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Treatment Lag on the Way to the Mental Health Clinic Among Arab- and Jewish-Israeli Patients

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Abstract: Background: The early recognition and timely treatment of psychiatric disorders helps reduce suffering, prevents mental disabilities and makes interventions more cost-effective. *Objective*: To examine treatment lag among Arab- and Jewish-Israelis applying to psychiatric clinics for the first time, and the association of this lag with selected socio-demographic and mental health-related variables. *Methods*: 251 adult outpatients making their first-ever visit to a psychiatric clinic completed a self-administered questionnaire, including questions on the time elapsed since the onset of the current disorder, reasons for the treatment lag, source of referral, main complaints, current psychiatric problems (self-diagnosis), attitudes to psychiatric disorders and treatment, pathways to care, and standard socio-demographic information. Univariate and multivariate analyses were performed to compare Arab- and Jewish-Israelis on parameters of interest. *Results*: Compared with their Jewish counterparts, Arab-Israeli patients showed a two-fold delay in initial treatment contact (χ^2=4.00, df=1, $p < 0.05$). Logistic regression analysis showed that this delay was associated with lower schooling, other-than-psychiatric attribution of mental symptoms, and a more pessimistic attitude to the successful treatment of mental disorders in general and for oneself in particular. *Conclusions*: Since longer treatment delay was mostly associated with potentially modifiable knowledge and attitudes on mental disorders and treatment, educational programs targeting specific community sectors and community agents should be promoted to shorten this lag.

Introduction

Studies indicate that the early recognition and timely treatment of common psychiatric disorders help reduce suffering, prevent mental disabilities and make interventions more cost-effective (1, 2). The adverse effects of treatment lag have been equally documented: people who leave a disorder untreated tend to have a poorer outcome in the short- and long-term (3–6). Despite this, there is often a considerable time lag between the onset of psychiatric disorder and help-seeking (7–10), and many people do not seek professional help at all (11–13).

A number of illness-related characteristics, as well as socio-cultural factors, have been identified as contributing to treatment delay: young age at onset of the disorder (14, 15); insidious onset (16); negative symptoms (17); low social class (18); the attitudes and belief systems prevalent in a society, including the stigmatization of mental illness (19–21) and poor psychosocial support (17, 22, 23).

Israel, a multiethnic society with substantial inter-ethnic and cultural differences among its sectors, provides a suitable ground for investigating the relationship between delay in treatment-seeking and cultural barriers to health care. The findings of such a study should leave mental health policy makers, care providers, and users and their families better informed for program planning.

The aims of this study were to examine the length of treatment lag among Arab- and Jewish-Israeli adult patients attending psychiatric clinics for the first time; and the association of selected socio-

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demographic and mental health-related variables with treatment lag.

Methods

Study design

At the center of the study was the first-ever visit by an adult to a psychiatric clinic. In the pilot stage we tested the reliability of 20 patients' self-report with regard to the onset of the current disorder against the information obtained at intake by a qualified clinician. The questionnaire used in this study was translated from Hebrew into Arabic and Russian, to match the patient's language of preference. The self-report questionnaire was administered to all consecutive clinic patients making a first-time visit between December 2001 and November 2002.

The clinics

Three psychiatric clinics participated. They were chosen from Israel's main geographical regions: north and south Galilee, including both urban and rural centers, and the central Dan region, with both urban and suburban population centers, including inner city and immigrant groups. The clinics were located in a psychiatric hospital, in a general hospital, and in a freestanding outpatient clinic. In the outpatient clinic serving predominantly Arab patients, the psychiatrist participating in the study was Arab by origin, while in the other two clinics the specialists were of Jewish origin. The Institutional Review Board for Human Studies approved the study protocol in each clinic.

