

Utilization Patterns of Ambulatory Psychiatric Services by Ethiopian Immigrants in Israel

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ABSTRACT

Background: Ethiopian immigrants in Israel (EI) have limited familiarity with Western psychiatric care and, reciprocally, their culture is hardly known by mental health professionals.

Objective: To compare utilization patterns of ambulatory psychiatric services in Israel by EI and other population groups.

Methods: EI, former Soviet Union immigrants and Israel-born users of the 64 psychiatric governmental clinics and of the nationwide psychiatric rehabilitation services were compared on demographic and clinical data. Data were obtained from the Ministry of Health for the years 1997-2003.

Results: Among the EI cared in psychiatric clinics, there was a greater proportion of users with psychotic disorders; a lesser proportion was referred by self, family or friends; a greater proportion was prescribed psychotropic medications; and a lesser proportion received individual psychotherapy. EI used more protected housing facilities and less social and leisure services.

Discussion: Patterns of utilization of both types of services were found to be different among EI, suggesting a need to develop culturally-sensitive programs for both the Ethiopian immigrants and the mental health professionals.

INTRODUCTION

Immigrants, such as those Israel has received over many decades, have to overcome multiple challenges in their process of adaptation to their new home, e.g., culture bereavement, culture shock, language barrier, discrepancy between hopes and realizations, and non-acceptance by the people of the host society. Also, there is considerable evidence from studies in Australia, Israel, North America and Western Europe, that immigration is a risk factor for mental ill-health (1-5). However, despite the higher rates of emotional distress and psychiatric disorders (1, 6, 7) among immigrants than among the non-immigrant populations, an indication of a higher need for psychiatric care in immigrants, studies showed lower rates of use (8-13), even in countries with universal health insurance (14-17).

The rate of mental health service utilization by immigrants is even lower for those emigrating from developing countries, such as African countries, that are unfamiliar with the services in the host society (18). Thus, it is not surprising that the pattern of psychiatric hospitalization differs among Ethiopian immigrants (EI) in Israel, as compared to former Soviet Union immigrants (FSUI) and the Jewish Israel-born (IB) (19). Analogous findings have been made in other countries, comparing among different groups of immigrants, and between them and the native-born (18, 20). In addition, clinical interventions with users from developing countries have been shown to be often ineffective, particularly because these patients drop treatment against the advice of their clinicians more often than their native Western counterparts (21-23). Furthermore, there is abundant evidence that immigrants often receive culturally inappropriate care, or experience multiple barriers to care

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(24-26). For example, Kirmayer et al. (27) have shown that the language barriers and cultural complexity (in particular culture-specific idioms of distress, 28) lead to cultural misunderstandings that may prevent adequate diagnosis and treatment.

Because immigrant populations from developing countries suffer from both the process of immigration and from the cultural gap between the host country and the country from which they emigrated, a way to study the effect of cultural differences on mental health service use is to compare two immigrant populations, one from a developing country and one from a developed country, while a comparison with non-immigrants allows taking into account the effect of immigration.

In Israel there is a unique opportunity to conduct such a study since it is a country of immigrants: over one third, 35%, of its population are immigrants, who came from different countries with marked cultural differences, while most of the non-immigrant population is composed of second-generation immigrants (29). Between 1984 and 1995, Israel absorbed 803,000 immigrants, most of them from the FSU and Ethiopia (30). According to Israel's Law of Return, Jews living anywhere are entitled to immigrate to Israel and receive immediate Israeli citizenship. To provide the new immigrants with language training, shelter, and livelihood has been part of Israel's mission since the State was founded. Despite this support, higher psychological distress and psychiatric morbidity were consistently found among both FSU immigrants and EI compared to the Israel-born (9, 10, 31-37).

The objective of this study was to compare the pattern of use of ambulatory psychiatric services (outpatient psychiatric clinics and psychiatric community-based rehabilitation services) among immigrants from Ethiopia (EI) and among two contrasting populations, the immigrants from the FSU (FSUI) and the native-born Israeli Jews (IB).

