

# **NIRP Research for Policy Series 20**

Development of a culturally-sensitive psychiatric screening instrument  
for Ethiopian populations  
The influence of acculturation on idioms of psychological distress

**Nelly Zilber, Rafael Youngmann,  
Fikre Workneh and Robert Giel**

## Colophon

### NIRP Research for Policy Series

**Part 20: Development of a culturally-sensitive psychiatric screening instrument for Ethiopian populations. The influence of acculturation on idioms of psychological distress**

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## Preface

Recognising inter-cultural differences in the way people experience and express emotional problems and the difficulties that consequently may arise in properly diagnosing mental health problems, this study seeks to develop and validate a tool for screening psychiatric disorders in Ethiopian populations. The study was carried out in Ethiopia as well as among Ethiopian Jews in Israel, among groups at different levels of exposure to western medicine. It was a collaborative effort between researchers from Israel, Ethiopia and the Netherlands.

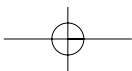
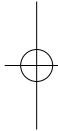
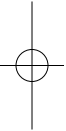
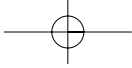
NIRP aims to encourage development-related research focused on socio-economic and cultural change. Being policy-oriented in nature, NIRP aims to make the results of research accessible to anyone interested in solving the problems investigated. The target groups for such knowledge include policy makers, representatives of non-governmental and donor organisations, and the scientific community. With this aim in mind, the Publication Board has launched the NIRP Research for Policy Series as a channel for the publication of “user-friendly” summaries of more than 30 scientific reports.

The Publication Board wishes to thank Dr. Mirjam A.F. Ros-Tonen for editing the summary on which this monograph is based. Thanks are also due to Howard Turner for revising the English.

Last but not least, the Publication Board wishes to thank the research team for the successful completion of this study.

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## I. General information

### I.1 Framework of the study

It is gradually being recognised that mental illness is a public health problem throughout the world (Desjaralais *et al.*, 1995). The primary care sector is the main source of care for a significant proportion of those persons suffering from psychological disorders or mental problems (Goldberg *et al.*, 1987; Mechanic, 1997). Thus, a substantial portion of the morbidity among primary health care recipients in developing as well as developed countries is constituted by psychological disorders – mainly somatisation, depression and anxiety disorders (Jacobsson, 1985a and b; Kirmayer and Young, 1998; Sartorius *et al.*, 1993; Desjaralais *et al.*, 1995). Although these disorders are not as severe as psychotic disorders, they can pose a significant public health problem because of their high prevalence and their serious effects on work, personal well-being and the use of health services (Desjaralais *et al.*, 1995).

It is well known that many of the mental health problems are not properly diagnosed by general health workers and do not get appropriate treatment (Schulberg and Burns, 1988; Mechanic, 1990; Maoz, 1998). This non-recognition or late diagnosis is even more frequent when the patient is not of “western” origin while the doctor is “westerly trained”, because of a communication gap between them. Such situations are found both in developing countries where the doctors have been trained in the framework of the western biomedical model and in western countries with patients who are immigrants from developing countries (Minuchin-Itzigsohn *et al.*, 1984; Pliskin, 1987). This communication gap derives from differences between doctors and patients in definition of mental illnesses and their symptoms (idioms of distress), in beliefs about health and in expectations of treatment. The medical belief system of the non-western patient is based on a particular traditional culture in which illness is usually viewed and treated in an integrated way that involves body, mind, spirit, community, family and cosmos. In contrast, the doctor who has been trained in the biomedical system is influenced by the western culture, which treats body

and mind illness separately (Kleinman *et al.*, 1978; Mechanic, 1978; Kleinman, 1980).

In addition to the problems deriving from the differences in medical belief systems, in the case of immigrants there are also problems due to language barriers. Immigration by itself is a source of stress, which has been shown to be associated with an increased risk of mental and physical health problems (Shuval, 1986; Stein, 1986; Berry *et al.*, 1987; Beiser and Edwards, 1994; Lerner *et al.*, 1994). Immigrants have thus a greater need of medical care while, as explained above, there are serious barriers to communication with the physicians, especially in the case of non-western immigrants, who thus commonly report feeling misunderstood by their doctors (Colledge and Svensson, 1986).

It is therefore important to develop valid psychiatric screening instruments in order to better detect psychiatric cases in primary health care settings, as well as to estimate the prevalence of psychiatric problems in different populations or specific groups and thus facilitate the more effective planning of mental health services. Unfortunately, psychiatric screening instruments developed on the basis of the western bio-medical model also lead to misunderstandings and a lack of diagnosis accuracy when applied in a non-western culture. In order to overcome these problems, experts from the World Health Organisation (WHO) developed a new research tool for the detection of psychiatric problems in primary health settings, especially in developing countries: the Self-Reporting Questionnaire (SRQ) (Harding *et al.*, 1980, 1983). The SRQ is composed of 24 questions about certain symptoms to which the respondent answers with "yes" or "no". Because of the high level of illiteracy in these countries, the questions are usually read aloud by the interviewer. The SRQ, originally developed to screen for psychiatric morbidity in primary care facilities, has been validated and used as a screening instrument for estimating the prevalence rates of psychopathology in different settings and different cultures in both developing and developed countries (Beusenbergh and Orley, 1994).

The hypothesis on which the development of the SRQ is based is that the symptoms of psychiatric disorders are clearly defined and universal and therefore that the presence of psychopathology can be determined by the respondents' report of the presence of clearly defined symptoms, identical for all populations whatever their culture (Harding *et al.*, 1983). It is well known, however, that every culture has its own authorised grammar for expressing emotional problems. For instance, the common reaction to a socio-environmental stress is dysphoria or sadness in the western societies, while in many non-western societies the common reaction is somatic



symptoms (Kirmayer, 1984). There are also differences in the types of somatic symptoms experienced and reported in different cultures (Janca *et al.*, 1995). For instance, Ethiopians share a typical cluster of cultural idioms of distress (Young, 1976; Hodes and Teferedegne, 1996). This cluster is composed of vague multiple somatic complaints centred mainly around three bodily areas which have specific ethno-physiological meanings: the head, the heart and the stomach (Young, 1976, 1977). The symptoms are typically burning, itching, crawling or numbness sensations (Giel and Workneh, 1980; Jacobsson, 1985 a & b; Hodes, 1997; Youngmann *et al.*, 1999). These typical cultural idioms of distress seem to be used also by Ethiopian Jewish immigrants to Israel (Andermann, 1996; Reiff *et al.*, 1999; Youngmann *et al.*, 1999).

The absence of such cultural idioms of distress in the SRQ may explain some validity problems found in the use of the instrument in certain cultures (De Jong, 1987; Kortmann, 1990; Beusenbergh and Orley, 1994). In particular, Kortmann and ten Horn (1988) and Kortmann (1987a & b; 1990) have shown that in Ethiopia the questions are not always properly understood and thus the standard Amharic version of the tool has serious limitations when it comes to detecting psychopathology in Ethiopian populations. In addition, it has been found that the threshold of the SRQ score for detecting psychopathology, the so-called cut-off point, is different in different cultures (Kortmann, 1987; Penayo *et al.*, 1990; Salleh, 1990).

In view of the importance of having a valid screening instrument for mental health problems and of the absence of such a tool for Ethiopian populations, the primary goal of the present project was to develop a culturally sensitive screening instrument for Ethiopians in both Ethiopia and Israel, and to train general physicians in its use. The need for a valid screening instrument sensitive to the Ethiopian culture became urgent when psychologically distressed or mentally ill Ethiopian Jews experienced difficulties in receiving adequate care in the primary clinics in Israel. These difficulties were undoubtedly related, at least in part, to difficulties in communication between patients and caregivers, due to differences between the medical belief system of the Ethiopian patients and their western-oriented doctors.

The study was carried out among Ethiopians in a rural and in an urban setting in Ethiopia and among Ethiopian Jews in Israel. Since most of the Ethiopian Jews who emigrated to Israel came from traditional agricultural villages in the Gondar region in the northwestern part of Ethiopia, it was an obvious decision to conduct the study in Ethiopia in this area. The total

population of the northern Gondar administrative zone is estimated at 2,088,684, of whom 1,852,059 live in rural areas and only 236,625 live in urban areas. Of the total population, 46.0% is under the age of 15 and 8.9% are 50 years and above (Central Statistics Authority, 1999). The Amhara ethnic group constitutes the overwhelming majority (89.7%) of the population of the zone. The remaining population is made up of Semitic ethnic minorities: the Kemants, Falashas and Wotios. The Falashas (also known as Beta-Israel or, as they are more commonly called today, Ethiopian Jews), are known to be Jewish descendants and almost all of them have migrated to Israel since the early 1980s. Most residents of the zone (95.3%) are Orthodox Christians, followed by Muslims (4.4%). The literacy rate is 14.6% (Central Statistics Authority, 1999). The population is mainly dependent on agriculture and livestock keeping (92.4% of the inhabitants) (Alemayehu, 1997).

The place of our urban sample was the capital Gondar town, which is located at a distance of 747 km from the capital Addis Ababa. Emperor Fasiledes founded the town in 1636 as the capital of Ethiopia and the seat of the throne (Alemayehu, 1997). The rural sample was from Menzero village, a rural village about 50 km away from Gondar town and more than an hour's walk to the nearest health centre in Teda.

Today, as a result of immigration and natural growth, close to 80,000 Ethiopian Jews live in Israel, and only a handful from the Beta Israel community live in Ethiopia. The dramatic rescue of thousands of Ethiopian Jews from war, famine and oppression and their transportation by the Israeli air force to the "Promised Land" took place in two main waves: "Operation Moses" in 1984-5 (6,700 immigrants) and "Operation Solomon" in 1991 (over 14,000 immigrants). The remaining immigrants arrived during the 1980s and 1990s in a series of smaller waves (Kaplan and Rosen, 1994; Kaplan and Salamon, 1998).

Demographically, the Ethiopian community in Israel is comparatively young: more than 50% are aged eighteen or under. The community also contains a high percentage of both one-parent families (20.1%) and large households with four or more children (19.4%).

Attempts have been made to avoid settling too many Ethiopians in deprived areas. Yet, a relatively large number of Ethiopian families settled in towns such as Kiryat Malachi, Netivot and Ofakim, whose industrial base and educational systems are weak. Even within better-off municipalities, the Ethiopians often settled in underprivileged neighbourhoods. These trends have accentuated educational difficulties, reflected for instance by a

large number of young people who have either dropped out of school or whose attendance or other aspects of their behaviour have caused them to be defined as at risk. Ethiopian families also suffer from high rates of unemployment. Local surveys from 1995 and 1996 indicate that in some municipalities more than 30% of the households headed by an Ethiopian couple have no breadwinner. Among single parents this number is 85% or higher. The figures look somewhat better if we examine unemployment according to age and sex. Unemployment is higher among those aged 45 and above. The rates of unemployment among men aged 25-45 are similar to those of the rest of the Israeli population in the same settlements, which seems to indicate that the problem of unemployment is, at least in part, a consequence of their settlement in problem-ridden areas (Kaplan and Salamon, 1998).

The Israeli towns with over 1,000 Ethiopians are Haifa, Hadera, Netanya, Ashqelon, Rehovot, Ashdod, Ramle, Beer Sheva, Kiriat Malachi, Yavne, Afula, Kiryat Gat, Kiryat Yam and Lod (Kaplan and Salamon, 1998). The samples in Israel were taken solely from these cities.

## **1.2 Objectives and hypotheses**

Both in Ethiopia and in Israel, it is important to find a cost-effective way of responding to the needs of Ethiopian patients who apply to primary care clinics, seeking help for mental health problems. The first step for progressing in this direction is to develop a culturally sensitive psychiatric screening instrument, valid for Ethiopian populations. The existence of such an instrument should enable practitioners to detect those patients who suffer from a psychiatric illness, or at least sensitise them to the possible mental health problems at the root of the somatic complaints of their Ethiopian patients.