The sample

Of a total of 354 apparently first-time attendees, only 251 fulfilled the inclusion criteria, 1) they were seeking help from a psychiatrist for mental health problems for the first time in their life, and 2) they gave written informed consent to their participation in the study. Of the 103 patients not enrolled, 87 were not in fact first-time attendees and 16 refused to be interviewed. The latter did not differ from the participants by age and gender distribution. The sample was divided by ethnic origin into an Arab (n=75) and a Jewish (n=176) sub-sample. The former subgroup comprised of 98% Muslim Arabs and the latter included only 4% Russian-born Jewish immigrants. All comparisons were performed between these two subgroups.

Procedure

During the intake interview, and once informed consent had been given, all patients aged 21–65 seeking care for any mental health problem answered a questionnaire that took 25 minutes to complete. The intake clinician made a psychiatric diagnosis on ICD-10 criteria, which was recorded on a separate form. To assure confidentiality, the clinician erased the patient's name from both coded forms. A separate notebook kept by the clinic investigator recorded both the patient's name and code for any future reference.

The instrument

The 36-item questionnaire included items on the time elapsed between the onset of the presenting symptom(s) and the current clinic visit; source of referral; reasons for the treatment lag; main complaints of mental health; current psychiatric problems (self-diagnosis); attitudes to psychiatric disorders and treatment; pathways to care; and standard socio-demographic information.

Data analysis

All analyses were performed using the SPSS-14.0 software package. Chi-square statistics were employed to test the significance of differences in proportions. Two-tailed *t*-tests and Mann-Whitney two-sample (non-matched) tests were used to check for the significance of differences in means and standard deviations (SD). In addition, logistic regression analysis was performed to assess the contribution of Arab/Jewish-Israeli affiliation, controlling for selected variables, which differed significantly between the groups at the bivariate level. Significance in the logistic regression was assessed using the Wald statistical model. Hosmer and Lemeshow's goodness-of-fit (GOF) tests were used to examine the degree of fitness of the models (24). For all analyses, the level of statistical significance was defined as an *alpha* less than 0.05.

Table 1. *Arab- and Jewish-Israeli Patients by Demographic Characteristics*

Characteristic	Arab-Israelis (n=75)	Jewish-Israelis (n=176)	Significance test
Gender (%)			
Male	45 (60.0)	101 (57.4)	χ^2=2.09, df=1, p=0.18
Female	30 (40.0)	75 (42.6)	
Age, mean±SD	35.8±11.1	37.3±13.3	$t_{1,222}$=0.64, p=0.52
Schooling, in years, (%)			
0–8	25 (39.1)	9 (5.3)	
9–12	37 (57.8)	115 (67.6)	χ^2=50.17, df=2, p<0.001
13+	2 (3.2)	46 (27.1)	
Mean±SD	9.5±2.2	12.4±2.6	t_{241}=8.08 p=0.001
Marital status (%)			
Single/divorced/widowed	26 (37.1)	100 (57.1)	
Married	44 (62.9)	75 (42.9)	χ^2=8.01, df=1, p<0.005
Employment (%)			
Full time	5 (6.7)	59 (33.7)	
Part time	10 (13.3)	34 (19.4)	χ^2=56.94, df=3, p<0.001
Unemployed	42 (56.0)	49 (28.0)	
Other (student, housewife, etc.)	18 (24.0)	33 (18.9)	
Religious observance			
Religious	71 (94.7)	60 (34.1)	χ^2=80.65, df=1, p<0.001
Secular	4 (5.3)	116 (65.9)	
Diagnosis (ICD-10)			
Organic & substance use disorders	7 (11.9)	3 (3.8)	
Schizophrenia	4 (6.8)	4 (5.1)	
Mood disorders	2 (3.4)	20 (25.2)	
Stress-related disorders	35 (59.3)	41 (51.9)	
Personality disorders	11 (18.6)	11 (14.0)	

Results

Characteristics of the Arab- and Jewish-Israeli groups

The two groups differed on several socio-demographic variables. More of the Arab-Israelis were married (χ^2=8.01, df=1, p<0.005), they had less schooling (χ2=59.17, df=3, p<0.001), more were unemployed (χ^2=56.94, df=3, p<0.001) and were religious (χ^2=80.65, df=1, p<0.001). The groups did not differ by gender (χ2=0.38; df=1, p=0.70) or by mean age (t=0.64, p=0.52).

