and is where the services for observation, treatment, and compulsory treatment of the arrested and convicted cases are provided.

After receiving consent on the 5th June of 2012 from the local ethic committee of the hospital, 100 male cases, who were admitted consecutively to the service for the arrested and convicted persons for treatment purposes, were offered to participate in the study. The persons who are younger than 18 and older than 65, who had clear mental retardation, who cannot comply with the tests, and who had no education at the primary school level were not admitted to the study. 10 cases (10%), 13 (13%) cases, 4 (4%) cases, and 3 (3%) cases were not included in the study as they did not consent to participate in the study; furthermore, they were not primary school graduates, they did not comply with the tests, and they were considered unfavorable in terms of their general medical status, respectively. A total of 70 cases were informed about the study, and were included in the study upon receipt of their informed consent. The diagnosis "malingering" was established after both cases were assessed by two clinicians, who were independent from the study.

Instruments

A questionnaire with 55 items formed by the authors containing sociodemographic data, crime properties, data in relation to prison experiences, and psychiatric story, as well as the Structured Clinical Interview for DSM-IV TR Axis-I Disorders (SCID I) (Ozkurkcugil et al. 1999), Structured Clinical Interview for DSM-III-R Personality Disorders

(SCID II) (Sorias et al. 1990), Rey Memory Test (RBT) (Jelicic et al. 2011, Reznick 2005), and Symptom Screening Test (SCL-90-R) (Dag 1991) were used.

Structured Clinical Interview for DSM-IV Axis-I Disorders (SCID-I):

It is a clinical assessment form applied by the interviewer in examining the existence of psychiatric disorders on Axis-I, which is adapted to the DSM-IV by First et al. The questions are intended to determine that the diagnostic groups are addressed to the patient during the clinical interview. The applying interviewer should be qualified in psychopathology. The validity and reliability of its Turkish version have been performed by Ozkurkcugil et al. (1999).

Structured Clinical Interview for DSM-III-R (SCID II):

It is a questionnaire prepared in accordance with the diagnostic criteria for the personality disorders included in the DSM-III-R classification system. The final diagnosis will not be established based on the responses provided, but rather through the assessment made by the clinician after the interview. The validity and reliability of its Turkish version have been performed by Sorias et al. (1990). It is a scale that enables a fast and structured assessment of the existence of personality disorders, which is frequently used in research and clinical interviews.

Symptom Checklist (SCL-90-R): It is a scale developed by Derogatis et al. to determine the level of psychological symptoms of individuals, and to which areas they spread into, wherein the validity and reliability have been proven in various patient groups. SCL-90-R is used as a reliable and valid scale in psychopathology surveys conducted in our country. The scale has been structured so as to conduct assessment on 9 different sub-tests with 90 items consisting of psychiatric symptoms and complaints. These sub-tests include somatization, obsessive-compulsive symptoms, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation, psychoticism, and a category of additional items. For each item contained in the SCL-90-R, one of the following options is checked: "never (0)", "rarely (1)", "sometimes (2)", "often (3)", and "very often (4)". The rating ranges between 0 and 4 for each item. Furthermore, the sub-scale ratings may range between 0.00 and 4.00. The best index of SCL-90-R scale in assessing the psychopathology is the general symptom level (Global Symptom Index - GSI). A GSI lower than 1.00 indicates that the symptoms are not qualified as psychopathological, while a GSI higher than 1.00 indicates a psychopathological case (Dag 1991, Aydemir and Koroglu 2009).

Rey Memory Test (RMT): It was designed by Rey in 1964 in order to identify simulative amnesia. It is a short and easily applicable test. Lezak (1983) has suggested that a score of 9 should be considered as a breakpoint (Soysal 2012, Cekirdek 2003, Simon 1994).

Statistical Method

Mean value, standard deviation value, and percent value were presented as descriptive statistics. The chi-square test and the calculation of Fisher exact p-value were performed to compare the distribution of the categorical properties with each other. During the comparison of the means of the quantitative properties with normal distribution between the two groups, Student's t-test for the independent groups was used. The relation of the quantitative and score-type properties was analyzed with the Spearman's Correlation Coefficient. Roc Analysis was carried out in order to demonstrate the cutpoint of the scale scores and the diagnostic criteria thereof. For multivariate analyses with the result variable with binary features, Binary Multiple Logistic Regression Analysis was used. SPSS 15,0 program was used for the analyses. The significance was accepted as <0.05 for all tests.