As mentioned above, narratives of illness and idioms of distress are rooted in the broader medical belief system of a particular culture. These systems are dynamic and may be influenced by "external" variables, such as exposure to a western bio-medical system. It is therefore important to examine to what degree the narratives of illness and idioms of distress of the Ethiopians are connected to (or influenced by) the level of exposure to the western bio-medical system (in this study called "acculturation"), and whether the validity of the instrument changes with this level of exposure.

In light of these problems and questions, the specific objectives of this study included the following:

1. The development of a screening instrument for mental health problems in Ethiopian populations.

2. The testing of the validity of this instrument in different Ethiopian populations.
3. The exploration and comparison of the idioms of distress, attitudes and beliefs regarding illness among Ethiopians at different levels of “acculturation” to scientific explanatory models of illness.
4. The sensitisation of the Ethiopian and Israeli primary health care workers to mental health problems among their Ethiopian patients, by training them in the use of the validated instrument.
5. The evaluation of the effectiveness of the instrument in screening for the presence of mental health problems within the primary care settings.

We hypothesised that:

1. It is possible to develop a simple culturally sensitive screening instrument for psychiatric illness that is valid for Ethiopian populations at different levels of exposure to western medicine (or levels of “acculturation”).
2. The level of exposure to the western bio-medical model affects illness behaviour and idioms of distress as expressed in the responses to the new instrument.
3. Among the Ethiopian populations there is, nevertheless, a core of attitudes and beliefs regarding illness experience and its expression that characterises Ethiopians, irrespective of the level of exposure to the western bio-medical model.

### **I.3 Methodology and elaboration of the research**

The study population consisted of Ethiopians – citizens of Ethiopia or Ethiopian Jews who emigrated to Israel – who were born in the Gondar region in Ethiopia, were Amharic speakers and were aged 18-55 at the time of the interview. The population was divided into four “acculturation groups” which were assumed to have been exposed differently to the western medical model: Ethiopian Jews who had emigrated to Israel before 1989, mainly during the “Moses operation”, Ethiopian Jews who had emigrated to Israel from 1989, mainly during the “Solomon operation”, and Ethiopians living in the Gondar region in Ethiopia – some in an urban and some in a rural setting. Each of these four groups was sub-divided into three groups according to the “level of care”, *i.e.* people from the general population who had not been in care during the three months that preceded the interview, patients in care in non-psychiatric setups (mainly primary care) and people in care in a psychiatric clinic who were not towards the end of their treatment.

The study sample included 356 interviewees, of whom 156 (43.8%) belonged to the general population sample, 134 (37.6%) were in care in a non-psychiatric clinic and 66 (18.6%) were in care in a psychiatric clinic. The distribution of the study sample according to level of care and acculturation group is shown in Table 1. Of the 356 interviewees, 167 (49.9%) were males and 189 (53.1%) females.

Table 1 Distribution of the study sample according to population group and level of care

Level of care	Rural Ethiopians		Urban Ethiopians		Ethiopian Jews from Solomon Operation		Ethiopian Jews from Moses Operation		Total	
	n	%	n	%	n	%	n	%	n	%
Not in care	40	40.8	40	41.2	32	45.7	44	48.3	156	43.8
In non-psychiatric care	40	40.8	40	41.2	26	37.2	28	30.8	134	37.6
In psychiatric care	18	18.4	17	17.5	12	17.1	19	20.9	66	18.6
Total	98	100	97	100	70	100	91	100	356	100

In this study we used five main instruments that were translated from English into Amharic by the Ethiopian team, back-translated into English in Israel, and pre-tested in both countries:

1. *Screening instruments* were used to choose the subjects according to the research criteria: in both Ethiopia and Israel one questionnaire for the general population, one for people in care in a primary care clinic, one for people in care in a specialist (non-psychiatric) outpatient clinic and one for people in care in a psychiatric clinic.
2. *The Self-Reporting Questionnaire for Ethiopians (SRQ-E)* which was based on the original 24-item SRQ with 20 items related to neurotic symptoms and four to psychotic ones. To these we added ten questions about the presence of symptoms which, on the basis of a preliminary study carried out by Youngmann and Minuchin-Itzigsohn (1993), reflected cultural idioms of distress which were typical of the Ethiopian-Amharic culture. A respondent was considered to be at a high risk of suffering from mental health problems if the total number of "yes" answers to the questions reached a given value (the cut-off point). To each SRQ-E question we added two probe questions, one about the meaning that the respondents attached to their response and the other one about what they thought was the cause of the symptoms. However, because asking these two questions would have made the interview too lengthy, it was decided to ask the probe questions only after those

questions to which the interviewee answered positively. The questions (the main questions and the probe questions) were read to the respondents by the interviewer and the responses were written down by the interviewers.

3. *The Brief Psychiatric Rating Scale in its expanded version (expanded BPRS)* (Lukoff *et al.*, 1986; Hafkenscheid, 1991, 1993) which is a questionnaire that allows a clinical assessment to be carried out of the interviewee's psychiatric status and results in a psychiatric diagnosis. In so far as the original BPRS has been carefully translated and used in a number of different countries, it also forms a standard basis for cross-cultural research in psychiatric diagnosis and treatment (Hedlund and Vieweg, 1980; Morlan and Tan, 1998).
4. The presence of psychopathology was determined according to the scores given by well-trained interviewers to the 24 BPRS questions. The original 7-point severity scale of each BPRS symptom was compressed in our study into a 3-point severity scale, according to the indications of the authors (Lukoff *et al.*, 1986). The three possible levels for the score of each question were: score 1 (lack of symptom); score 2 (sub-clinical symptom – medium severity); score 3 (pathological symptom – high severity). This simplification of the original BPRS rating was decided upon because of the relatively limited clinical experience of some of our interviewers, especially in Israel. An interviewee was considered a case if at least one of the 24 items was rated 3 (pathological).
5. *A socio-demographic questionnaire* which included, among others, data on sex, age, education level and, in Israel, year of immigration of each interviewee.
6. *An anthropological questionnaire* which was composed of both closed and open-ended questions (allowing free narratives) and was aimed at exploring the illness perceptions, illness circumstances and help-seeking behaviour of Ethiopian populations at different stages of acculturation to the western medicine.

The interviewers in Israel were mainly Ethiopian Jewish social workers, while those in Ethiopia were medical doctors and a psychiatric nurse. All the interviews were conducted in Amharic, at the interviewees' house or at the clinic itself, and lasted for about two hours each.

A pilot study first involved 16 interviewees in each country in order to check the optimal working conditions in the clinics and improve the Amharic translation of the questionnaires by checking the understanding of the questions by the interviewees.

We then tried to establish the validity of each of the SRQ-E items which had eventually been re-translated and established six criteria for excluding questions from the questionnaire (see Section II.3).

After exclusion of the invalid or repetitive questions, we were left with a 29-item questionnaire: the Falk Self-reporting Questionnaire (SRQ-F) named after the institute which initiated and co-implemented this study. We then checked the validity of the SRQ-F. First, we checked its construct validity – a comparison of the mean scores of the SRQ-F among the three “level of care groups” and a comparison of the probability of suffering from psychopathology according to the SRQ-F among these three groups. Second, we checked its criterion validity, *i.e.* the degree to which it correlates with a “gold standard” (in our case the BPRS). We then looked at changes in illness behaviour due to “acculturation”.

Finally, having developed a valid psychiatric screening instrument for Ethiopian populations, we tried to sensitise Ethiopian and Israeli primary health workers to detect psychological disorders among their Ethiopian clients, by training them in the use of the SRQ-F. The effect of this training was evaluated by comparing the correlation between the presence of psychopathology according to the SRQ-F and the indication of mental health problems by the general practitioners, before and after the training.

#### **I.4 Theoretical orientation**

Kleinman (1980) suggested that culture affects the clinical reality of mental illness (*i.e.* the cognitive construction of reality in the clinical setting) in five ways: through subjective experience, idioms of distress, diagnosis, treatment and treatment outcome. Some theoretical clarifications on these subjects will be given below.

##### *“Illness” and “Disease”*

Concerning the culture-based subjective experience, the distinction of Kleinman (1988) between illness and disease can be very useful. According to his definition, the term “*illness*” refers to the patient’s subjective experience of being sick, the experience of the symptoms, of suffering, help seeking, social stigma, explanations of the causes, perceived diagnosis and prognosis, as well as personal consequences in family life and occupation. In contrast, the term “*disease*” refers to the clinician definition or diagnosis of the patient’s problem. The disease diagnosis is always taken from the paradigm in which the clinician was trained, *e.g.* the bio-medical model, the more traditional model, etc.



### *Idioms of distress*

One of the ways in which culture affects the clinical reality of mental illness is through the culture-based idioms of distress (Kleinman, 1980). Idioms of distress are the ways in which people tend to express that they are ill. They can include cognitive emphasis on certain symptoms while ignoring others and physical actions such as looking for clinical care, mannerism and figures of speech (Castillo, 1997).

A western patient who suffers from depression will generally complain of sadness, an-hedonism (chronic pleasure freeze), sleeping and appetite disorders, concentration difficulties, etc. An Ethiopian patient, on the other hand, will instead complain about headaches, weakness and crawling or burning sensation in his stomach.

### *Explanatory models*

Mental illnesses acquire their meaning through the explanatory model (Kleinman, 1988). This refers to the way that culture schemes explain the cause of mental illness. These meanings affect the experience of people with mental illness and in many ways structure the subjective illness experience (Castillo, 1997).

Thus, a western patient might perceive his depression as a biological problem, such as a chronic disease in the brain, and might seek help from a psychiatrist who can give him medications or electro-convulsive therapy, in order to balance the chemical processes in his brain. A similar experience, which would be considered as a major depression by a western physician, might be perceived by an Indian patient as a case of *dhat* (caused by semen loss). This patient will feel guilty about “loosing” too much semen and will seek a traditional healer who will heal him by issuing strict instructions about sexual abstinence. Finally an Ethiopian patient might consider his experience of depression as a case of spirit possessing (Giel, Gezahegn and van Luijk, 1968). The Ethiopian explanatory model defines health as a state of equilibrium between the physiological, spiritual, cosmological, ecological and social forces surrounding man. As in other traditional society cultures, well-being is considered to be secured and maintained mainly by a peaceful relationship with the supernatural world. In the Amhara culture, there are guardian spirits known as *Wukabe*, *Kole* or *Adhar*, who are believed to protect the well-being of individuals and the community. According to the traditional Ethiopian explanatory model, most diseases are caused by supernatural forces. Thus, healing is generally sought from traditional healers who will treat the supernatural cause of ailment, rather than from



modern physicians whose treatments are viewed as relating only to the symptoms (Alem *et al.*, 1999).

### *Cultural diagnosis and diagnostic ethnocentrism*

It is clear that both the patient and the clinician hold their own cultural explanatory model, their own cognitive constructions of illness and disease, and relate to cultural-based idioms of distress in their interaction. The culture-based diagnosis refers mainly to the fact that the way clinicians (western as well as non-western) assess and diagnose a problem is consistent with their own culture.