A substantially higher proportion of the Arab-Israeli group was diagnosed with organic/substance use and personality disorders, while the frequency of mood disorders was higher among Jewish-Israeli subjects (χ^2=20.26, df=4, p<0.01). No group differences were found in the diagnosis of schizophrenia and stress-related disorders.

Table 2. *Reasons for Treatment Delay, Pathway to Clinic Care, Source of Referral to Psychiatric Clinic and Current Psychiatric Problems*

	Arab-Israelis N=75	Jewish-Israelis N=176	z-value#
Reason for treatment lag^			
Lack of resources	24 (31.6)	17 (9.7)	4.30***
Other-than-psychiatric attribution	41 (53.9)	59 (33.7)	3.06**
Stigma	45 (59.2)	60 (34.3)	3.68***
First agent contacted			
Social network	6 (7.9)	62 (35.4)	4.51***
Family doctor, non-psychiatrist	35 (46.0)	37 (21.1)	4.01***
Mental health services	9 (11.8)	21 (12.0)	0.03
Social worker/NISI agent/ clerk/army physician	8 (10.5)	25 (14.3)	0.81
Source of referral			
Self-referral	7 (9.2)	50 (28.6)	3.36***
Family member/friend/neighbor/ employer/religious authority	9 (11.8)	33 (18.8)	1.37
Family doctor/non-psychiatrist	55 (72.4)	89 (50.8)	3.17**
Social worker/NISI agent/ police/court	6 (7.8)	5 (2.8)	1.79
Current psychiatric problems			
Mood disturbances	29 (38.1)	112 (64.0)	3.79***
Suicide ideation	38 (50.0)	70 (40.0)	1.47
Behavior problems	32 (42.1)	56 (32.0)	1.54
Emotional distress/unreasonable fears	52 (68.4)	157 (89.7)	4.15***
Alcohol/substance abuse	4 (5.3)	19 (10.8)	1.41

^ Subjects were allowed to give more than one reason
# Mann-Whitney two-sample (non-matched) test, two-tailed
* $p<0.05$; ** $p< 0.01$; *** $p< 0.001$

Treatment lag

The length of treatment lag in the total sample varied from 1.5 months to 37 years (mean=4.7 years, SD=6.7). The median number of years elapsed between onset of disorder and initial treatment visit to a mental health specialist was three years for the Arab-Israeli group, and half that (1.5 years) for the Jewish-Israelis (Yates' corrected $\chi^2=4.00$, df=1, $p<0.05$). No other study variable was associated with treatment lag.

Reasons given for treatment lag

The groups differed significantly with regard to the reasons given for the delay in treatment. Arab-Israelis reported more often than Jewish-Israelis the lack of instrumental resources (e.g., time, money) (31.6% vs. 9.7%; z-value=4.30, $p<0.001$) and gave an other-than-psychiatric attribution for the presenting problem (e.g., "my problem is non-psychiatric" or "the problem will resolve itself") (53.9% vs. 33.7%; z=3.06; $p<0.01$), as well as negative attitudes towards the treatment of mental disorders (e.g., negative advice from family, friends or a religious leader about seeking professional help, lack of confidence in psychiatry and the effectiveness of psychiatric medication) (59.2% vs.34.3%; z=3.68, $p<0.001$).