METHODS

Participants. The study included adult EI and FSUI who arrived to Israel between 1990 and 1991, and IB. All participants received psychiatric care during the years 1997-2003 in one of the country's 64 psychiatric governmental outpatient clinics or utilized psychiatric community-based rehabilitation services during the years 1997-2003. All services were provided cost free.

The clinic analysis consisted of two stages: 1) in the first stage, the study population refers to all the applica-

tions for care during the study period, so that the same individual could have more than one application during this period; and 2) in the second stage, the study population refers to the clinic contacts during the study period. With regard to the use of the rehabilitation services, the study population consisted of users of sheltered housing, vocational rehabilitation and/or social or leisure activity during the study period.

Data collection. Unidentified personal data were obtained from the Department of Information and Evaluation of the Israel Ministry of Health: socio-demographic data, clinical data (psychiatric diagnosis) and service use data (for clinics: referral agency, number of contacts; type of treatment; profession of the mental health caregiver and adherence to treatment; and for the rehabilitation services: type of service used).

Analysis. Descriptive statistics were used. To promote reliability, psychiatric diagnoses were grouped into seven broad diagnostic categories according to the ICD-10 (38): schizophrenia or other psychoses (codes F20); affective disorders (codes F30); organic disorders (codes F01-F04); neurotic or personality disorders (codes F40 and F60); drugs and alcohol disorders (codes F10); mental retardation and developmental disorders (codes F70 and F80); and Z codes (persons who were admitted for evaluation).

The number of contacts per patient per year, an index used by the Ministry of Health, was calculated for each population group as follows: the total number of contacts during the year divided by the total number of outpatients who had at least one contact with a clinic in the corresponding year. This index was calculated for each year of the study (1997-2003), and the mean number of contacts per patient per year is the mean of the index for each of these seven years. The corresponding numbers are larger than those published by the Ministry of Health because of slightly different definitions, e.g., if a patient was in group therapy led by two caregivers, the number of recorded contacts was two and not one.

RESULTS

OUTPATIENT PSYCHIATRIC CLINICS

In the years 1997-2003, 1,878 EI, 7,860 FSUI and 60,814 IB applied for care in the 64 psychiatric governmental clinics.

The distribution of the applications by psychiatric diagnosis was found to be significantly different in the three population groups ($\chi^2=2643.01$; $df=12$; $p\leq 0.0005$):

Table 1. Comparison of the Distribution (%) of the Applications to Mental Health Clinics by Diagnosis, in the Three Population Groups

Diagnosis	Ethiopian Immigrants (n=1,542*)	Former Soviet Union Immigrants (n=6,354*)	Israel-born (n=49,235*)
Schizophrenia or other psychosis	44.0	18.2	23.8
Affective disorder	12.7	18.8	12.1
Organic disorder	2.9	13.1	2.4
Neurotic or personality disorder	23.3	35.4	40.7
Drugs or alcohol disorder	2.6	2.8	3.3
Mental retardation or developmental disorder	2.9	3.1	5.2
Z code	11.5	8.6	12.5
Total	100	100	100

*The numbers refer to applications for which a diagnosis was indicated in the file.

Table 2. Comparison of the Distribution (%) of the Applications to Mental Health Clinics by Referral Agency, in the Three Population Groups

Referral agency	Ethiopian Immigrants (n=1,830*)	Former Soviet Union Immigrants (n=7,689*)	Israel-born (n=59,086*)
Self-referral	27.2	38.5	43.1
Family or friends	4.1	6.7	7.2
Mental health agency	19.7	10.8	13.4
General physician	26.3	33.1	19.0
Other health agency	6.8	4.6	6.2
Welfare agency	12.2	4.0	6.5
Other	3.7	2.3	4.6
Total	100.0	100.0	100.0

*The numbers refer to applications for which the referral was indicated in the file.