If the client and the clinician are from the same culture, they will usually agree on the nature of the illness and its cause (Castillo, 1997). Ignorance of the patient's cultural medical belief system and idioms can lead the clinician to what is known as "diagnostic ethnocentrism", *i.e.* problems in assessment and diagnosis stemming from different cultural frames of reference. The physician can for instance interpret a certain set of behaviours as symptoms of (severe) psychopathology while, in the patient culture, these behaviours have certain non-pathological meanings and are not considered as an indication of (severe) psychopathology. This is the case, for instance, when people hear voices of their dead ancestors in non-western societies, where the spirits of the dead ancestors are consulted regularly on any important decision. Yet, the typical western diagnostic interview conceptualises hearing voices as a symptom of psychosis. In some societies such as India, Kenya and China, people who report symptoms such as somatic symptoms that are associated with major depression in the West, do not consider themselves to be depressed. It is a category fallacy to count these as cases of depression equivalent to western depression (Castillo, 1997). In the Swat Pukhtun tribe (in northern Pakistan), where the social environment is harsh and competitive and individuals are completely ruthless in the pursuit of personal power and health, the symptoms of antisocial personality disorder and narcissistic personality disorder appear to be the norm, rather than the exception (Lindholm, 1997). Also some syndromes exist only in certain cultures – the culture-bound syndromes (Levine and Gaw, 1995). Some of them are included in the appendix of DSM-IV-TR (APA, 2000), like the Zar syndrome in Ethiopia, Somalia, Egypt, Sudan and other North Africa and Middle Eastern societies, the Dhat syndrome in India and the Susto syndrome in Latin America.

The more common misdiagnoses occur when a non-western patient uses typical cultural somatic metaphors, or idioms of distress, in order to

communicate about his mental or emotional problems with western-oriented physicians, who are not familiar with the cultural meanings of these expressions (Kirmayer and Young, 1998).

In the case of the SRQ, WHO experts who developed the tool as a screening instrument for psychiatric disturbances in primary health care settings, especially in developing countries (Harding *et al.*, 1980, 1983), did not take into account that the illness concepts being used in the questionnaire were basically taken from western cultural schemes. It turns out that some of these illness concepts do not exist in other cultures and, if they do exist, they may have a different meaning or cultural significance, as has been found, for instance, in Guinea Bissau, West Africa and Ethiopia (De Jong, 1987; Kortmann and Ten Horn, 1988). In Ethiopia, for example, crying more often than usual is not necessarily a symptom of depression (Kortmann, 1987).

In order for an instrument such as the SRQ to gain validity in cross-cultural settings, the tool needs to be based on concepts from the indigenous cultural schemas. This usually requires a thorough translation and back translation of western psychiatric instruments, as well as ethnographic research aimed to discover indigenous illness categories, symptoms and idioms of distress, which will be integrated into the instrument.

## II. Results

### II.1 General characteristics of the study population

The distribution of the study population by age, number of education years in a modern school, population group and level of care group for males and females is shown in Table 2. No significant difference between the sexes was found in the distribution by age, population group and level of care. Women were found to have fewer years of education years than men.

Table 2 Distribution of the sample population according to different demographic variables

Variables	Males		Females		Total	
	n	%	n	%	n	%
- Age (years)						
18 – 25	62	37.3	63	33.3	125	35.2
26 – 40	75	45.2	91	48.2	166	46.8
41 – 59	29	17.5	35	18.5	64	18.0
Total	166	100.0	189	100.0	355	100.0
- Education (years)						
0	60	36.6	96	51.9	156	44.7
1 – 8	45	27.4	38	20.5	83	23.8
9+	59	36.0	51	27.6	110	31.5
Total	164	100.0	185	100.0	349	100.0
- Population group						
Rural Ethiopians	50	29.9	48	25.4	98	27.5
Urban Ethiopians	45	26.9	52	27.5	97	27.2
Ethiopian Jews from the Solomon Operation	38	22.8	53	28.0	91	25.6
Ethiopian Jews from the Moses Operation	34	20.4	36	19.1	70	19.7
Total	167	100.0	189	100.0	356	100.0
- Level of care group						
General population not in care	80	47.9	76	40.2	156	43.8
In non-psychiatric care	60	35.9	74	39.2	134	37.6
In psychiatric care	27	16.2	39	20.6	66	18.6
Total	167	100.0	189	100.0	356	100.0

## **II.2 Increasing the validity of the Self-Reporting Questionnaire for Ethiopians (SRQ-E) by changing the Amharic translation of its questions**

Theoretically, each question should be easily and clearly understood by all interviewees, both in Ethiopia and in Israel, whatever their level of education. We asked two probe questions for each of the 34 SRQ-E items, in order to check the understanding of the questions by the interviewee. The answers to the probe questions were analysed by independent clinicians in both Ethiopia and Israel, in order to check the understanding of the questions by the people interviewed in the pilot study, and the few cases of disagreement were discussed until an agreement was reached.

If an item was repeatedly misunderstood, we tried to understand the reason for the problem and this enabled us to re-translate the item into Amharic. This was done for 12 items from the original (24 items) SRQ. Three examples are given below:

“Is your appetite poor?”

The Amharic translation of the adjective “poor” means “low”, which is less dramatic than the original term. We used another adjective in Amharic, which means “reduced very much”.

“Do you cry more than usual?”

The Amharic translation of the verb “cry” was associated with crying in funerals. We used another term in Amharic (*emba emba*), which is associated with tears as a result of personal deep sorrow.

“Are you a much more important person than most people think?”

The Amharic translation of “much more important” (*tafelagi*) was associated with “more wanted” or “more needed”. We used another Amharic term (*teleksew*), which means a “very important person”.

## **II.3 Developing a new screening instrument: the SRQ-F**

### *II.3.1 Checking the validity of the SRQ-E questions*

We also examined the validity of each of the questions, using six exclusion criteria for considering a question as not being valid. These exclusion criteria referred to a lack of content validity, repetition, a lack of construct validity (two measurements) and a lack of criterion validity (two measurements).

*a. Items lacking content validity*

Questions that were not well understood were considered as lacking content validity. This could be the case for two reasons: either the interviewee did not understand the question at all or (s)he seemed to understand it but the positive response referred to non-pathological situations, because of the cultural-specific meaning of certain situations. For instance the question “Are you a much more important person than most people think?” was aimed at detecting delusions of grandiosity, but some people gave a positive response because they invested in their own future in order to be able to support their parents (which is considered highly praiseworthy), without others knowing about this.

In the cases when the interviewee him/herself changed his/her affirmative answer to the probe questions to a negative answer afterwards, the positive answer was also counted as invalid since the probe questions are not part of the instrument as used in the field.

Since probe questions were asked only for those SRQ-E items to which a positive answer was given, we could calculate only the percentage of positive answers that were invalid, and not the percentage of invalid negative answers. It was decided that an item would meet the exclusion criterion when more than 20% of the positive answers to this item were invalid. In addition, spontaneous comments to negative answers could indicate other cultural or language misunderstandings as well. For instance in the case of a question about the difficulty to make decisions, interviewees gave a negative answer and explained that they were not in a social position to allow them to take decisions.

These misunderstandings, however, differed from interviewee to interviewee and therefore had no implications for the translation of the SRQ-E items.

*b. Repetitive items*

Several SRQ-E items seemed fairly similar:

“Do you have trouble thinking clearly?” (item 8) and  
“Have you noticed any interference or anything else unusual with your thinking?” (item 23);

“Do you feel tired all the time?”(item18) and  
“Are you easily tired?” (item 20);

“Do you easily get angry at other people?” (item 25) and  
“Do you have difficulty in controlling your temper?” (item 26) and  
“Do you feel inclined to injure, hurt or fight with someone else?” (item 27);

“Do you feel that somebody has been trying to harm you in some way?”  
(Item 21) and

“Do you feel that someone has insulted or humiliated you?” (Item 29) and  
“Do you feel that someone has cursed you?” (Item 30).

We decided that an item would meet the exclusion criterion if all interviewees giving a positive answer to this item also answered also “yes” to at least one of the other apparently repetitive items. Only item 27 fulfilled this criterion.

*c. Items lacking construct validity*

Each question of the instrument was intended to help differentiate between people who were physically and emotionally ill. The construct validity refers to how well the item measures the underlying dimension of mental illness. This is appraised by seeing whether there are associations between the answer to the item and other variables that should be linked with the characteristic under study, *viz.* mental illness. Two proxy variables were used to this end: the “level of care” and the diagnosis given by the caregiver.

*The level of care*

The probability of suffering from psychopathology is obviously higher among people in care in a psychiatric clinic than among people in care in a non-psychiatric clinic, and higher among the latter than among people in the community who are not currently in care. There may of course be non-psychiatric patients who visit a psychiatric clinic, although this is probably very rare. What occurs more frequently is that patients who are mentally ill go to a general outpatient clinic. This can happen for one of the following reasons:

- the illness is not too severe (in particular not psychotic);
- no psychiatric clinic is readily available and/or going to it is stigmatising;
- the patient suffers from both physical disease and emotional disorder, whichever is the cause of the other.

For each question, the proportion of cases with a positive score should therefore be higher in the psychiatric clinics. For each item of the SRQ-E

we checked whether there was a significant difference between the proportion of interviewees giving a positive response to this item among people in care in psychiatric clinics, in outpatient non-psychiatric clinics and in the general population. The items for which the proportion of interviewees giving a positive response was not significantly higher among the people in care in psychiatric clinics than among those in care in non-psychiatric clinics (one-sided Fisher test,  $p>0.05$ ) were considered as meeting the exclusion criterion.

#### *The diagnosis given by the caregiver*

In each setting, the caregiver had to indicate whether the patient was suffering from somatic symptoms related to a physical disease, unexplained somatic symptoms, somatic symptoms related to mental problems, only mental symptoms or no symptoms at all. Although we assume that the primary care physicians might be unaware of the mental origin of somatic symptoms and often do not detect mental symptoms (which was the reason for developing our SRQ instrument), it is nevertheless legitimate to assume that the probability of being a mental patient is higher when the caregiver indicates “somatic symptoms related to mental problems” or “only mental symptoms” than when he indicates “somatic symptoms related to a physical disease”. Therefore, for each item of the SRQ-E, the proportion of interviewees giving a positive answer to this item should be significantly higher in the first group. The items for which this condition was not fulfilled (one-sided Fisher test,  $p>0.05$ ) and/or for which the percentage of affirmative answers was lower in the first group, were considered as meeting the exclusion criterion.

#### *d. Items lacking criterion validity*

We chose the Brief Psychiatric Rating Scale (BPRS) as our criterion (or “gold standard”) for diagnosing the people suffering from psychopathology. It was decided that an item of the SRQ-E would meet the exclusion criterion if the percentage of interviewees giving a positive response to this item was not significantly higher among the “mentally ill” than among the “healthy” according to the BPRS (one-sided Fisher test,  $p>0.05$ ).

Item 1 of the BPRS, which deals with somatisation, was excluded from the analysis as almost all the subjects were rated 2 or 3 on this item. As indicated above, an interviewee was considered a case if at least one BPRS item was rated 3 (pathological). As we suggest that the validated version of the SRQ-E be used for detecting the presence of emotional distress and not only psychopathology, the same analysis was also carried out when the

criterion of not being a case was at least one BPRS item with a score of 3, or two items with a score of 2 (excluding BPRS item 1).

### *II.3.2 Building and checking the validity of the SRQ-F*

A check of the validity of each item based on the criteria above resulted in the exclusion of five items (out of 34), resulting in a 29-item questionnaire, the SRQ-F (*cf.* Appendix 3). The internal consistency (Alpha Cronbach) of the SRQ-F was found to be very good (92%). The validity of the SRQ-F was tested in the whole sample as well as in each country separately. Both the construct validity and criterion validity were found to be excellent; in each subgroup, the mean SRQ-F score was found to be significantly higher among respondents positive on the BPRS than among those negative on the BPRS. The SRQ-F is intended to be used mainly as a screening tool for detecting people potentially suffering from psychopathology, for eventual further referral to mental health counselling. It is therefore important that the referring services neither over-refer (low specificity) nor under-refer (low sensitivity). The cut-off point, *i.e.* the value of the SRQ-F score at or above which a subject can be considered mentally ill, was thus chosen as the SRQ-F score which gave the highest sensitivity and specificity when both are as close as possible to each other, which corresponds to a cut-off point of 7-8. For a cut-off score of 7, the sensitivity is 90% and the specificity 83%. The cut-off point was almost similar in both countries (8 for Ethiopia and 7 for Israel).