Table 3. *Arab-Israeli and Jewish-Israeli Patients by Attitudes to Aspects of the Treatment of Mental Disorders*

Attitude	Arab-Israelis	Jewish-Israelis	Significance test
Treatability of mental disorders	N=72	N=141	
All treatable	19 (26.4)	17 (12.1)	
Most treatable	31 (43.1)	100 (70.9)	χ^2=16.22, df=2, p<0.001
None treatable	22 (30.6)	24 (17.0)	
Treatability of one's own mental problem	N=74	N=166	
Quite treatable	24 (32.4)	103 (62.0)	
Partly treatable	13 (17.6)	31 (18.7)	χ^2=25.49, df=3, p<0.0001
Not treatable	10 (13.5)	10 (6.0)	
Not sure	27 (36.5)	22 (13.3)	
Type of treatment needed	N=74	N=169	
Only medication	7 (9.5)	16 (9.5)	
Only psychotherapy	13 (17.6)	47 (27.8)	
Medication and psychotherapy	16 (21.6)	63 (37.3)	χ^2=25.65, df=4, p<0.0001
Does not know	38 (51.4)	43 (25.4)	
Fear of medication	N=73	N=167	
Much	27 (37.0)	55 (33.0)	
Some	12 (16.4)	55 (32.9)	χ^2=12.82, df=3, p<.01
Not at all	18 (24.7)	43 (25.7)	
Not sure	16 (21.9)	14 (8.4)	
Reason for fear of medication*			
Habituation	43 (70.5)	71 (48.3)	χ^2=6.45, df=1, p<0.01
Mind control	11 (18.0)	35 (23.8)	χ^2=0.83, df=1, ns.
Adverse effects	14 (23.0)	53 (36.1)	χ^2=3.93, df=1, ns.
Other	7 (11.5)	20 (13.6)	χ^2=0.17, df=1, ns
Time required for treatment	N=74	N=150	
One week	2 (2.7)	3 (2.0)	
One month	3 (4.1)	9 (6.0)	χ^2=11.38, df=3, p<0.05
Six months and over	2 (2.7)	24 (16.0)	
Does not know	67 (90.5)	114 (76.0)	
Familiarity with someone in psychiatric care	N=73	N=167	
Yes	26 (35.6)	87 (52.1)	
No	38 (52.1)	66 (39.5)	χ^2=10.12, df=2, p<0.01
Not sure	9 (12.3)	14 (8.4)	

* Subjects allowed giving more than one reason

Help-seeking and referral sources

Arab-Israeli patients preferred to turn to family doctors or other non-psychiatric medical professionals (46%), while Jewish-Israeli patients more often sought help from members of their social network before consulting a psychiatrist (35.4%). Accordingly, among Arab-Israelis it was the family doctor/non-psychiatrist physician who more often

referred the subjects to the psychiatric clinic than was the case for the Jewish-Israeli group (72.4% vs. 50.8%, z-value=3.17, p<0.01), while the Jewish-Israelis had a higher frequency of self-referral (28.6% vs. 9.2%; z=3.36, p<0.001).

Current psychiatric problems

The groups did not significantly differ on frequency of self-reported alcohol/drug use, behavioral problems and suicidal ideation as a reason for attending the clinics. However, compared with the Jewish-Israeli patients, the Arab-Israelis reported mood disturbances (64% vs. 38.1%; z=3.79) and emotional distress (68.4% vs. 89.7%, z=4.15, both p<0.001) significantly less often.

Attitudes to treatment of mental disorders

The Jewish-Israeli group was significantly more optimistic with regard to the treatment of most mental disorders than its counterpart (70.9% vs. 43.1%; χ^2=16.22, p<0.001). They were also more positive as to the susceptibility to treatment of their own mental problem (62% vs. 32.4%; χ^2=25.49, p<0.001).

Type of treatment needed: We found significant group differences in views on the type of treatment needed. While Arab-Israeli patients more frequently expressed no preference (51.4% vs. 25.4%), the Jewish-Israeli patients preferred psychotherapy (27.8% vs. 17.6%) or a combination of psychotherapy and medication (37.3% vs. 21.6%; χ^2=25.65, df=3, p<0.001).

Fear of psychiatric medication: In general, the Jewish-Israeli patients reported significantly more fear of taking medication than the Arab-Israeli patients (χ^2=12.82, df=3, p<0.001). Among the specific reasons for such fear, Arab-Israelis more frequently than Jewish-Israelis cited the risk of habituation to the medication (49.2% vs. 30.6%; χ^2=6.45, df=1, p<0.01), while the Jews tended to be more afraid of adverse reactions to medication.