Table 3. Comparison of the Distribution (%) of the Patient Contacts by Profession of the Mental Health Caregiver, in the Three Population Groups

Profession of the mental health caregiver	Ethiopian Immigrants (n=39,722*)	Former Soviet Union Immigrants (n=152,858*)	Israeli-born (n=1,798,856*)
Psychiatrist	48.7	58.0	34.8
Psychologist	5.4	11.2	18.5
Psychiatric nurse	25.5	12.5	15.0
Social worker	17.0	14.2	25.1
Occupational therapist	0.9	1.1	1.8
Other	2.5	3.0	4.8
Total	100.0	100.0	100.0

*The numbers refer to the contacts for which the profession of the mental health caregiver was indicated in the file

among the EI, the highest percentage of applications received a diagnosis of schizophrenia or other psychotic disorders, while among FSUI and IB the highest percentage of applications received a diagnosis of neurotic or personality disorder (Table 1).

The distribution of the applications to the clinics by

referral agency also was found to be significantly different in the three study groups ($\chi^2=1198.92$; $df=12$; $p\leq 0.0005$); the percentage of self-referrals or referrals by family or friends was smaller among the EI (31.3%) than among the FSUI (45.2%) and the IB (50.3%), while the percentage of referrals by a welfare agency

Table 4. Comparison of the Distribution (%) of the Patient Contacts by Type of Contact, in the Three Population Groups

Type of contact	Ethiopian Immigrants (n=41,295*)	Former Soviet Union Immigrants (n=156,674*)	Israeli-born (n=1,820,585*)
Intake	14.5	13.6	9.6
Psychodiagnostic evaluation	1.1	0.8	0.8
Drug therapy	44.2	36.0	24.9
Individual therapy	18.1	28.3	32.3
Group therapy / follow up	10.7	12.3	24.0
Couple therapy / family counseling	0.4	0.9	1.5
Professional evaluation for legal processes	2.3	1.1	1.0
Home visit	2.1	0.8	0.8
Other	6.6	6.1	4.9
Total	100.0	100.0	100.0

* The numbers refer to the contacts for which the type of contact was indicated in the file.

was greater (12.2%, 4.0% and 6.5 % respectively) (Table 2). These differences were found, at different degrees, within each diagnostic group.

The distribution of the patient contacts in the clinics by the caregivers' profession was found to be significantly different in the three population groups ($\chi^2=43012.96$; $df=10$; $p\leq 0.0005$). The proportion of contacts with a psychologist was lower and with a psychiatric nurse-higher among the EI than among the users of the other two groups (Table 3).

The distribution of the patient contacts in the clinics by type of treatment was found to be significantly different in the three population groups ($\chi^2=32299.74$; $df=16$; $p\leq 0.0005$): the percentage of contacts with individual therapy was lower in the EI (18.1%) than among the FSUI (28.3%) and the IB (32.3%), while the percentage of contacts with pharmacotherapy was the highest (44.2%, 36.0% and 24.9%, respectively) (Table 4). The proportion of house visits among EI (2.1%) was more than twice larger than among the two other groups (0.8%).

The mean number of contacts per patient per year was found to be higher among the IB (19.9) than among both immigrant population groups (EI, 16, and FSUI, 12.4). A similar pattern was found among patients with a diagnosis of schizophrenia or other psychosis (the mean number of contacts per patient per year among IB, EI and FSUI was 24.2, 21.3 and 14.9, respectively), and among patients with diagnoses other than psychotic disorders (15.7, 10.8 and 9.9, respectively).

The proportion of contacts for which patients were scheduled an appointment but did not show was found

to be similar in the three groups: EI, 24.7%; FSUI, 21.2%; and native born, 25.5%.

PSYCHIATRIC COMMUNITY-BASED REHABILITATION SERVICES

The number of people with a mental disability using the rehabilitation services during the years 1997-2003 by population group was the following: among EI, $n=338$; FSUI, $n= 993$; and IB, $n=14,186$.

The proportion of users of rehabilitation services in sheltered housing was significantly ($\chi^2=47.730$, $d.f.=2$, $p\leq 0.0005$) different in the three population groups, with a higher percentage among the EI (61.3%) than among the FSUI (41.7%) and the IB (44.4%). The proportion of those who used vocational rehabilitation services was also significantly ($\chi^2= 94.220$, $d.f.=2$, $p\leq 0.0005$) different in the three population groups, with a percentage similar among the EI (76.8%) and the FSUI (72.2%) and significantly lower among the IB (60.4%). The proportion of those who utilized social and leisure activity services was also significantly ($\chi^2=117.876$, $d.f.=2$, $p\leq 0.0005$) different, lowest among the EI (41.2%), higher among the FSUI (53.4%) and the highest among the IB (63.6%).