## **II.4 The advantages of the SRQ-F over the original SRQ**

### *II.4.1 Comparison of the validity of both questionnaires*

The first alteration we made in the original SRQ was to change the Amharic translation of twelve questions so that they became more understandable and would more accurately reflect the concepts behind the questions. This undoubtedly increased the validity of the instrument, but we do not know exactly by how much, since in the present study we did not administer the SRQ in its original Amharic translation. The only thing we could do was to compare the sensitivity and the specificity<sup>1</sup> of the 24-item SRQ in its original translation, as reported by others, to those of the 24-item SRQ in our new translation. Using the new Amharic translation of the SRQ in our

<sup>1</sup> Sensitivity refers to the proportion of people with psychopathology who have an SRQ score equal to or above the cut-off point, while specificity refers to the proportion of people without psychopathology who have an SRQ score below the cut-off point.



study, we found a sensitivity of 89% and a specificity of 80% for the whole population. Breaking down the population by level of care, sensitivity and specificity applied to 85% and 71% of patients in care in non-psychiatric clinics respectively, 91% and 85% in the psychiatric group, and 86% and 92% in the general population, for a cut-off point of 7/8. These numbers are significantly higher than those published by other authors. Kortmann and ten Horn (1988), for example, applied the original translation in a similar study among Ethiopians and found a sensitivity and specificity of 75% and 55% respectively among patients in care in non-psychiatric clinics, 90% and 22% in the psychiatric group and 0% and 100% in the general population, for a cut-off point of 8/9. This clearly indicates that the changes in translation significantly improved the validity of the SRQ for Ethiopian populations.

We also compared the validity (both criterion validity and construct validity) of the SRQ-F versus that of the original SRQ in its new translation, thus measuring the effect of taking out questions and adding others which are typical Ethiopian idioms of distress. Comparing the criterion validity of the SRQ-F and the validity of the new (retranslated) SRQ version, we found that the sensitivity and specificity of the SRQ-F were slightly better. However, when we compared the SRQ-F and the SRQ scores of the people in non-psychiatric care versus the general population; of the people in psychiatric care versus non-psychiatric care and of the people in psychiatric care versus the general population, we found that the SRQ-F distinguishes somewhat better between these population groups. This means that the SRQ-F is more able than the SRQ (even after translation changes) to differentiate between Ethiopians who suffer from psychopathology and those who do not.

#### *II.4.2 The potential utility of the SRQ-F*

Among the patients in care in the primary care clinics and who were diagnosed by the BPRS as suffering from psychopathology, only 6.9% were diagnosed by the general practitioners as suffering from emotional problems (4.5% in Ethiopia and 14.3% in Israel). The proportion would have been even smaller if the general practitioners had indicated only those people to whom a psychiatric diagnosis applied. Had they used the SRQ-F (cut-off point 7), they would have diagnosed psychopathology in 89.5% of the patients with psychopathology according to the BPRS (90.9% in Ethiopia and 72.7% in Israel). The use of the instrument by the general practitioners should therefore help considerably with the detection of psychopathology among people who approach primary clinics for care in both countries and in particular in Ethiopia.

## II.5 Changes in illness behaviour due to “acculturation”

In the current study, acculturation was defined as the level of exposure to the western bio-medical system. One of our assumptions was that people at different levels of “acculturation” are different in their illness behaviour as represented, *inter alia*, by idioms of distress, although there remains a core of attitudes and beliefs regarding illness that remain unchanged. We checked this assumption in the three following ways. Among people at different levels of acculturation, we compared (i) the criterion validity of the SRQ-F; (ii) the “idioms of distress”; and (iii) the attitudes regarding uvula removal.

### *Criterion validity*

The analysis of the validity of the SRQ-F in the four acculturation groups showed that the SRQ-F is valid for Amharic-speaking Ethiopians from the Gondar region at different levels of acculturation. In other words, Ethiopians who apply for medical help or who are dealing with a stressful situation, commonly use the same idioms of distress (SRQ-F items) to express their suffering. This could indicate that the illness experience and its expression remain stable, irrespective of the level of exposure to the western bio-medical system. Similar results were found among other ethnic minorities who emigrated to Israel (Minuchin-Itzigssohn *et al.*, 1984; Pliskin, 1987).

### *Idioms of distress*

However, we have seen that there are a few differences between the groups. While the mean SRQ-F score of the general population is similar in the four acculturation groups, the mean SRQ-F score of the patients in non-psychiatric care and the mean SRQ-F score of the patients in psychiatric care seem to be inversely related to the level of acculturation, with the people in rural Ethiopia having the highest scores (Table 3). The main difference is between Ethiopia and Israel, with all the mean scores being lower in Israel.

The following possible explanations can be considered:

1. The Ethiopians from Ethiopia answer positively to more items of the SRQ-F for a given level of psychopathology because they are less exposed to scientific medical explanations and thus express their mental problems more traditionally and/or because they were interviewed by medical doctors and tended to answer positively to more questions because they hoped to get a secondary benefit from their interview by the doctors.

Table 3 Mean SRQ-F scores by population groups and level of care

Level of care	Rural Ethiopians	Urban Ethiopians	Ethiopian Jews from the Solomon Operation	Ethiopian Jews from the Moses Operation	Total	P
General population	2.80	3.50	2.23	1.78	2.61	0.192
In non-psychiatric care	9.24	6.57	5.25	5.52	6.89	0.008
In psychiatric care	17.00	15.21	10.55	10.25	13.45	0.010

P = Statistical significance of the difference in the mean SRQ-F of the four population groups, within each level of care.

## 2. The patients who turn to the clinics are actually sicker in Ethiopia than in Israel.

According to the second explanation, one would expect the cut-off point of the SRQ-F to be the same in Ethiopia and in Israel. In contrast, according to the first explanation, where the Ethiopians from Ethiopia answer positively to more items of the SRQ-F for a given level of psychopathology, the cut-off point would be higher in Ethiopia than in Israel. We have shown that, according to the BPRS, there is a trend for more psychopathology in Ethiopia, significantly so in the psychiatric clinics, perhaps because there are less psychotropic drugs available in Ethiopia. We also found that the cut-off point is higher, but only slightly, in Ethiopia (8) than in Israel (7) for a criterion of equal sensitivity and specificity, which leaves the two possible alternative hypotheses.

We also observed that the relative frequency of positive answers to some SRQ-F items is different in the four acculturation groups. This variability appeared to be greater among the mentally ill than among the others. Assuming that the distribution of the mental diseases was similar in the four groups (the psychotics had been excluded from the analysis), it seems therefore that the idioms of distress are influenced more by the level of acculturation among the mentally ill than among the others.

Another, even more interesting, difference is that respondents from Ethiopia and Israel varied in the meaning they gave to the same idiom of distress. We observed in particular a slight tendency of Ethiopians in Israel to interpret the SRQ-F items in a way that is more closely linked to western medicine. This phenomenon is further supported by differences in the validity of the SRQ-F among Ethiopian Jews from the "Moses Operation" and the "Solomon Operation". The validity of the SRQ-F tends to be lower among those who stay longer in Israel than among the more recent immigrants. This might indicate that there is a tendency among the more veteran Ethiopian Jews in Israel to use less somatic or culturally-specific

idioms as an expression of distress. This finding suggests that veteran Ethiopian Jews in Israel started to use more psychological or emotional expressions, as is common among other Israelis. This is consistent with a process of adaptation.

*Attitudes regarding uvula removal*

In the present study, acculturation was defined by the level of exposure to western medicine, implying that a higher level of exposure to western medicine might lead to changes in the medical explanatory models. It is known that, in Ethiopia, the traditional beliefs and practices regarding health and illness are similar in Ethiopian Jews and other Ethiopians (Hodes and Teferedegne, 1996; Hodes, 1997). We compared one of these beliefs in the four acculturation groups. It is well known that in the traditional Ethiopian medical culture, the belief is widespread that the removal of the uvula is a way of preventing throat disease among young children. Hence, evaluating the differences in attitude towards uvula removal might give us a clue as to the changes that occur in the Ethiopian medical belief system after exposure to western medicine.

We compared the attitude towards uvula removal in the four acculturation groups (rural population in Ethiopia, urban population in Ethiopia, Ethiopian Jewish immigrants arrived before 1988 – mainly in the Solomon Operation in 1984 – and Ethiopian Jewish immigrants who arrived after 1989 – mainly in the Moses Operation in 1991). The percentage of people who thought the uvula of a young child should be removed was 88% of the rural sample in Ethiopia, 35% of the urban sample in Ethiopia, 43% of the Solomon Operation sample in Israel and 42% of the Moses Operation sample in Israel. Thus there is a significant difference ( $p = 0.000$ ) between the four groups, the “rural” sample having the most positive attitude towards uvula removal (the traditional attitude). The attitude of the urban respondents in Ethiopia was not found to be more traditional than that of the two Israeli samples. A study carried out in rural Gondar (Dagnew and Damena, 1990) found similar results: 99% of the people surveyed believed the uvula removal is protective, and thus 86% of the children had undergone uvulectomy. Both in Ethiopia and Israel, the traditional attitude was positively correlated with age and negatively correlated with education and women expressed more traditional attitudes than men. The effect of age and the effect of gender were found to be explained by differences in education.<sup>2</sup>

28 <sup>2</sup> This was determined on the basis of a logistic regression analysis.

Differences in level of education between the four acculturation groups, however, cannot explain the differences in attitude towards uvula removal, since this attitude remained significantly correlated with the “level of acculturation” and in the same direction after checking the level of education.<sup>2</sup>

The very fact that the attitude towards uvulectomy in the Israeli samples is close to that of the urban sample, even though most of the immigrants to Israel are former peasants, may reflect the influence of exposure to western medicine. The similarity between the two immigrant groups in the attitude towards uvulectomy in spite of differences in length of stay in Israel, may reflect the fact that the more recent immigrants, and only they, had stayed for a long period in Addis before emigration, where they were taken care of by a western team of the American Joint Distribution Committee (Hodes and Teferedegne, 1996). The similarity between the Israelis and the urban Ethiopians, in spite of lower exposure to western medicine in Gondar, might indicate that the changes in the attitude reflect both the length and intensity of exposure to western medicine.

The fact that 42% of the respondents in Israel still acknowledge a traditional attitude towards uvulectomy might also be explained by the immigration of almost the entire community to Israel, along with its traditional leaders and healers, who support the traditional practices (Nudelman, 1998; 1993).

Thus, we have shown that the Ethiopian immigrants actually use the same idioms as the rural and urban samples from Ethiopia. Nevertheless we observed a slight tendency towards using more emotional expressions. Apparently, a very slow process of change occurs in the use of the idioms of distress, in parallel with the changes in the medical beliefs, towards a certain “Westernisation”.

## **II.6 The effectiveness of the SRQ-F in general practitioners’ screening for mental disorders**

### *II.6.1 Measuring the effectiveness of the SRQ-F in screening for mental health problems*

Having obtained a valid screening instrument – the SRQ-F – and determined the cut-off point to identify patients with mental health problems, we turned to the application of the instrument. Our first goal was to sensitise Ethiopian and Israeli primary health workers in order to detect psychological distress among their Ethiopian clients, by training them in the use of the SRQ-F. Our second goal was to evaluate the effectiveness of

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the new instrument in general practitioners' screening for the presence of mental disorders in primary care clinics. Box 1 describes how this was set up.

**Box 1 Evaluating the effectiveness of the SRQ-F in general practitioners' screening for mental disorders**

The evaluation was carried out on seven general practitioners working in two different primary care clinics in Addis Ababa, Ethiopia, and seven general practitioners working in three different primary care clinics in two different cities in Israel (two in Yavneh and one in Hadera). In Addis, 300 patients were interviewed (160 before general practitioners' training and 140 after their training), all of them consecutive patients applying for treatment in the above primary care clinics. In Israel 303 patients were interviewed (153 before and 150 after general practitioners' training), sampled in the same way as in Ethiopia. All the patients were Amharic speakers, aged 18-55.