Time required for treatment: The majority of patients had no clue as to the time required to treat the presenting problem. The Arab-Israeli group thought more time was needed than the Jewish-Israelis (Arab, 90.5% vs. Jews, 76%; χ^2=11.38, df=3, p<0.05).

Knowing someone in psychiatric care: While 52.1% of the Jewish-Israeli patients reported knowing someone who had received psychiatric treatment, the same proportion of Arab-Israeli patients reported not knowing anybody who had (χ^2=12.82, df=3, p<0.01).

Multivariate analyses: A multivariate logistic regression analysis was conducted to control for confounding effects when studying group differences (Table 4). Only four of the 17 independent variables were found to be significantly associated with one ethnic group or the other. These were: schooling (goodness-of-fit [GOF]=43.97, Wald χ^2=25.61, df=1, p=0.001); treatment of mental disorders, both in general (GOF=15.89; Wald χ^2=12.31, df=2;p=0.002) and for oneself (GOF=30.59; Wald χ^2=20.51, df=3, p=0.001); and other-than-psychiatric attribution of mental symptoms (GOF=6.41; Wald χ^2=5.80, df=1, p=0.016). This model (adjusted R^2=0.42; likelihood ratio χ^2=84.93; df=7; p<0.001) was able to correctly classify 84% of the patients as belonging either to the Arab-Israeli or the Jewish-Israeli group.

Table 4. *Logistic Regression Model of Factors Associated with Ethnicity (dependent variable)*

Predictor variables	Goodness-of-fit	Wald χ^2	DF	P
Schooling years	43.97	25.61	1	0.001
Treatability of one's own mental problem	30.59	20.51	3	0.001
Treatability of mental disorders in general	15.89	12.31	2	0.002
Other-than-psychiatric attribution of mental symptoms	6.41	5.80	1	0.016

Adjusted R^2=0.42; Likelihood ratio χ^2=84.929; d.f.=7; p<0.001
Prediction success rate=0.84

Discussion

Compared to their Jewish-Israeli counterparts, Arab-Israeli patients showed a two-fold delay in their initial treatment contact. Many variables distinguished between the groups, and each of them, alone or in combination with others, could contribute to treatment delay. Logistic regression analysis showed that the relationship between treatment delay and a lower level of schooling, other-than-psychiatric attribution of mental symptoms, and more pessimistic attitudes to the treatment of mental disorders both in general and for oneself was mediated by ethnic affiliation (being Arab). Most of these factors can be addressed through mental health education programs (25).

Our findings suggest that the central link in this constellation of factors is lack of schooling, which leads to ignorance about mental disorders and treatment possibilities. The lack of such information easily gives rise to negative (stigmatizing) attitudes to people with mental disorders and to the likelihood of successful treatment. The longer delay for the Arab-Israeli group was related to their negative attitudes. Correspondingly, the shorter delay for the Jewish-Israeli group might be imputed to their more optimistic view on the treatability of mental disorders, and their expectation — correct or incorrect — as to the length of treatment.

Mulvany et al. (18) have shown that, whereas social class of origin does not seem to be an important risk factor for schizophrenia, it does partially determine patients getting treatment at a later age. Thus, the relation between low social class at birth and poor outcome may be at least partially mediated through treatment delay. In our study, low socioeconomic status (SES), to the extent that it is captured by socio-demographic characteristics, may have led those married and unemployed and with lower schooling level to delay seeking the social support of mental health treatment. This reason for delayed presentation for treatment, in combination with indications of lower SES, was found more frequently in the Arab than the Jewish sub-sample.