DISCUSSION

Both newcomers and Israeli-born residents have a free-of-charge access to the government outpatient psychiatric clinics and, if they meet the official criteria of being mentally disabled, to the mental health rehabilitation services. However, significant differences were found in

the patterns of utilization of outpatient psychiatric clinics services and psychiatric rehabilitation services between Ethiopian immigrants, immigrants from the former Soviet Union and native-born Israelis. The strengths of the study reside in the fact that mass immigration (reducing the bias of self-selection, which exists in most studies) of two very different populations took place recently in Israel and in the existence of nationwide data on service use of psychiatric governmental outpatient clinics and psychiatric rehabilitation services during the years 1997-2003 in the Israel Ministry of Health.

Study weaknesses include the fact that the data on outpatient psychiatric clinics included only the outpatient psychiatric clinics owned by the government, i.e., not the psychiatric outpatient clinics in general or psychiatric hospitals, or those owned or subsidized by health insurance organizations. However, since the different types of psychiatric clinics are spread all over the country and people generally choose the clinic which is the closest to their home (39), it is reasonable to assume that the utilization patterns would be the same in most public outpatient psychiatric clinics that serve the three population groups.

Among the immigrants from Ethiopia who applied for treatment in governmental psychiatric clinics, the percentage with a diagnosis of schizophrenia or other psychosis was found to be higher than among FSUI and people born in Israel, while the percentage with neurotic or personality disorders was smaller. Among the EI, the percentage with a diagnosis of schizophrenia or other psychosis was found to be even higher than the percentage with a diagnosis of neurotic or personality disorders, while among FSUI and the native-born it was the contrary. Since a visit to a professional mental health worker implies some kind of awareness of ones' mental health problems, it seems that the EI patients tend to consider that non-psychotic disorders do not justify visiting mental health professionals in public clinics and/or are not referred to services. FSUI and people born in Israel are apparently more aware and informed that mental health problems, such as neurotic or personality disorders, can be treated in outpatient mental health clinics. One cannot, of course, exclude the possibility of a misdiagnosis among EI, as documented for minority populations in Western countries (40, 41). A possible difference in the distribution of the diagnoses in the general population (2) is not likely to explain the significant difference between EI and other population groups in the diagnosis of applicants who turn to mental health clinics.

It is reasonable to hypothesize that an EI who suffers from psychiatric disorders other than psychotic disorders may seek help from other agencies, such as family physician, traditional healers or welfare agencies. Fenta et al. (18), in a random sample of 342 Ethiopian adults residing in Toronto, found that only 12.5% among those who suffered from a mental disorder received help from formal healthcare providers, mainly family physicians. The authors report that the Ethiopians were more likely to consult religious leaders and traditional healers than medical professionals for emotional problems.

About two thirds of Ethiopian immigrants' applications to mental health clinics were based on referrals from health and welfare agencies, while the frequency of self-referrals and referrals by family or friends was much lower (less than one third). These personal referrals were substantially less frequent than among the Israel-born and the FSUI. This might indicate less awareness of their psychiatric problems, disbelief in the ability of the mental health clinics to help them, lack of knowledge about relevant mental health services and/or preference to avoid mental health services because of the stigma attached to mental health problems. Indeed, other research suggests that Ethiopians tend to conceptualize some emotional problems as physical rather than problems needing psychiatric services (31, 32). Furthermore, psychiatric services in Ethiopia are extremely limited (42), which may explain the reduced awareness of such services.

Studies about stigma have documented (43) that mental disorders appear to be a considerably more important correlate of perceived stigma than chronic physical conditions, among persons with significant activity limitations, especially in developing countries. In this respect, Israel is closer to developing countries (44). It is possible that, among EI, stigma related to mental conditions is still higher, because, in the Ethiopian culture, mental illness is highly stigmatized, not only concerning the person who is ill, but also for every member of the extended family (45).