RESULTS

Malingers (M) were $n=31$ (44.3%) persons and non-malingers (NonM) were $n=39$ (55.7%) persons. No significant difference was identified in terms of the sociodemographic data such as age, educational status, military service, residence, and working experience of the cases included in the study.

When the groups were reviewed in terms of crime properties, 6.5% of the cases in group M committed consanguineous crime, while this rate in the other group was identified as 25.6%. When the target of crime was compared in both groups, a statistically significant difference was identified ($p=0.034$). When the cases were reviewed in terms of the form of crime, 48.4% of the cases in the group M and 25.6% of the cases in the group NonM committed the alleged crime with a group. When the groups were compared accordingly, statistical significance was identified ($p=0.049$). 35.5% of group M and 17.9% of group NonM had committed 10 or more crimes. When the groups were compared in terms of crime numbers, no statistically significant difference was identified between them ($p>0.05$). When the duration of lifelong imprisonment of all the cases was considered, it was identified that those with a prison experience of 10 years or more corresponded to 29.0% in group M and 5.1% in the second group. Based on these findings a statistically significant difference was identified between the two groups in terms of total imprisonment time ($p=0.009$) (Table 1).

When the cases were reviewed in terms of their judicial statuses, 54.8% of the cases in group M and 66.7% of the cases in group NonM were under arrest. The lawsuits of 19.4% in group M and of 28.2% in the other group were still in the preliminary phase. No statistically significant difference was identified between the two groups in terms of their judicial statuses and lawsuit processes ($p>0.05$).

Table 1. Crime properties of the cases based on the groups

	n	M (%)	NonM (%)	p
Type of crime¹				
Violent	25	(80.6%)	32 (82.1%)	0.88
Non-violent	6	(19.4%)	7 (17.9%)	
Target of crime¹				
Consanguineous	2	(6.5%)	10 (25.6%)	0.034*
Non-consanguineous	29	(93.5%)	29 (74.4%)	
Fashion of crime¹				
Alone	16	(51.6%)	29 (74.4%)	0.049*
In group	15	(48.4%)	10 (25.6%)	
The number of crime¹				
between 1-10	20	(64.5%)	32 (82.1%)	0.10
10 and more	11	(35.5%)	7 (17.9%)	
Lifelong jail time²				
less than 10 years	22	(71.0%)	37 (94.9%)	0.009**
10 years and more	9	(29.0%)	2 (5.1%)	

M: Malingers, NonM: Non-Malingers

*: Statistically significant ($p<0.05$). **: Statistically highly significant ($p<0.01$).

¹: Chi-Square test, ²: Fisher final p calculation was applied.

Cases included in the study are also assessed in terms of factors related to prison experiences. It was identified that the prison was in a city far away from their kinsmen in 48.4% of the cases in group M and in 20.5% of the cases in group NonM. It was determined that such a difference between the groups was statistically significant ($p=0.014$) (Table 2). 45.2% of group M and 23.1% of the second group received letters on regular basis. When both groups were compared in terms of receiving letters regularly, the result obtained on a statistical basis was nearly significant ($p=0.051$) (Table 2). Through the assessment of the cases, it has been observed that 71.0% of group M and 38.5% of the other group requested to be permitted to return to the prison, or to be transferred to the rehabilitation (R) type of prisons. A high level of statistically significant difference was identified between the groups in terms of presence of requests ($p=0.007$) (Table 2).

When the indications for hospitalization of the cases were reviewed, it was identified that the hospitalization process in both groups was performed mostly due to suicidal ideation, and that 32.3% of group M and 17.9% of group NonM were hospitalized due to suicide attempt. Also, it was discovered that the hospitalization, which was performed due to the differential diagnosis, was 25.8% in the first group while it was 15.4% in the second group. It was observed that the rates of hospitalization of group M due to suicide attempt and differential diagnosis were higher than the other group; however, no statistical analysis could be applied due to inconsistency of the distribution.