The stigmatization of psychiatric problems and the psychological barriers to seeking help for mental dysfunction or substance abuse are thought to be important determinants of the undertreatment of psychiatric disorders (20, 21, 26–28). Negative preconceptions may also result in non-compliance with beneficial psychiatric treatments, perceived as a sign of weakness and inability to cope with misfortune. This is particularly true in Arab culture, where emotional symptoms (fears, worries, low spirits) are attributed to weakness of personality or weakness of religious faith (29). In the present study, the Arab-Israeli patients cited stigma substantially more frequently than their Jewish counterparts as a reason for treatment delay. This finding could be explained by significant differences found between the study subsamples with regard to religions affiliation. As previous studies have shown, negative (stigmatizing) attitudes to mental disorders and treatment are expressed and mental health service utilization is lowered among religious communities (30, 31). These reasons fit also to explain lower psychotropic drug use among Arabs (28, 29) and, probably, other religious minorities in Israel (32, 33).

In other contexts, even health professionals have portrayed psychiatric treatment as cosmetic and indicative of a superficial life style. Other psychiatric practices, such as electroconvulsive therapy, involuntary hospitalization, the treatment of children with stimulants and suicide prevention, are also subject to stigma and, for some groups, constitute breaches of individual autonomy and freedom. In line with such attitudes to psychiatric treatment and practices, we found that the Arab-Israeli patients sought help for their mental problems more frequently than their Jewish counterparts from family doctors and non-psychiatric medical professionals. It is possible that presenting their problems first to general practitioners could prolong the time that elapses until their first psychiatric contact due to inadequate and time-consuming attempts to have their psychiatric problems treated by a non-specialist (34, 35).

The findings of previous studies that severity of disorder is associated with probability of treatment and shorter delay (8, 15, 36–38) were supported by the present study. In particular, we found that compared with their Jewish counterparts, fewer Arab attendees were diagnosed by a psychiatrist with a mood disorder and fewer Arab-Israelis self-reported mood disturbances or experienced emotional distress.

Although the Jewish attendees reported more often than Arab patients some fear of taking psychiatric medication, the groups gave different reasons for this fear: Jews were afraid of medication side-effects, while Arabs feared addiction. It is possible that having the same attitude to psychiatric medication as to illicit drugs may postpone treatment-seeking among the Arab group.

Previous studies on attitudes to mental disorders have shown that respondents who have had personal contact with a mentally ill person are more willing to interact with a person in psychiatric care (39, 40) and that the more the respondents are familiar with psychiatric treatment, the less stigmatization they display (41). Consistently with these studies, we found that Jews as a group, who more often acknowledged knowing someone who had received psychiatric treatment, also delayed seeking treatment less. It is plausible that their more frequent familiarity with someone in psychiatric treatment enabled them to form a more optimistic view of the successful treatment of mental disorders in general and their own mental problem in particular. In line with this positive thinking, the Jews gave more differential preferences with regard to the type of treatment needed in their particular case. Though both groups were uncertain about the treatment time their mental problem required, the Jews reported such uncertainty less frequently.

There are several limitations that need to be kept in mind in interpreting the results of the present study. The first is that attendees were asked to retrospectively recall and date the first onset of their disorder. Recall bias could overestimate treatment lag. However, this recall failure would be common for all participants and, hence, cannot explain the substantial between-group difference in treatment delay. We are uncertain whether our questions affected recall accuracy of the date of the first appearance of symptoms, but significantly smaller treatment delay has been found in this study than in previous surveys using other instruments (15, 25, 42). Secondly, a relatively small sample-size limited the number of variables we could examine in order to avoid multiple comparisons generating spurious findings. Third, both the small number of non-Muslims in the Arab subgroup and immigrants in the Jewish subgroup precluded comparisons of inter-religious and inter-cultural factor, which could potentially influence help-seeking patterns and treatment delay.

In conclusion, the longer treatment lag this study found was mostly associated with potentially modifiable knowledge and attitudes to mental disorders and treatment. Needed, therefore, are educational programs tailored to the different consumer sectors and the different community gatekeepers of access to psychiatric care, programs designed to raise confidence in the treatability of mental disorders and so shorten treatment lag. Further research into treatment delay and the factors associated with it, in a wider national framework, is also clearly warranted.

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