The fact that EI are less likely to self-refer for services than others might explain the findings that in the mental health clinics, the percentage of patients with schizophrenia or other psychotic disorders is higher and the percentage with neurotic or personality disorders is lower among EI than among the other population groups: mental health or welfare agencies, which were the main referral source for EI patients tend to direct patients with schizophrenia or other psychosis

rather than patients with neurotic or personality disorders to mental health clinics.

Considering the distribution of patient contacts by mental health profession, in comparison to FSUI and Israel-born residents, EI patients were less likely to be treated by psychologists, who usually practice Western psychotherapy, and most likely to be treated by psychiatrists and psychiatric nurses, who probably primarily prescribe medications. This claim is confirmed by the fact that Ethiopian immigrants, compared to FSU immigrants and the Israel-born, were found to be mainly treated by drugs and to a much lesser degree by psychotherapy. Pharmacological treatment as a therapy of choice seems appropriate to some extent, since most of the Ethiopian immigrants in care in outpatient psychiatric clinics are diagnosed as suffering from severe mental illness such as schizophrenia or affective disorders (56.7%). Nonetheless, for other patients applying to clinics with less severe mental disorders, such as neurotic or personality disorders, the low utilization of individual psychotherapy among Ethiopian immigrants probably reflects the lack of adaptability of Western psychotherapy to the mental health needs of Ethiopian immigrants and/or their disbelief in the ability of a verbal therapy to relieve their psychological distress. It suggests that cultural factors, such as linguistic barriers, or cultural differences in perception of health and in help-seeking behavior (46), play an important role in choosing individual psychotherapy for treatment. On the other hand, the small percentage of individual psychotherapy among Ethiopians might also reflect that there are not enough trained Ethiopian psychotherapists to help this population effectively. However, it is important to mention that mental health care providers in the government psychiatric outpatient clinics seem to direct more resources to Ethiopian immigrant patients, as indicated by a proportion of home visits to Ethiopian immigrant patients more than double that to FSU immigrants or Israeli-born patients, when these contacts are generally initiated by the care providers.

The average number of contacts per patient per year was found to be lower among both immigrant groups compared with the native born. It was higher among EI compared with FSUI despite the fact that individual therapy, for which there are usually more visits, was more frequent among FSUI than among EI. This trend was found both among patients with a diagnosis of schizophrenia or other psychosis and among patients with non-psychotic disorders. Although the reason for this is not clear, it is

very encouraging; an effort should be made to increase the probability of EI to turn to psychiatric clinics since, once in care, they do not tend to miss contacts for which they were invited more often than members of the other groups. Furthermore, EI patients tend to remain in care longer than other immigrants.

Concerning patterns of rehabilitation service use, our data related to the nationwide service use in the period 1997-2003, which includes the period following the beginning of the implementation of the Rehabilitation of the Mentally Disabled Law in January 2001 (47). We found that the proportion of the mentally disabled entitled to get rehabilitation services who used sheltered housing services was relatively high among EI and substantially higher than among the FSUI and IB. The high proportion of sheltered housing service use might reflect the relative weakness of the Ethiopian family and community structure (48, 49), that could not help and take direct responsibility for their most vulnerable members. Since the family has an important role in the psycho-social process of rehabilitation, even when the mentally disabled are in sheltered housing (50, 51), it seems that the Ethiopian families should get more support and be guided to assure the rehabilitation of the affected family member.

Results of the study further show that a high proportion (about three quarters) of the mentally disabled Ethiopians and FSUIs entitled to get rehabilitation services used vocational rehabilitation services – significantly more than the Israel-born. It has been shown that vocational rehabilitation has a significant impact both on the rehabilitation of the individual and on the society, both socially and economically (52, 53). In this respect, the higher use of vocational rehabilitation services by immigrants, both from Ethiopia and FSU, might indicate that the door to integration in the new society is open, even for the weakest immigrants.