In Ethiopia the interviewers were medical doctors working at Emanuel Hospital (most of whom participated in the first phase of the research). In Israel the interviewers were Ethiopian immigrants, some of whom were university students, while others were former teachers in Ethiopia. All the interviewers were given a one-day intensive training seminar on the use of the instruments, using role-play under the supervision of the principal investigators.

The three instruments used were the SRQ-F; a "personal data form" or questionnaire asking each interviewee his/her place of birth, family status, education, profession and occupation; and a "clinical form" asking the general practitioners some questions about the patients: the nature of the presenting symptoms, the degree of their severity, the details about the diagnosis; and recommendations for further treatment.

The patients were interviewed in Amharic in the primary care clinics, before they were seen by the general practitioners. The interviews lasted about ten minutes. After the patient's visit, the general practitioners completed the questionnaire about the diagnosis (see above). The study procedure included four stages:

- *A pilot study* at the beginning of this second phase of our research with ten patients in each country, in order to check whether the questions were easily understood by both interviewees and general practitioners.
- *Stage A* during which consecutive patients were interviewed with the SRQ-F and the "personal data form" shortly before the general practitioners took care of them. Then the general practitioners completed the "clinical form" for these patients.
- *Training the general practitioners* who participated in stage A, along with other primary care workers from their clinics (and other clinics as well) in a one-day training seminar. Topics dealt with in the seminar covered the prevalence of emotional problems in primary care and the importance of detecting them, psychiatric symptomatology and diagnostic categories, general principles of management of psychological problems: screening with the SRQ-F, diagnosis and case management. The training in Ethiopia was conducted by the Ethiopian team and in Israel, by the Israeli team along with the Ethiopian principal investigator. The general practitioners who participated in stage A and in the training seminar were requested to obligate themselves to use the SRQ-F over the following three weeks, in order to "internalise" the tool and the relevant dimensions for detecting mental disorder.
- *Stage B* which repeated the same procedure as in Stage A about three weeks later with the general practitioners who participated in stage A and in the training. Consecutive patients were interviewed with the SRQ-F and the "personal data form" and the general practitioners completed the "clinical form".

To evaluate the effectiveness of the new instrument in screening for the presence of mental disorders in primary care clinics, we compared the detection rate of mental problems by the general practitioners before and after the training seminars. The detection rate refers to the proportion of Ethiopian patients for whom the general practitioners indicated the presence of mental health problems, among those patients with psychopathology according to the SRQ-F (*i.e.* with an SRQ-F score superior to the cut-off point of 7).

Table 4 presents the results in Ethiopia and in Israel. Both before and after the training, the general practitioners rarely diagnose patients as suffering from mental problems who, according to the SRQ-F, are mentally healthy (5 to 6% false positives). In contrast, the percentage of false negatives (*i.e.* the percentage of patients who according to the SRQ-F suffer from mental problems but were diagnosed by the general practitioners as mentally healthy) is very high both before and after the training. In Ethiopia it was 94% before the training and decreased to 90% after the training. In Israel it was lower: 78% before the training, but no decrease was observed after the training. We will discuss these results in the next subsection.

Table 4 Comparison of the detection of mental disorders according to the SRQ-F and according to the general practitioner's evaluation, before and after their training in the use of the SRQ-F, in Ethiopia and Israel

Presence of mental disorders according to the SRQ-F	Presence of mental disorders according to the general practitioners in Ethiopia				Presence of mental disorders according to the general practitioners in Israel			
	Pre-seminar		Post-seminar		Pre-seminar		Post-seminar	
	-	+	-	+	-	+	-	+
-	94.8	5.2	94.3	5.7	94.2	5.8	94.6	6.4
+	93.8	6.3	90.4	9.6	77.6	22.4	82.1	17.9

- = Absence of mental disorders.

+ = Presence of mental disorders.

The table shows the percentage of those people who were considered by the general practitioners as not suffering (-) or as suffering (+) from mental problems, among the patients without mental disorders (first line) or with mental disorders (second line) according to the SRQ-F (cut-off point 7). The percentages refer to patients examined by the general practitioners before the training seminar ("Pre-seminar") and to other patients examined after the seminar ("Post-seminar").

### II.6.2 *Discussing the effectiveness of the SRQ-F in screening for mental disorders*

As described above, we did not find any significant change in the general practitioners' ability to detect mental disorders among Ethiopian patients who seek help in primary care clinics after their participation in our training seminar on the use of the SRQ-F. This result was fairly surprising in view of the positive feedback we obtained from the doctors after the training.

In Ethiopia, however, Phase B (measurement after training) was carried out only one day after the general practitioners finished their seminar training in the use of the SRQ-F, while it was planned to take place about three weeks later. Thus, it is not clear whether they used the instrument to evaluate the nature of the symptoms in their patients. In any case, they had not gained any practice in the use of the instrument before being evaluated. In Israel the evaluation of the effectiveness was carried out at least three weeks after the general practitioners' training took place, so theoretically the general practitioners could have internalised the concepts behind the SRQ-F and gained some experience in using it. In order to find out what happened, we interviewed the Israeli general practitioners who participated in the training seminar. They emphasised the importance of the training seminar and the potential benefit of using the SRQ-F as a screening tool for psychiatric disorders. They repeatedly told us that the seminar sensitised them to the emotional problems of their Ethiopian patients. Several physicians, however, acknowledged the difficulty of changing their clinical working routines with patients, especially when the schedules are so busy. They claimed that they are overwhelmed by their heavy daily duties, which leave them with approximately ten minutes for each patient. Therefore they had no opportunity to use the SRQ-F with their Ethiopian patients. Thus, the results do not necessarily mean that the SRQ-F does not help in detecting mental health problems among Ethiopian patients who apply for help at primary clinics.

At this stage it is worthwhile recalling the abundance of literature about the poor effects of intensive education programmes or seminars on changing physicians' daily practice, and the gap between the enthusiasm of the general practitioners about the training and the actual implementation of the programmes. For example, Rosser and Palmer (1993) reported that approximately six months after the dissemination of guidelines on screening and managing hyper-cholesterolemia, 78% of the primary care physicians surveyed stated that they followed the guidelines, but specific questions revealed that as few as 5% of respondents actually adhered to the guidelines. In the psychiatric field, Lin *et al.* (1997) examined whether



physician education over a 12-month period has enduring effects on the treatment of depression, to find out that no lasting educational effect was observed in any of the outcome measures. Tiemens *et al.* (1999) developed a comprehensive, 20-hour training programme for primary-care physicians, which sought to improve their ability to detect, diagnose and manage depression. The authors evaluated the effects of physician training on patient outcomes, using a pre-post design. The results indicate that the training only had an effect on a short-term outcome, particularly for patients who had recently become depressed. A 1-year follow-up revealed that all the training effects had faded away.

It has also been shown that, in order to be effective, a programme requires practice-based reinforcing strategies and reminders in addition to specific instructions (Wensing and Grol, 1994; Davies *et al.*, 1995). An important point is that the recommendations to the general practitioners during the training which are more likely to be implemented are those which are less complex and require minimal additional effort on the part of physicians (Grilli and Lomas, 1994).

In line with these recommendations, we plan to adopt a suggestion made by some of the trained doctors in order to use the SRQ-F effectively in the clinics. In Israel, a successful start has been made to implementing a project that employs Ethiopian mediators in the primary care clinics on a regular basis in several clinics countrywide (Nirel *et al.*, 2000). The general practitioners' suggestion was that the SRQ-F should be administered to the patients not by the physicians themselves but by a mediator. In the event that the SRQ-F score was above the cutting point, the mediator would give the filled SRQ-F to the general practitioner, thus allowing him/her to carry out a better assessment and consequently provide better treatment without needing significant additional time for the visits or any drastic change in the routine work. This new setup would therefore allow the use of the SRQ-F to be integrated into the daily work of the primary health clinics, thus giving the general practitioners the equivalent of a practice-based programme that translates the guidelines into local action.

A pilot project, using an Ethiopian mediator who works on a regular basis in a primary care clinic and administers the SRQ-F, has actually been implemented successfully in one of the main clinics in Beer Sheva, to the satisfaction of the patients and the staff. It is possible that, in Ethiopia too, the primary care physicians and the patients might benefit similarly if the SRQ-F was implemented by paramedical workers who have been trained in the use of the SRQ-F. This type of implementation could enable doctors to utilise the SRQ-F to its fullest potential. It would allow them to

detect about 85% of the patients suffering from psychopathology (the sensitivity of the SRQ-F), as opposed to a detection rate of only 7% without using the SRQ-F.

## II.7 Conclusions

The Ethiopians experience and express their mental distress via somatic complaints, which are cultural idioms usually unknown to non-Ethiopian physicians. It is difficult for non-Ethiopian physicians using a bio-medical explanatory model to distinguish symptoms that indicate mental problems among the variety of multiple complaints, often somatic, that are presented by the Ethiopian patient. This situation is also evident in Ethiopia where Ethiopian general practitioners rarely detect the psychopathology of their patients (*cf.* Table 4). This often leads to a wrong diagnosis and to inadequate treatment that does not respond to the patients' problems (Reiff, 1999; Youngmann *et al.*, 1999). In addition, the instruments that are available to doctors for detecting mental distress, such as the SRQ, were shown to be problematic for Ethiopians (Kortmann and ten Horn, 1988). Because of these problems, an accurate instrument was needed and the primary goal of the present study was to develop and validate a culturally sensitive psychiatric screening instrument for Ethiopian populations, both in Ethiopia and Israel.

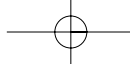
The new instrument we developed was based on the original 24-item SRQ developed by the WHO. According to Kortmann (1990), one of the main problems was the inadequacy of the original translation of the SRQ into Amharic. In our pre-test, similar problems were encountered and the principal investigators from the three countries involved in our project changed the translation of the twelve items which were found to be problematic. In addition, we tried to increase the validity of the instrument by adding ten questions, resulting in the 34-item SRQ-E. Following a complex analysis, five of the 34 questions of the SRQ-E were found to lack validity and were therefore removed, resulting in a more parsimonious instrument, the SRQ-F.

The SRQ-F was shown to be properly valid (as regards both construct and criterion validity). For a SRQ-F cut-off point of 7, the sensitivity was 90% (90% of the people with psychopathology had an SRQ-F score equal or greater than 7) and the specificity was 83% (83% of the people without psychopathology had an SRQ-F score below 7). The results were quite similar in both Israel and Ethiopia. It was therefore concluded that the SRQ-F is a valid instrument for detecting psychopathology among

The results can be compared with the objectives and hypothesis of our study as follows. The first objective of our study was to explore and compare the “idioms of distress”, attitudes and beliefs regarding illness among Ethiopians at different levels of “acculturation”. In accordance with our hypotheses, we found that the “acculturation” process, as was defined in the present study, affects basic traditional attitudes concerning illness behaviour, such as the attitude toward uvula removal. Changes also occur regarding illness behaviour as expressed for instance in the clusters of “somatic complaints” or “idioms of distress” (e.g. SRQ-F items), being used to express distress among subjects who were, and were not, diagnosed as suffering from mental disorder. Among the Ethiopian population there is nevertheless a core of attitudes and beliefs regarding illness experience and expression that characterises Ethiopians, irrespective of their level of “acculturation”. This enabled us to develop a single screening instrument.

The second and third objectives were to develop a screening instrument for mental health problems in the Ethiopian populations and to check its validity for Ethiopians at different levels of acculturation. In accordance with our hypothesis, we have shown that it is possible to develop a simple culturally-sensitive screening instrument for psychological disorders that is valid for Ethiopians, irrespective of their level of “acculturation” – the SRQ-F.