When the cases were reviewed in terms of their previous psychiatric stories, it was identified that the rate of presence of multiple suicide attempts (48.4%) in the first group and the rate of the absence of suicide attempts (53.8%) in the second group were higher. It was found out that the rate of use of

Table 2. Factors in relation to the prison conditions

	M		NonM		p
	n	(%)	n	(%)	
Current prison					
In the same city with their kinsmen	16	(51.6%)	31	(79.5%)	0.014*
Away from their kinsmen	15	(48.4%)	8	(20.5%)	
The persons they are living with					
Alone	10	(32.3%)	8	(20.5%)	0.26
With others	21	(67.7%)	31	(79.5%)	
Subject to disciplinary action					
Yes	11	(35.5%)	8	(20.5%)	0.16
No	20	(64.5%)	31	(79.5%)	
Frequent visitor					
Yes	15	(48.4%)	22	(56.4%)	0.50
No	16	(51.6%)	17	(43.6%)	
Frequent letter					
Yes	14	(45.2%)	9	(23.1%)	0.051
No	17	(54.8%)	30	(76.9%)	
Frequent telephone call					
Yes	15	(48.4%)	25	(64.1%)	0.19
No	16	(51.6%)	14	(35.9%)	
Request					
Yes	22	(71.0%)	15	(38.5%)	0.007**
No	9	(29.0%)	24	(61.5%)	

M: Malingers, NonM: Non-Malingers

*: Statistically significant ($p < 0.05$). **: Statistically highly significant ($p < 0.01$). Chi-Square test was applied.

psychoactive substance before prison was 80.6% in group M, while this rate was 53.8% in group NonM. Furthermore, it was identified that the difference between such rates was statistically significant ($p = 0.019$). When the cases with contact to psychiatry preceding prison were compared, it was identified that 53.3% of the cases in group M were diagnosed with a psychiatric disorder due to use of alcohol and substance, and that 87.5% of the cases in group NonM were diagnosed with a psychiatric disorder due to any reasons other than use of alcohol and substance. When both groups were compared in terms of the diagnoses established before prison, statistical significance was identified ($p = 0.023$) (Table 3). When the cases were compared in terms of Axis-I diagnoses during the application, it was identified that 19.4% of the cases in group M were diagnosed with the Axis-I, while such a rate in group NonM was 89.7%. It was found out that such a difference between the groups was statistically highly significant ($p < 0.001$). 77.4% of M and 30.8% of the second group had a diagnosis with the Axis-II. When both groups were compared in terms of the presence of Axis-II diagnosis based on such findings, highly statistically significance was identified ($p < 0.001$) (Table 3).

When the range of diagnosis of the cases was reviewed, it was observed that 80.6% of the cases in group M were not diagnosed with the Axis-I, while 64.5% thereof were diagnosed with Antisocial Personality Disorder in the Axis-II. It was identified that 38.5% of the cases in the NonM had adjustment disorder, while 30.8% had a psychotic disorder.

Table 3. Previous psychiatric stories and diagnoses of the cases based on the groups

	M		NonM		P
	n	(%)	n	(%)	
Previous suicide attempt¹					
No	13	(41.9%)	21	(53.8%)	0.06
1 time	3	(9.7%)	9	(23.1%)	
more than 1 time	15	(48.4%)			
Use of psychoactive substance¹					
Yes	25	(80.6%)	21	(53.8%)	0.019*
No	6	(19.4%)	18	(46.2%)	
Application before prison¹					
Yes	15	(48.4%)	16	(41.0%)	0.54
No	16	(51.6%)	23	(59.0%)	
Diagnoses before prison²					
Psychiatric disorders associated with the use of alcohol and substance	8	(53.3%)	2	(12.5%)	0.023*
Other psychiatric disorders	7	(46.7%)	14	(87.5%)	
Axis-I diagnosis during the application¹					
Yes	6	(19.4%)	35	(89.7%)	<0.001***
No	25	(80.6%)	4	(10.3%)	
Axis-II diagnosis during the application¹					
Yes	24	(77.4%)	12	(30.8%)	<0.001***
No	7	(22.6%)	27	(69.2%)	

M: Malingers, NonM: Non-Malingers

*: Statistically significant ($p < 0.05$) ***: Statistically very highly significant ($p < 0.001$) ¹: Chi-Square test, ²: Fisher exact p-value calculation was applied.