Looking at the distribution of social and leisure activity services for the mentally disabled in the three population groups, we found that relatively few EI used these services compared with FSUI, while the Israel-born used them the most. It is plausible that these services are culture specific and are not tailored to the special features of immigrants, in particular EI, as it is also the case with other specific cultural and minority groups, such as the Arab Israelis and the Ultra-Orthodox Jews (47).

CONCLUSIONS

The most striking finding of this study is the similarity between immigrants from the former Soviet Union and the Israel-born, whereas immigrants from Ethiopia were significantly different from both groups concerning the patterns of utilization of both psychiatric services and psychiatric rehabilitation services. This may indicate that help-seeking behavior and use of services is more influenced by culture than by immigration *per se*. Active efforts are needed to make the role of ambulatory psychiatric services accessible, available and culturally suitable to EI. Clinical recommendations include initiation of psycho-educational programs for families and the community; to increase the number of Ethiopian professional mental health providers; and to train other professionals about the Ethiopian social context and the meaning of the Ethiopian patients' idioms of distress. These recommendations should result in more culturally-sensitive mental health services for Ethiopian immigrants.

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References

- Cantor-Graae E, Zolokowska K, McNeil TF. Increased risk of psychotic disorder among immigrants in Malmö: A 3-year first-contact study. *Psychol Med* 2005;35:1155-1163.
- Bhugra D, Gupta S, Bhui K, Craig T, Dogra N, Ingieby JB, Kirkride J, Moussaoui D, Nazroo J, Qureshi A, Stompe T, Tribe R. WPA guidance on mental health and mental health care in migrants. *World Psychiatry* 2011;10:2-10.
- Kirmayer LJ, Narasiah L, Munoz M, Rashid M, Ryder AG, Guzder J, Hassan G, Rousseau C, Pottie K. Common mental health problems in immigrants and refugees: General approach in primary care. *CMAJ* 2011;183:E959-E967.
- Bhugra D. Acculturation, cultural identity and mental health. In: Bhugra D, Cochrane R, editors. *Psychiatry in multicultural Britain*. London: Gaskell, 2001: pp.112-136.
- Tran TV, Manalo V, Nguyen VT. Nonlinear relationship between length of residence and depression in a community-based sample of Vietnamese Americans. *Int J Soc Psychiatry* 2007;53:85-94.
- Zilber N, Lerner Y, Eidelman R, Kertes J. Depression and anxiety disorders among Jews from the former Soviet Union five years after immigration to Israel. *Int J Geriatr Psychiatry* 2001;16:993-999.
- Cantor-Graae E, Selten J-P. Schizophrenia and migration: A meta-analysis and review. *Am J Psychiatry* 2005;162: 2-24.
- Levav I, Kohn R, Flaherty JA, Lerner Y, Aisenberg E. Mental health attitudes and practices of Soviet immigrants. *Isr J Psychiatry Relat Sci* 1990;27:131-144.
- Arieli A, Aychen S. Psychopathology among Jewish Ethiopian immigrants in Israel. *J Nerv Ment Dis* 1992;180:465-466.
- Zilber N, Lerner Y. Psychological distress among recent immigrants from the former Soviet Union to Israel, I. Correlates of level of distress. *Psychol Med* 1996;26:493-501.
- Bhui K, Stansfeld S, Hull S, Priebe S, Mole F, Feder G. Ethnic variations in pathways to and use of specialist mental health services in the UK. Systematic review. *Br J Psychiatry* 2003;182:105-116.