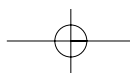
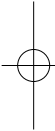
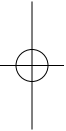
The fourth and fifth objectives were to sensitise Ethiopian and Israeli primary health care workers to mental health problems of their Ethiopian patients, by training them in the use of the validated SRQ-F, and evaluate the effectiveness of the instrument in screening for the presence of mental health problems. In Ethiopia and in Israel, a one-day seminar was organised for a limited number of general practitioners (along with other primary care health workers and psychiatrists) that were involved in the evaluation of the effectiveness of the SRQ-F. After participating in the training seminar, the general practitioners did not detect significantly more psychopathology among their patients. In other words, it was not possible to prove that this training increased their ability to diagnose mental problems. A similar poor effect of training programmes on changing some aspects of the actual daily practice of general practitioners has repeatedly been described in the literature. In the present study, the seminar participants showed great interest and involvement, and clearly stated that the seminar was very useful in increasing their knowledge and sensitivity with regard to their (Ethiopian) patients, but they did not have the opportunity to use the new tool. A possible solution will be presented in the discussion.



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The participants in the seminars, both in Ethiopia and in Israel, encouraged us to spread the SRQ-F and other relevant findings to a larger population of primary care workers and mental health workers. A first step towards this was taken through a conference held in Addis Ababa.



### III. Discussion

#### III.1 Scientific relevance and discussion of methodological issues

We have found that “acculturation”, defined in the present study as exposure to western medicine, affects some traditional attitudes concerning illness behaviour, such as the attitude towards uvula removal. Changes also occur regarding the clusters of “somatic complaints” or “idioms of distress” used to express emotional suffering and the meaning attributed to these idioms. Among the Ethiopian population there is, nevertheless, a core of attitudes and beliefs regarding illness experience and expression that characterises Ethiopians, irrespective of their level of “acculturation”. This enabled us to develop a simple culturally-sensitive screening instrument for psychological disorders that is valid for Ethiopians, irrespective of their level of “acculturation” – the Falk Self-Reporting Questionnaire (SRQ-F).

The SRQ-F is based on items from the SRQ developed by the WHO using universal idioms of distress, along with items that are more specifically bound to the Ethiopian culture. Since the SRQ-F proved to be more effective in detecting mental disorders among Ethiopians than the SRQ, there is good reason to assume that an optimal psychiatric screening instrument is one that successfully integrates both universal idioms of distress and more specific cultural idioms of distress.

Of course, the question arose of whether some methodological issues could have biased our results, such as sampling, differences in methodology and setup between Ethiopia and Israel, the validity of the Brief Psychiatric Rating Scale (BPRS) for Ethiopian populations and the possible influence of illness behaviour on the SRQ-F score. Each of these issues will be now discussed.

Due to the difficulty to locate the people of the random sample in the general population sample in Israel, part of this sample was chosen through the quota sample method and therefore the possibility exists that the sample is not representative. A similar possibility, although more far-fetched, applies to the clinical samples where consecutive patients were chosen.

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However, even if some samples were not completely representative, the conclusions we have reached about the validity of the SRQ-F remain correct. The construct validity was checked by comparing the SRQ-F scores of Ethiopians in three groups, chosen in a way that the probability of suffering from psychological disorders differs in each of them (the general population or “healthy” people from the community, people in care in non-psychiatric clinics and people in care in psychiatric clinics). The interviewees in each of the three samples did meet the criterion we fixed. In particular, we made certain that all the interviewees in the general population had not been in medical care in the past three months and thus met the criterion to be included in this group. Therefore it is most likely that the very large differences that we found in the SRQ-E scores of the interviewees of the three groups do, in fact, result from the differences in their “level of care”.

The criterion validity of the SRQ-F was checked with the BPRS as the criterion. The results concerning the criterion validity should not be influenced by our sampling methods, since the analysis was always based on the comparison between the SRQ-F score and the BPRS score of each interviewee separately.

Another possible drawback in the study is the existence of some differences in the methodology between Ethiopia and Israel. The sampling methods were somewhat different, the interviewers were medical doctors in Ethiopia and social workers in Israel, the interviews were administered in clinics in Ethiopia and at the interviewees’ homes in Israel and, finally, it was only in Ethiopia that all interviewees benefited from a medical examination by the interviewer. Thus, the setup in Ethiopia was more medically oriented than in Israel. We found that the mean SRQ-F score tended to be higher in Ethiopia (Table 3), *i.e.* the Ethiopians had a larger number of complaints in Ethiopia for a given “level of care”. The question was whether this is due to a tendency to make more complaints for a given level of psychopathology due to the medical setup as mentioned above, or whether the Ethiopians in fact suffer from more psychopathology in Ethiopia than in Israel. As was argued before in Part II.7, in Ethiopia there is apparently both a tendency to complain more about a given pathology and to have a higher percentage of people suffering from psychopathology, perhaps due to the shortage in psychotropic drugs.

Another bias could have arisen from the fact that the BPRS validity had not been checked specifically for the Ethiopian population. However, we believe that this should not represent a problem for the following reasons. The expanded version of the BPRS (Lukoff *et al.*, 1986; Hafkenscheid, 1991, 1993) is an instrument for psychiatric assessment. It is based on the

impression and the evaluation of the interviewer, following a series of predetermined central questions, which are asked in a way that allows flexibility and free dialog with the interviewee (Hedlund and Vieweg, 1980; Morlan and Tan, 1998). The interviewers were themselves of Ethiopian origin, *i.e.* of the same culture as the interviewees. They also went through a special training course in the use of the BPRS, given by the same members of the team in Ethiopia and Israel, according to the lines of training suggested by Ventura *et al.* (1993). In addition, the possibility of inaccurate scoring was reduced by the fact that we simplified the original 7-point severity scale of each BPRS symptom and in fact used only two levels of severity – lack of symptom or sub-clinical symptom *vs.* pathological symptom (high severity), according to the definitions of the authors of the expanded version of the BPRS (Lukoff *et al.*, 1986). Finally, the interviewers had to write the interviewees' answers and their own observations about the interviewees. In each country, the text for each interviewee was examined by two clinicians that independently scored the answers. In the few cases of disagreement, a discussion was held until an agreement was reached. Thus, the probability of a respondent being wrongly classified as (not) suffering from psychopathology according to the BPRS can be considered as minimal.

A last possible bias was the following. We assume that the positive responses to the items of the SRQ-F point to the presence of psychiatric symptoms. The SRQ, as well as the SRQ-F, is a set of questions concerning complaints which are common in psychiatric patients when they are given the opportunity to complain. In principle it could, of course, be claimed that the reactions of the respondent can indicate a form of illness behaviour, a tendency to complain. A crucial question concerns whether a high number of positive responses indicates a higher level of psychopathology, or whether it reflects a tendency of certain respondents to complain when they are given the opportunity to do so. The latter possibility does not seem likely since at each level of care in each country the mean SRQ-F score was found to be significantly higher among the respondents who were suffering from mental illness according to our gold standard (the BPRS), than among the respondents who were negative on the BPRS. Moreover, a more detailed analysis which we carried out recently revealed a significant correlation between positive SRQ-F answers and specific BPRS symptoms rated 3, mainly anxiety and depression. This indicates that the SRQ-F score is related to psychopathology (BPRS symptoms rated as 3) rather than to complaining behaviour. Thus, the results we obtained should not be seriously affected by any of these methodological issues.

### III.2 Recommendations for further research

The present results should lead to further research in the following areas:

- *Screening for psychological distress* – The SRQ-F was originally aimed at detecting those who suffer from mental disorders. However, it is well known that the primary care clinics, both in Ethiopia and Israel, are overloaded by Ethiopian patients suffering from psychological distress, *i.e.* clinically significant symptoms that do not meet diagnostic criteria. It is therefore worthwhile calculating a different cut-off point aimed at detecting those who suffer from psychological distress.
- *Screening for specific disorders* – Recent studies have used the BPRS to detect three main diagnostic categories, namely anxiety, depression and psychosis. Our rich collection of data should be re-analysed in order to allow the SRQ-F to be used as a screening instrument for these specific diagnoses.
- *Cultural sensitivity* – The SRQ-F is based on 22 items taken from the original SRQ, plus seven items which were found to be more specific Amharic idioms of distress. The 22 SRQ items were re-translated into Amharic, taking into account their meanings in Ethiopian culture and problems in communication as ascertained during use of the SRQ in Ethiopia by Kortmann (1987). As the SRQ-F proved to be more effective in detecting mental disorders among Ethiopians than the original SRQ, there is good reason to assume that similar screening instruments should be developed in other non-western cultures as well which would integrate both universal and more culturally specific idioms of distress. The present study could serve as a model for such studies.

### III.3 Practical applicability

This study dealt with the problem of misdiagnosis and malpractice of care givers concerning Ethiopian patients who suffer from mental disorder and apply for help in primary care clinics, both in Ethiopia and Israel. Many of these patients become “chronic complainers” (Giel and Workneh, 1980), who feel they have not been properly understood by their doctors and return again and again to the clinics, hoping to get appropriate treatment for their illness. These patients overload primary health clinics, which leads to high expenses in the health services in Ethiopia and Israel due to the non-recognition, or late diagnosis, of their mental health problems.

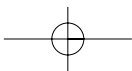
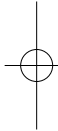
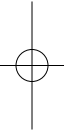
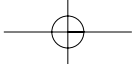
The present study has led to the development of a culturally sensitive psychiatric screening instrument which is valid for Ethiopian population and which is a (partial) answer to the problem mentioned above. It raised the problem of the validity of the tool for Ethiopians who are at different



levels of acculturation; *i.e.* does the validity of the instrument change with the level of exposure to the western bio-medical system? The results have shown that the SRQ-F is an effective tool that can be used to screen for mental disorders among Ethiopians in primary health care settings in Ethiopia and among Ethiopian immigrants, such as the Ethiopian Jews in Israel. It can thus serve as a reference instrument for the detection of mental problems by any health care worker working with Ethiopian populations.

Social workers and any other professionals might also benefit from the use of the instrument. Early detection of severe emotional problems could prevent expensive and pointless laboratory tests and treatments and lead to more appropriate treatment, thus alleviating their suffering. At the same time it could decrease the load on the primary care settings, either by providing more effective treatment or by the referral to mental health services.

Even if the practitioners do not actually use the new instrument routinely, the services and the patients themselves could benefit from it. Through its diffusion, the primary caregivers should become more sensitive to mental health problems and become aware of the fact that the typical somatic complaints of Ethiopian patients may mask serious mental problems.

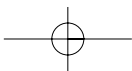
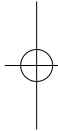
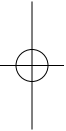
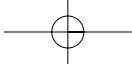


## IV. Recommendations

In both developing and developed countries, mental health problems are being recognised more and more as a major public health issue. As most mental health patients apply only to primary care settings, the latter should be in the front line in the development of a strategy to control mental illnesses. The instrument we developed could serve as a key tool in this respect.

The SRQ-F is a good psychiatric screening instrument for identifying psychopathology among Amharic-speaking Ethiopians. In spite of the effectiveness of the instrument, the general practitioners' daily overloaded schedule (both in Ethiopia and Israel) does not seem to enable them to use the tool by themselves. Therefore, it seems that the most efficient way of using the SRQ-F as a psychiatric screening instrument in primary care clinics might be for the tool to be implemented by trained paramedical health workers (*e.g.* nurses in Ethiopia and Ethiopian Jewish nurses or mediators who work on a regular basis in the primary care clinics in Israel). This could be done on a routine basis for everyone who applies to the clinics, or only to selected cases (like the "chronic complainers"). The health workers would inform the general practitioners regarding those patients whose SRQ-F score is higher than the cut-off point for psychopathology.