When the complaints and the comments of the cases regarding their diseases were questioned, 67.7% of group M stated that their complaints were related to the prison conditions while 43.6% of group NonM associated their complaints with the prison conditions. When both groups were compared, it was discovered that this difference was statistically significant ($p=0,044$).

When the range of symptoms of mental illnesses was reviewed, it was observed that the symptoms of psychotic disorder were simulated at a rate of 35.5%, at the most, and that depression symptoms were simulated at a rate of 22.6% while the symptoms of adjustment disorder were simulated at a rate of 12.9%. 52.9% of the arrested cases preferred to simulate the symptoms of psychotic disorder, while 42.9% of the convicted cases preferred to simulate the symptoms of depression.

When the score of the Rey Memory Test was reviewed, it was identified that the average of the cases in group M was 10.71 ± 4.43 , and that the average of the cases in group NonM was 13.33 ± 2.22 . When the groups were compared in terms of the scores of Rey Memory Test, a high level of statistically significant difference was identified ($p=0.004$) (Table 4).

It was identified that GSI, which was the general average score of the SCL-90-R scale, was at the level of 0.85 ± 0.61 for group M, while it was at the level of 0.61 ± 0.41 for group NonM. When the groups were compared in terms of GSI scores, no statistically significant difference was identified ($p>0.05$). In respect to the cases in group M and group NonM, as a consequence of the score and analysis of Rey Memory Test through the subscale of SCL-90-R, it was observed that the score of Rey Memory Test and the score of psychotic and paranoid symptoms of SCL-90-R showed reverse significance in group

Table 4. Scale scores of the cases based on the groups

	Group	N	Mean	Standard Deviation	p
RMT Score	M	31	10.71	4.43	0.004*
	NonM	39	13.33	2.22	
SCL-90-R GSI	M	31	0.85	0.61	0.06
	NonM	39	0.61	0.41	

M: Malingers, NonM: Non-Malingers, RMT: Rey Memory Test, SCL-90-R: Symptom Checklist, GSI: Global Symptom Index

*: Statistically highly significant ($p<0,01$). Student's t-test was applied.

Table 5. The correlation of SCL-90-R sub-scale scores of both groups through the RMT scores

		Psychotic symptom		Paranoid symptom	
		M	NonM	M	NonM
RMT	rs	- 0.421*	0.108	- 0.465**	0.182
	p	0.018	0.513	0.008	0.268
	n	31	39	31	39

M: Malingers, NonM: Non-Malingers, RMT: Rey Memory Test

Spearman correlation coefficient was applied.

*: Statistically significant ($p<0,05$). **: Statistically highly significant ($p<0,01$)

M, and that no such kind of significance was identified in group NonM. The more the scores of Rey Memory Test decreased in group M, the more the scores of psychotic and paranoid symptoms increased. No significance was identified in the other subscales of the SCL-90-R scale. (Table 5).

Different regression models were established due to the fact that Axis-I and Axis-II variables affected each other significantly. In the first model, where the Axis-I was not available, the Axis-II was the basic variable in identification of the

Table 6. Regression Models

Logistic Regression Model 1 of the Variables Which May Affect the Existence of Malingering

	B	S.E.	P	OR	Confidence Interval
Are there any requests?	0.376	0.300	0.210	1.457	0.809-2.624
Use of substance before prison	0.308	0.326	0.345	1.360	0.718-2.577
Total jail time	0.448	0.476	0.346	1.565	0.616-3.977
Disciplinary action	-0.463	0.397	0.243	0.630	0.289-1.369
Current prison	0.365	0.356	0.304	1.441	0.718-2.892
Was s/he diagnosed with Axis-II?	0.823	0.342	0.016*	2.276	1.165-4.449

$X^2 = 22.489$; df:6; $p=0.001$ **. * ($p<0.05$). ** ($p<0.001$). Total correct classification percent 72.9%