- Steel Z, Silove D, Chey T, Bauman A, Phan T, Phan T. Mental disorders, disability and health service use amongst Vietnamese refugees and the host Australian population. *Acta Psych Scand* 2005;111:300-309.
- Jackson JS, Neighbors HW, Torres M, Williams DR, Baser R. Use of mental health services and subjective satisfaction with treatment among Black Caribbean immigrants: Results from the National Survey of American Life. *Am J Public Health* 2007;97:60-67.
- Beiser M, Gill K, Edwards RG. Mental health care in Canada: Is it accessible and equal? *Canada's Mental Health* 1993;41:2-7.
- Kirmayer J K, Weinfeld M, Burgos G, du Fort GG, Lasary J-K, Young A. Use of health services for psychological distress by immigrants in an urban multicultural milieu. *Can J Psychiatry* 2007;52:295-303.
- Tiwari SK, Wang J. Ethnic difference in mental health service use among White, Chinese, South Asian and South East Asian population living in Canada. *Soc Psychiatry Psychiatr Epidemiol* 2008;43:866-871.
- Fenta H, Hyman I, Noh S. Health service utilization by Ethiopian immigrants and refugees in Toronto. *J Immigr Minor Health* 2007;9:349-357.
- Fenta H, Hyman I, Noh S. Mental health service utilization by Ethiopian immigrants and refugees in Toronto. *J Nerv Ment Dis* 2006;194:925-934.
- Youngmann R, Pugachova I, Zilber N. Patterns of psychiatric hospitalization among Ethiopian and Former Soviet Union immigrants and persons born in Israel. *Psychiatr Serv* 2009;60:1656-1663.
- Takei N, Persaud R, Woodruff P, et al. First episodes of psychosis in Afro-Caribbean and White people. An 18 year follow-up population-based study. *Br J Psychiatry* 1998;172:147-153.
- Chiesa M, Drahorad C, Longo S. Early termination of treatment in personality disorder treated in a psychotherapy hospital: Quantitative and qualitative study. *Br J Psychiatry* 2000;177:107-111.
- Self R, Oates P, Pinnock-Hamilton T, Leach C. The relationship between social deprivation and unilateral termination (attrition) from psychotherapy at various stages of the health care pathway. *Psychol Psychother* 2005;78:95-111.
- Arnold BA, Blasey C, Manber R, Constantine MJ, Markowitz JC, Klein DN, Thase ME, Kocsis JH, Rush AJ. Dropouts versus completers among chronically depressed outpatients. *J Affect Disord* 2007;97:197-202.
- Woodward AM, Dwinell AD, Arons BS. Barriers to mental health care for Hispanic Americans: A literature review and discussion. Special Issue: Multicultural mental health and substance abuse services. *J Ment Health Adm* 1992;19:224-236.
- Sent L, Ballem P, Paluck E, Yalland L, Vogel AM. The Asian women's health clinic: Addressing cultural barriers to preventive care. *CMAJ* 1998;159:350-354.
- Grisaro N, Irwin M, Kaplan Z. Acute psychotic episodes as a reaction to severe trauma in population of Ethiopian immigrants to Israel. *Stress Health* 2003;19:241-247.
- Kirmayer LJ, Groleau D, Guzder J, Blake C, Jarvis E. Cultural consultation: A model of mental health services for multicultural societies. *Can J Psychiatry* 2003;48:145-153.
- Kirmayer LJ. Cultural variations in the clinical presentation of depression and anxiety: Implication for diagnosis and treatment. *J Clin Psychiatry* 2001;62:22-30.
- Statistical Abstract of Israel. No 56. Central Bureau of Statistics. Tel Aviv: Government Publishing House 56, 2005.
- Statistical Abstract of Israel. No 47. Central Bureau of Statistics. Tel Aviv: Government Publishing House 47, 1996.
- Hodes R. Cross-cultural medicine and diverse health beliefs. Ethiopians abroad. *West J Med* 1997;166:29-36.