Furthermore, we recommend that the SRQ-F be an integrated aspect of the teaching of professionals (medical doctors, nurses, psychologists, social workers, etc.). This should increase their awareness of mental health problems and therefore contribute to the detection of mental illness in primary medical practice and other settings on an everyday basis.



## References

- Alem, A., Jacobsson, L., Araya, M., Kebede, D. and Kullgren, G. (1999). 'How are mental disorders seen and where is help sought in rural Ethiopian community?' *Acta Psychiatrica Scandinavica* 100: 40-47.
- Alemayehu, M. (1997). 'Health profile of the North Gondar Administrative Zone'. Unpublished.
- American Psychiatric Association (2000). *Diagnostic and statistical manual of mental disorders. Text revision* (4th ed.). Washington, DC: American Psychiatric Association.
- Andermann, L.F. (1996). 'Ethiopian Jews meet Israeli family physicians: a study of cultural somatization', *Transcultural Psychiatric Research Review* 33: 333-345.
- Beiser, M. and Edwards, R.G. (1994). 'Mental health of immigrants and refugees', *New Direction of Mental Health Services* 61: 73-86.
- Berry, J.W., Kim, U., Mine, T. and Mok, D. (1987). 'Comparative studies of acculturation stress', *International Migration Review* 21: 491-511.
- Beusenberg, M. and Orley, J. (1994). *A user's guide to the Self Reporting Questionnaire (SRQ)*. Geneva: World Health Organization, Division of Mental Health.
- Castillo, R.J. (1997). *Culture and mental illness: a client-centered approach*. New York: Brooks/Cole Publishing Company.
- Central Statistics Authority (CSA) (1999). *The 1994 population and housing census of Ethiopia: results for Amhara Region, Vol. II – Analytical Report*. Addis Ababa, Ethiopia.
- Colledge, M. and Svensson, P. (1986). 'Introduction to the contribution of the social sciences', in M. Colledge, H.A. van Geuns and P. Svensson, P. (eds.) *Migration and health: towards an understanding of the health care needs of ethnic minorities*. Copenhagen: World Health Organization.
- Dagnew, M.B. and Damena, M. (1990). 'Traditional child health practice in communities in northwest Ethiopia', *Tropical Doctor* 20: 40-41.
- Davis, D.A., Thomson, M.A., Oxman, A.D. and Haynes, R.B. (1995). 'Changing physician performance: a systematic review of the effect of

- continuing medical education strategies', *Journal of the American Medical Association* 274: 700-705.
- De Jong, J.T.V.M. (1987). *A descent into African psychiatry*. Amsterdam: Royal Tropical Institute.
- Desjaralais, R., Eisenberg, L., Good, B. and Kleinman, A. (1995). *World mental health: problems and properties in low-income countries*. Oxford: Oxford University Press Inc.
- Giel, R. (1995). 'Problems of transcultural communication', in M. Barach and D. Lipsky (eds.) *Cross-cultural issue in mental health: Ethiopian populations*. Jerusalem: JDC-Israel.
- Giel, R., Gezaherg, Y. and van Luijk, J. N. (1968). 'Faith-healing and spirit-possession in Ghion, Ethiopia', *Social Science and Medicine* 2: 63-79.
- Giel, R. and Workneh, F. (1980). 'Coping with outpatients who cannot cope: management of persistent complainers in an African country', *Transactions of the Royal Society of Tropical Medicine and Hygiene* 74(4): 475-478.
- Goldberg, D., Benjamin, S. and Creed, F. (1987). *Psychiatry in medical practice*. London: Tavistock Publications.
- Grilli, R. and Lomas, J. (1994). 'Evaluating the message: the relationship between compliance rate and the subject of a practice guideline', *Medical Care* 32: 202.
- Hafkenscheid, A. (1993). 'Reliability of a standardized and expanded Brief Psychiatric Rating Scale: a replication study', *Acta Psychiatrica Scandinavica* 88: 305-310.
- Hafkenscheid, A. (1991). 'Psychometric evaluation of a standardized and expanded Brief Psychiatric Rating Scale', *Acta Psychiatrica Scandinavica* 84: 294-300.
- Harding, T.W., Climent, C.E., Diop, Mb., Giel, R., Ibrahim, H.H.A., Srinivasa Murthy, R., Suleiman, M.A. and Wig, N.N. (1983). 'The WHO collaborative study on strategies for extending mental health care: II: the development of new research methods', *American Journal of Psychiatry* 140: 1474-1480.
- Harding, T.W., De Arango, M.V., Baltzar, J., Climent, C.E., Ibrahim, H.H.A., Ladrado-Ignacio, L., Srinivasa Murthy, R. and Wig, N.N. (1980). 'Mental disorder in primary health care: a study of their frequency and diagnosis in four developing countries', *Psychological Medicine* 10: 231-241.
- Hedlund, J.L. and Vieweg B.W. (1980). 'The Brief Psychiatric Rating Scale (BPRS): a comprehensive review', *Journal of Operational Psychiatry* 11: 48-63.

- Hodes, R.M. (1997). 'Cross-cultural medicine and misunderstanding: the case of Ethiopians', *Western Journal of Medicine* 166: 29-36.
- Hodes, R.M. and Teferedegne, B (1996). 'Traditional beliefs and disease practice of Ethiopian Jews', *Israel Journal of Medical Sciences* 33: 561-567.
- Jacobsson, L. (1985a). 'Mental disorder in patients admitted to a general hospital in Western Ethiopia 1960-1970', *Acta Psychiatrica Scandinavica* 71: 410-416.
- Jacobsson, L. (1985b). 'Psychiatric morbidity and psychological background in an outpatient population of general hospital in western Ethiopia', *Acta Psychiatric Scandinavica* 71: 417-426.
- Janca, A. Isaac, M. Bennett, L.A. and Tacchini G. (1995). 'Somatoform disorder in different cultures – a mail questionnaire survey', *Social Psychiatry and Psychiatric Epidemiology* 30: 44-48.
- Kaplan, S. and Rosen, C. (1994). 'Ethiopian Jews in Israel', in D. Singer and R. Seldin (eds.) *American Jewish Yearbook 1994*. New York: American Jewish Committee.
- Kaplan, S. and Salamon, H. (1998). *Ethiopian immigrants in Israel: experience and prospects*. London: The Institute for Jewish Policy Research (JPR).
- Kirmayer, L.J. (1984). 'Culture, affect, and somatization', *Transcultural Psychiatry Research Review* 21: 159-188.
- Kirmayer, L.J. and Young, A. (1998). 'Culture and somatization: clinical epidemiological, and ethnographic perspectives', *Psychosomatic Medicine* 60: 420-430.
- Kleinman, A. (1991). *Rethinking psychiatry*. New York: The Free Press.
- Kleinman, A. (1988). *The illness narratives: suffering, healing and the human condition*. New York: Basic Books.
- Kleinman, A. (1980). *Patients and healers in the context of culture: an exploration of the borderland between anthropology, medicine and psychiatry*. Berkeley: University of California Press.
- Kleinman, A., Eisenberg, L. and Good, B. (1978). 'Culture, illness and care: clinical lessons from anthropology and cross-cultural research', *Annual of International Medicine* 88: 251-258.
- Kortmann, F. (1990). 'Psychiatric case finding in Ethiopia: shortcoming of the Self-Reporting Questionnaire', *Culture, Medicine and Psychiatry* 14: 381-391.
- Kortmann, F. (1987a). 'Popular, traditional and professional mental health care in Ethiopia', *Transcultural Psychiatric Research Review* 24: 255-274.

- Kortmann, F. (1987b). 'Problems in communication in transcultural psychiatry. The Self-Reporting Questionnaire', *Acta Psychiatrica Scandinavica* 75: 563-570.
- Kortmann, F. and ten Horn, S. (1988). 'Comprehension and motivation in response to a psychiatric screening instrument. Validity of the SRQ in Ethiopia', *British Journal of Psychiatry* 153: 95-101.
- Lerner, Y., Mirsky, J. and Barasch, M. (1994). 'New beginnings in an old land: refugee and immigrant mental health in Israel', in A.J. Marsella, T. Bornemann, S. Ekblad and J. Orley (eds.) *Amidst peril and pain: the mental health and wellbeing of the world's refugees*. Washington D.C.: American Psychological Association Press.
- Levine, R.E. and Gaw, A.C. (1995). 'Culture-bound syndromes', *Psychiatric Clinics of North America* 18: 523-535.
- Lin, E.H.B., Katon, W.J., Simon, G.E., Von Korff, M., Bush, T.M., Rutter, C.M., Saunders, K.W. and Walker, E.A. (1997). 'Achieving guidelines for the treatment of depression in primary care. Is physician education enough? *Medical Care* 35: 831-842.
- Lindholm, C. (1997). 'The Swat Pukhtum family as a political training ground', in R.J. Casstillo (ed.) *The Meaning of Madness*. Pacific Grove, CA: Brooks/Cole.
- Lukoff, D., Liberman, R.F. and Nuechterlein, K. H. (1986). 'Symptom monitoring in the rehabilitation of Schizophrenic patients', *Schizophrenia Bulletin* 12: 578-602.
- Maos, B. (1998). 'Editorial: psychiatry and primary medicine in Israel', *Israel Journal of Psychiatry* 35(2): 120-127.
- Mechanic, D. (1997). 'Approaches for coordinating primary specialty care for persons with mental illness'. *General Hospital Psychiatry* 19: 395-402.
- Mechanic, D. (1990). 'Treating mental illness: generalist versus specialist', *Health Affairs Winter*: 61-75.
- Mechanic, D. (1978). 'Effects of psychological distress on physical health and the use of medical and psychiatric facilities', *Human Stress* (Dec.): 26-32.
- Minuchin-Itzigsohn, S.D., Ben-Shaoul, R., Weingrod, A. and Krasilowsky, D. (1984). 'The effect of cultural conceptions on therapy: a comparative study of patients in Israeli psychiatric clinics', *Culture Medicine and Psychiatry* 8: 229-254.
- Morlan, K.K. and Tan, S.Y. (1998). 'Comparison of the Brief Psychiatric Rating Scale and the Brief Symptom Inventory', *Journal of Clinical Psychology* 54: 885-894.