Logistic Regression Model 2 of the Variables Which May Affect the Existence of Malingering

	B	S.E.	p	OR	Confidence Interval
Are there any requests?	0.897	0.474	0.058	2.453	0.969-6.208
Use of substance before prison	0.190	0.452	0.674	1.209	0.499-2.931
Total jail time	0.200	0.631	0.752	1.221	0.354-4.209
Disciplinary action	-1.079	0.563	0.055	0.340	0.113-1.026
Current prison	0.904	0.460	0.049*	2.468	1.002-6.083
Was s/he diagnosed with Axis-I?	-2.370	0.543	<0.001**	0.093	0.032-0.271

$X^2 = 53.178$; df:6 $p<0.001$ **. * ($p<0.05$). ** ($p<0.001$). Total correct classification percent 91,4%

simulation (Table 6). In the model, where only Axis-I diagnosis was available, it was discovered that the variable of the location of penal institution was significant in identification of malingering behaviors (Table 6). By this model, including both Axis I and Axis II together, the values were as $X^2 = 54.2423$; $df:7$ $p=0.001$ and the total correctly classifying percentage of the model was found to be 91.4% ($p<0.001$). It is confirmed that the possibility of the presence of the Axis I diagnosis reduced the presence of malingering -2.283 fold, and the Axis II diagnosis was not found significant. However, the regression model without Axis I and Axis-II variables was also significant ($X^2 = 16.363$, $df: 5$ $p = 0.006$). Total correctly classifying percentage of the model (68.6%; $p<0,01$) in terms of malingering other variables was not statistically predictive ($p>0.05$). In conclusion, it was specified that the Axis-I variable excluded malingering behavior, the Axis-II variable accompanied the cases exhibiting malingering behaviors, and the other variables alone were not significant in terms of identifying malingering behavior.

DISCUSSION

In this study, those in group M constituted 44.3% of cases. In literature, it is possible to find studies where the frequency of malingering behavior among the prisoners has been reported to be 32%, 46% respectively (Pollock et. al. 1997, Walters et al. 1988). At a study, conducted by McDermott and Sokolov (2009) at a prison in Sacramento, it was identified that 66% of the prisoners simulated in having a psychiatric disease. In literature, it has been reported that cases with mental disorders mostly commit consanguineous crimes (Shaw et al. 2006, Nielsson et al. 2007, Belli et al. 2010). In a study conducted at our hospital, the target group of the crime was analyzed, and it was observed that psychotic patients targeted the family members at a rate of 3 times more than those in the control group (Ural et al. 2012). Considering the crime properties among our cases, it was also identified at a statistically significant level that the cases in group M committed a lesser number of consanguineous crimes. This finding complies with literature.

It is known that cases with mental disorders commit fewer organized crimes as well as crimes committed together with a group. Via an established study, it has been confirmed that 98% of the patients, without criminal responsibility due to mental disease, committed crimes alone (Resnick 1999, Thompson et al. 1992, Turkcan et al. 2000). At another study, it was observed that only 5% of the schizophrenic patients committed a group crime (Robertson 1988). The results of our study were found to comply with literature.

When the duration of lifelong imprisonment of all cases was assessed in our study, it was discovered that an imprisonment time of ten years or more was significantly high in group M.

It has been stated that the psychiatric diseases most often associated with the increasing number of entries into prison are Antisocial Personality Disorder and alcohol and substance abuse disorders (Kokkevi et al. 1993).

Considering the high level of Antisocial Personality Disorder in group M, this result can be clarified by the criminal behaviors of the recurring antisocial persons since they were few, as well as by the presence of prison experiences (Yetkin ve Battal 2007). When the cases included in the study were assessed regarding the factors affecting prison experiences, it was discovered that the kinsmen of 48% of the cases in group M live in a city far away from the prisons, and that such a rate was significantly higher than the other group on a statistical basis. In literature, there is not any available information in relation thereto; however, the impression that the cases in group M preferred to be imprisoned in a location near their kinsmen was established.