32. Youngmann R, Minuchin-Itzigsohn S, Barasch M. Manifestation of emotional distress among Ethiopian immigrants in Israel: Patient's and the clinician's perspective. *Transcult Psychiatry* 1999;36:45-63.
33. Ponzovsky A, Ginath Y, Durst R, Wondimeneh B, Safro S, Minuchin-Itzigsohn S, Ritsner M. Psychological distress among Ethiopian and Russian Jewish immigrants to Israel: A cross-cultural study. *Int J Soc Psychiatry* 1998;44:35-48.
34. Andermann LF. Ethiopian Jews meet Israeli family physicians: A study of cultural somatization. *Transcult Psychiatry* 1996;33:333-345.
35. Reiff M, Zakut H, Weingarten MA. Illness and treatment perceptions of Ethiopian immigrants and their doctors in Israel. *Am J Public Health* 1999; 89:1814-1818.
36. Lerner Y, Mirsky J, Barasch M. New beginnings in an old land: Refugee and immigrant mental health in Israel. In: Mersella AJ, Bornemann T, Ekblad S, Orelly J, editors. *Amidst peril and pain. The mental health and well-being of the world's refugees*, Washington, DC: American Psychological Association, 1994: pp. 153-192.
37. Mirsky J. Mental health implication of migration. A review of mental health community studies on Russian speaking immigrants in Israel. *Soc Psychiatry Psychiatr Epidemiol* 2009;44:179-187.
38. World Health Organization: The ICD-10 classification of mental and behavioural disorders: Clinical descriptions and diagnostic guidelines. Geneva: WHO, 1992.
39. Levinson D, Lerner Y, Zilber N, Grinshpoon A, Levav I. Twelve-month service utilization rates for mental health reasons: Data from the Israel National Health Survey. *Isr J Psychiatry Relat Sci* 2007;44:114-125.
40. Bauer AM, Alegria M. Impact of patient language proficiency and interpreter service use on the quality of psychiatric care: A systematic review. *Psychiatr Sev* 2010;61:765-773.
41. Alegria M, Nakash O, Lapatin S, Oddo V, Gao S, Lin J, Normand SL. How missing information in diagnosis can lead to disparities in the clinical encounter. *J Public Health Manag Pract* 2008;14:S26-35.
42. Bekele YY, Fisher A J, Alem A, Baheretebew Y. Pathways to psychiatric care in Ethiopia. *Psychol Med* 2009;39:475-483.
43. Alonso L, Buron A, Bruffaerts R, He y, Posada-Villa J, Lepine JP, Anqermeyer MC, Levinson D, de Girolamo G, Tachimori H, Mneimeh ZN, Medina-Mora ME, Ormel J, Scott KM, Gureie O, Haro JM, Gluzman S, Lee S, Vilaqut G, Kessler RC, Von Korff M. World Mental Health Consortium. Association of perceived stigma and mood and anxiety disorders: Results from the World Mental Health Survey. *Acta Psychiatr Scand* 2008;118:305-314.
44. Levinson D. Psychiatric epidemiology – comparison between Israel and other countries. *Medicine* 2011;17:18-25 (in Hebrew).
45. Shibre T, Negash A, Kullgren G, Kebede D, Alem A, Fekadu D, Madhin G, Jacobsson L. Perception of stigma among family members of individuals with schizophrenia and major affective disorders in rural Ethiopia. *Soc Psychiatry Psychiatr Epidemiol* 2001;36:299-303.
46. Kinzie JD. Immigrants and refugees: The psychiatric perspective. *Transcult Psychiatry* 2006;43:577-591.
47. Aviram U. The rehabilitation of the mentally disabled in the community law – interim evaluation and preparing for the future. *Medicine* 2010; 4:14-23 (in Hebrew).
48. Kaplan S, Salomon H. Ethiopian Jews in Israel: A part of the people or apart from people? In: *Jews in Israel: Contemporary social and cultural patterns*. Rebhun V, Waxman CI, editors. Hanover and London: Brandeis University, 2004.
49. Offer S. The Ethiopian community in Israel: Segregation and creation of a racial cleavage. *Ethnic Racial Studies* 2007;30:461-480.
50. Beigel DA. Families and psychiatric rehabilitation: Past, present and future. *Social Security* 1998;53:45-63 (in Hebrew).
51. Teller Y. Coping of families of mentally disabled. In: Teller Y, editor. *On an upward path: Chapters in community mental health*. Haifa: Achva, 2008: pp. 101-148 (in Hebrew).
52. Corrigan PW, Muser KT, Bond GR, Drake RE, Solomon P. Principles and practice of psychiatric rehabilitation: An empirical approach. New York: Guilford, 2008.
53. Hadass-Lidor N, Lachman M. On the way to recovery: Rehabilitation and integration of mentally disabled in the community. In: Hadass-Lidor N, Lachman M, editors. *Different points of view in mental health rehabilitation and recovery – practice, policy and research*. Kfar Yona: Litam, 2007: pp. 117-129 (in Hebrew).