As a consequence of a study carried out on prisoners, it was identified that the possibilities of suicide for the individuals, who did not contact with their families, were higher than those who contacted with their families (Lekka et al. 2006). In the event that such findings and observations are interpreted together with the information about the fact that suicide attempt or suicide ideation is highly used for simulative purposes, as obtained from our study, it can be deduced that the possibility of taking advantage of contacting families may be a strong malingering motivation for the prisoners.

Another property of the cases in group M was that they received letters on a regular basis at a high level which was nearly significant in comparison to the other group. This situation was considered to be probably associated with the fact that antisocial individuals changed their prisons very frequently due to their adjustment problems, and that they contacted with their friends and kinsmen by means of letters.

When the complaints and comments of the cases about their diseases were asked, 67.7% of group M expressed that their complaints were related to the prison conditions; furthermore, it was identified that this comment was significantly higher than those in group NonM.

As it was stated in our study, group M was also significantly more demanding. Considering the content of their requests, most of the cases in group M requested not to return to their prisons, or to be transferred to rehabilitation (R) type prisons. Based on our information that was previously obtained, this situation made us think that the prisoners malingered for the purpose of ensuring a secondary gain such as spending their times at a place, which is supervised less often than the prison, and which is more comfortable than the prison, and where their personal needs could be satisfied more easily (Mason et al. 2013, Resnick 2008).

As a consequence of our study, it was determined that arrested or convicted status made no difference in terms of malingering frequency. In literature, there is no study comparing and reviewing the arrested and convicted cases in group M.

Mills and Lipian (2007) state that the most frequently simulated psychiatric cases are mental retardation, organic disorders, amnesia, psychotic disorder, as well as depression and post-traumatic stress disorder.

As a result of our study, it was also observed that the psychotic disorder took place on the top (35.5%), and that depression was ranked second (22.6%). In our study, it was determined that 52.9% of the arrested cases preferred to simulate psychotic disorder while 42.9% of the convicted cases preferred to simulate depression. This situation appears to comply with the information prescribed in the literature (Palermo et al. 1996). It is an understandable situation for the arrested cases to simulate psychotic disorder symptoms, which are of the nature to completely cancel the penal responsibility, in order to escape from the penal responsibility. It is possible for the convicted cases to prefer to simulate depression symptoms as they can more easily simulate such symptoms due to expectations ranging from staying in a more comfortable environment, replacing or moving away from the prison, reaching the psychotropic substances, being close to their families, or drawing the attention thereof, which are out of the judicial process, as well as due to the unhappiness resulting from being imprisoned.

Under our study, Axis-I diagnosis and Axis-II diagnosis of the cases during the application were analyzed, and it was observed that 80.6% of the cases in group M had no Axis-I diagnosis during the application, and that 64.5% thereof met the criteria for Antisocial Personality Disorder in the Axis-II assessment.

As a result of our study, the cases in group M were diagnosed with a significantly higher Axis-II diagnosis. Antisocial Personality Disorder was ranked first among the Axis-II diagnoses. It has been stated under the previous studies that malingering behavior is mostly associated with Antisocial Personality Disorder (Mason et al. 2013, Mills and Lipian 2007, Soysal 2007). Delain et al. (2003) suggest under their studies that the persons, who say that they don't remember the time of the crime during their defenses, and who simulate the amnesia, are mostly antisocial persons.

Under our study, the diagnoses established during their psychiatric applications of the cases before prison were also researched. The rate of disorders in relation to use of alcohol and substance in group M was higher than the other group, and a significant difference was also identified between the groups in terms of use of psychoactive substance before prison. In literature, it is stated that the combination of the use of substance and the Axis-II diagnosis is very high (Jahng et al. 2011). Considering that the vast majority of group M has Antisocial

Personality Disorder under our study, the fact that the use of alcohol and substance is high complies with literature.

By analyzing the hospitalization indications of the cases hospitalized for treatment purposes, it was observed that 67.8% of the cases in group M was hospitalized due to suicide ideation and attempt on the most frequent basis. In literature, it is stated that antisocial individuals more frequently attempt to commit suicide, however the number of completed suicides is lower among such individuals (Sommers-Flanagan and Sommers-Flanagan 2003). Considering that a vast majority of the cases in group M has Antisocial Personality Disorder under our study, the fact that hospitalization is performed most frequently due to suicide ideation and attempt complies with literature.

Considering that antisocial persons easily tell lies, and that they are prone to behaviors affecting the persons in their circles, this situation becomes usable for their benefit (Pompili et al. 2009). As a consequence of a thesis study conducted previously in the service for the arrested/convicted persons in our country, it was discovered that the cases hospitalized due to suicide ideation and attempt were diagnosed with "Simulation" at the rate of 21.5% (Sarp Topragin 2011). In compliance with such information, it was also observed under our study that the cases in group M frequently attempted to commit a manipulative suicide for the purpose of hospitalization thereof, or that they described a suicide ideation; and that thereby they achieved their objectives.

One of the tests used in order to assess simulative amnesia is RBT. Lezak (1983) has stated that 9 elements should be considered as a breakpoint during this test; accordingly, it was discovered that the rate of the cases with malingering was 85.7% under a study conducted on 23 forensic cases upon accepting the relevant value, and that 14.3% of the cases available in the patient group were accidentally diagnosed with the simulation (Simon 1994). As a consequence of such a study conducted upon obtaining the cutoff score, it was observed that false positive results may also be obtained. As a consequence of a thesis study conducted previously at our hospital, it was discovered that the average of the score of RBT of group M was significantly high (Cekirdek 2003). Under this study, it was identified that the average of the score of RBT of group M was 10.71 while the average of the other group was 13.33, and that the difference between them was greatly significantly low. As a consequence of ROC analysis, the sensitivity of the RBT was found to be 45.2%, while its specificity was identified as 84.6%; accordingly, it was observed that distinctiveness of the RBT in identification of malingering was low, although the rate of malingering among the cases distinguished was high. Today, the Structured Inventory of the Malingered Symptomatology (SIMS) and the Structured Interview of Reported Symptoms (SIRS) are among the tests used to identify malingering. Furthermore, Psychological

Assessment Inventory (PAI) (Morey 1991), the Assessment of Depression Inventory (ADI) (Mogge and LePage 2004), and many more tests have been developed and used; however, no study on their validity and reliability in Turkey has been carried out other than Miller Forensic Assessment of Symptoms Test (M-FAST) (Miller 2005, Keyvan et al. 2015).

Our study was intended to identify which symptoms were most often simulated; therefore, SCL-90-R was utilized. As a consequence of correlation analysis, it was observed that a decrease of the scores of RBT in group M was significantly associated with the increase of SCL-90-R sub-scale scores for psychotic and paranoid symptoms. In literature, it is suggested that the simulation of positive psychotic symptoms is preferred due to the fact that they are easier to be simulated rather than negative symptoms or anxiety symptoms (McDermott and Sokolov 2009, Broughton and Chesterman 2001).

In respect to the model, where the variables other than the Axis-I and Axis-II diagnoses were assessed, none of them was considered to be significant in the identification of malingering. Under our study, this situation demonstrated that the factors in relation to the prison experience or crime properties could not predict malingering alone. Establishment of diagnoses only upon the opinion of the clinician, due to the fact that there was no auxiliary diagnosis means, which we could utilize in order to diagnose the simulation during the conduct of study, in our country can be considered as a restriction.

Sociodemographic data and psychiatric disease stories were obtained from the cases under the study. The medical records of some cases, who previously applied to our hospital, were reviewed; however the stories of the cases, who did not apply to our hospital, were obtained exclusively from the cases. Exclusion of the patients' relatives from the study, and failure in the obtainment of their sufficient medical, and criminal records are restrictions of the study.

Conclusion and Suggestions

This study indicates that clinicians have to take malingering behaviors into account especially by arrested and convicted cases who applied for treatment, and that they have to be careful in performing the differential diagnosis. As a result of our study, no significance other than the diseases simulated by the arrested and convicted cases was identified; however, any additional distinctive data between the two groups may be obtained during studies to be conducted with more extensive sampling. Any data, which are of a different nature, can be obtained through the studies, in which the cases are grouped based on the expertise and therapy services.

Any data in relation to the epidemiology of malingering in the prisons in our country can be provided through the multi-center studies to be supported and conducted by using the commonly used scales made available in our language.

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