- Nirel, N., Rosen, B. and Ismail, S. (2000). "‘Refuah Shlema’ an intervention program for Ethiopian immigrants in primary care clinics: results of an evaluation study’, *Society and Welfare* 20: 563-584 (Hebrew).
- Nudelman, A. (1998). ‘Cultural influences on health behaviour of Ethiopian immigrants in Israel’. Presented at the 12th International Congress on Anthropological and Ethnological Sciences, Zagreb, Yugoslavia.
- Nudelman, A. (1993). ‘The importance of traditional healing for Ethiopian immigrants in Israel’, *Collegium Antropologicum* 17: 233-239.
- Penayo, U., Kullgren, G. and Caldera, T. (1990). ‘Mental disorders among primary health care patients in Nicaragua’, *Acta Psychiatrica Scandinavica* 82: 82-85.
- Pliskin, K.L. (1987). *Silent boundaries. Culture constraints on sickness and diagnosis of Iranians in Israel*. New Haven: Yale University Press.
- Reiff, M., Zakut, H. and Weingarten, M.A. (1999). ‘Illness and treatment perceptions of Ethiopian immigrants and their doctors in Israel’, *American Journal of Public Health* 89(12): 1814-1818.
- Rosser, W.W. and Palmer, W.H. (1993). ‘Dissemination of guidelines on cholesterol: effect on patterns of practice of general practitioners and family physicians in Ontario’. Ontario Task Force on the Use and Provision of Medical Services, *Canadian Family Physician* 39: 280.
- Salleh, M.R. (1990). ‘Psychiatric morbidity in schizophrenic relatives: use of the Self-Reporting Questionnaires (SRQ)’, *Singapore Medical Journal* 31: 457-462.
- Sartorius N., Ustun, T.B., Costa e Silva, J.A., Goldberg, D., Lecrubier, Y., Ormel, J., Von Korff, M. and Wittchen, H.U. (1993). ‘An international study of psychological problems in primary care: preliminary report from the World Health Organization collaborative project on “Psychological Problems in General Health Care”’, *Archive of General Psychiatry* 50: 819-824.
- Schulberg, H.C. and Burns, B.J. (1988). ‘Mental disorders in primary care: epidemiologic, diagnostic, and treatment research directions’, *General Hospital Psychiatry* 10: 79-87.
- Shual, J. (1986). ‘Migration and stress’, in L. Goldberg and S. Breznitz, (eds.) *Handbook of stress: theoretical and clinical aspects*. New York, NY: Macmillan.
- Stein, B.N. (1986). ‘The experience of being a refugee: insights from the research literature’, in C. Williams and J. Westermeyer (eds.) *Refugee mental health in resettlement countries*. Washington, DC: Hemisphere.
- Tiemens, B.G., Ormel, J., Jenner, J.A., van der Meer, K., Van Os, T.W.D., van der Brink, R.H.S., Smith, A. and van den Brink, W. (1999). ‘Training

- primary-care physicians to recognize, diagnose and manage depression: does it improve patient outcomes?' *Psychological Medicine* 29: 833-845.
- Ventura, J.L., Green, M.F., Shaner, M. and Liberman, R.P. (1993). 'Training and quality assurance with the Brief Psychiatric Rating Scale: 'The Drift Busters'', *International Journal of Psychiatric Research* 3: 885-894.
- Wensing, M. and Grol, R. (1994). 'Single and combined strategies for implementing changes in primary care: a literature review', *International Journal for Quality in Health Care* 6: 115-132.
- Young, A. (1982). 'Rational men and the explanatory model approach', *Culture, Medicine and Psychiatry* 6: 57-71.
- Young, A. (1977). 'Order, analogy and efficacy in Ethiopian medical divination', *Culture, Medicine and Psychiatry* 1: 189-199.
- Young, A. (1976). 'Internalizing and externalizing medical belief systems'. An Ethiopian example, *Social Science and Medicine* 10: 147-156.
- Youngmann, R. and Minuchin-Itzigsohn, S. (1993). 'First stage of the pilot study for developing a culturally-sensitive diagnostic instrument for early detection of emotional distress among Ethiopian immigrants in Israel'. Unpublished Report. Jerusalem: Falk Institute, JDC-Israel (Hebrew).
- Youngmann, R., Minuchin-Itzigsohn, S. and Barash, M. (1999). 'Manifestations of emotional distress among Ethiopian immigrants in Israel: patient and clinician perspectives', *Transcultural Psychiatry* 36: 45-63.

## Appendix 1

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## Appendix 2

### Follow-up of the project: capacity building and project-related publications

All of the psychiatrists and general practitioners from the Amanuel Mental Health Hospital in Addis Ababa and the psychiatric nurses from the Gondar College Hospital were trained in the administration of the psychiatric screening tools (the BPRS and the SRQ-E). They also were trained to be sensitive to the more personal narratives regarding illness through the probe questions of the SRQ-E and the anthropological questionnaire.

General practitioners from primary care clinics in Addis Ababa were trained in the use of the SRQ-F in order to sensitise them to the relevance of mental health problems in their everyday practice.

Psychiatrists, general practitioners and psychiatric nurses who participated in the fieldwork as interviewers, learned to plan fieldwork and interview people from the general population as well as somatic and psychiatric patients, thus broadening their clinical and research experiences.

The public health students from Gondar College of Medicine who participated in collecting the census information in the village of Menzero, gained experience in planning fieldwork and collecting data in the community.

The aforementioned training seminars were delivered in part by professionals from the Netherlands and Israel (who were among the project's principal investigators). These seminars, together with ongoing interactions and visits by these investigators, created an atmosphere conducive to discussions and brainstorming around a variety of topics for research and training. Examples of these ideas include the need for postgraduate studies for psychiatrists in Ethiopia, developing a culturally sensitive screening instrument for children, and researching changes that have occurred in the traditional healers' belief system and working methods due to the mass emigration of the Ethiopian Jews and the influence of the western bio-medical model. Some of these ideas have

indeed begun to be carried out. For example, research of attitudes and behaviours regarding AIDS in Ethiopia has been carried out, as well as interviews of various traditional healers in the Gondar area by members of our team.

Dr. Yilma Yitayew, a physician from Amanuel Mental Health Hospital is working on his PhD dissertation which is based on the Ethiopian part of the project. His tutor is Prof. Dr. F. Kortmann from the Academic Hospital, Nijmegen, the Netherlands. Since Dr. Aida Getachew retired from her position in the project, Dr. Yitayew, a young energetic physician, who participated in the fieldwork, was chosen to take her place as a cooperating researcher, responsible for the fieldwork and the data analysis in Ethiopia. He took his responsibility seriously, took actively part in initiating and discussing various stages of the project, thus gaining a lot of experience in psychiatric research. As part of the requirements towards his PhD dissertation and in order to strengthen his research abilities, Dr. Yitayew participated in a course in SPSS (Statistical Package for Social Sciences; a computer programme for statistical analyses used in social sciences) at the Department of Public Health, Addis Ababa University. He also took part in the summer programme on transcultural psychiatry at the Division of Social Psychiatry, Medical Faculty, Montreal Canada which included workshops on psychiatric epidemiology, cultural psychiatry, qualitative research methods, religion and psychiatry and evaluation research in social psychiatry, as well as in two summer courses in statistical reasoning in public health and regression analysis, at John Hopkins University in Baltimore, USA.

In addition to the above, a contribution was also made to the Ethiopian community in Israel:

1. About 20 Ethiopian immigrants working as social workers, psychiatric nurses and culture mediators were trained in the administration of the psychiatric screening tools (the BPRS and the SRQ-E). They were also trained to be aware of the importance of the personal narrative regarding illness for understanding the individual's complaints and disease.
2. Non-Ethiopian general practitioners from three primary care clinics in Yavneh and Hadera, as well as other non-Ethiopian primary health workers and mental health professionals, participated in a training seminar aimed to enhance sensitivity to psychological distress and the detection of mental problems among their Ethiopian clients through the use of the SRQ-F.
3. Mr. Mamoye Zere, a young social worker who emigrated from Ethiopia, has completed his MA dissertation (with honours) which was based on

the Israeli part of the project. His tutors were Dr. N. Zilber from the Falk Institute and Prof. Y. Rabinovitch from the School of Social Work, Bar-Ilan University. In addition, Mr. Zere took an active part in different stages of the project, participating in discussions concerning methodological and practical problems, and delivering training seminars in the use of the SRQ-F. These activities broadened his clinical and research experiences.

A final conference was held in Addis Ababa, Ethiopia, which was participated in by 50 primary care physicians working in government and private hospitals and health centres. The project findings were presented and the participants were made aware of possible mental health problems among their patients. The participants showed a keen interest in the topics presented and were actively involved throughout the conference. The conclusions of the conference were the following:

- Similar conferences for primary health care workers should be held on a regular basis.
- It is very important to decentralise the mental health service and integrate it with the existing general health services. To that end a committee of six people was formed consisting of one physician each from the Addis Ababa Health Bureau, Government and Private Hospitals, Amanuel Hospital and the Department of Psychiatry. The committee will act as a core group to facilitate interactions between the participants, other health workers and the mental health workers.
- The conference was an eye-opener for the participants who are now able to deal properly with the many patients who come to the primary health care with physical symptoms but who have underlying psychological problems.

## Publications

### *Papers presented:*

- Yitayew Y., Workneh, F., Youngmann, R., Zilber, N. and Giel, R. (1998). 'Development of a culturally-sensitive psychiatric screening instrument valid for Ethiopian populations'. Paper presented at the *1999 Conference on Mental Health in Ethiopia*, Nazareth, Ethiopia.
- Youngmann, R., Zilber, N., Kaveh, N., Zere, M., Minuchin-Itzigsohn, S., Yitayew, Y., Workneh, F. and Giel, R. (1999). 'Development of culturally-sensitive psychiatric screening instrument valid for Ethiopians and Ethiopian immigrants in Israel'. Paper presented at the *1999 NIRP*

*Conference, Truman Institute, the Hebrew University of Jerusalem (Hebrew).*

- Youngmann, R. (1999-2000). Series of lectures about transcultural psychiatry, with special emphasis on Ethiopians, held in the Jerusalem Centre for Mental Health.
- Youngmann, R., Zilber, N., Zere, M., Minuchin-Itzigsohn, S., Kaveh, N., Yitayew Y., Workneh, F. and Giel, R. (2000). 'Psychological distress among Ethiopian immigrants in Israel and Ethiopians living in Ethiopia: development of a culturally-sensitive psychiatric screening instrument for detecting psychological disorder among Ethiopians'. Paper presented at "Social Work, one profession – many variations", the National Conference of Social Work, Tel-Aviv (Hebrew).
- Zilber, N., Youngmann, R., Kaveh, N., Zere, M., Minuchin-Itzigsohn, S., Yitayew, Y., Workneh, F. and Giel R. (2000). 'Psychopathology in samples of Ethiopians who have immigrated to Israel and those living in the Gondar region of Ethiopia'. Paper presented at the 10th national conference of the Israel Psychiatric Association. Tel-Aviv. (Hebrew).
- Youngmann, R., Zilber, N., Kaveh, N., Zere, M., Minuchin-Itzigsohn, S., Yitayew Y., Workneh, F. and Giel, R. (2000). 'A culturally sensitive screening instrument for identifying psychopathology among Ethiopian populations'. Paper presented at the 10th national conference of the Israel Psychiatric Association, Tel-Aviv (Hebrew).

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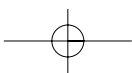
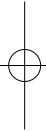
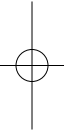
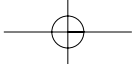
- Youngmann, R., S. Minuchin-Itzigsohn and M. Zere (1997). *Lexicon for mental health concepts in Ethiopian immigrants' culture in Israel*. Jerusalem: JDC – Israel (Hebrew).
- S. Minuchin-Itzigsohn, R. Youngmann and M. Zere (1997). *Meetings with traditional healers from the Ethiopian community in Israel*. Jerusalem: JDC – Israel (Hebrew).
- Youngmann, R. S., Minuchin-Itzigsohn., M. Zere and N. Zilber (1998). 'Expression of emotional distress among Ethiopian Jewish immigrants in Israel', *Society and Welfare* 18: 75-95 (Hebrew).
- Youngmann, R., S. Minuchin-Itzigsohn and M. Zere (1999). 'Idioms and narratives of mental health problems among Ethiopian Jewish patients in Israel', in T. Parfitt, and E. Trevisan Semi (eds.) *The Beta Israel in Ethiopia and Israel: studies on the Ethiopian Jews*. London: The University of London, Curzon Press.
- Youngmann, R. Minuchin-Itzigsohn, S. and Barash, M. (1999). 'Manifestations of emotional distress among Ethiopian immigrants in



Israel: patient and clinician perspectives', *Transcultural Psychiatry* 36: 45-63.

Zere, M. (2000). 'SRQ-E: a culturally sensitive psychiatric screening instrument for Ethiopian immigrants in Israel'. MA Thesis. Submitted to Bar Ilan University – School for Social Work (Hebrew).

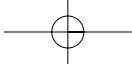
Youngmann, R. Zilber, N. Kaveh, N. Zere, M. Workneh, F. Bekele, Y. and Giel R. (2002). 'Development of a culturally sensitive psychiatric screening instrument for detecting emotional problems among Ethiopian immigrants in Israel', *Harefuah* 141: 10-16 (Hebrew).



## Appendix 3

### The Falk Self-Reporting Questionnaire (SRQ-F)

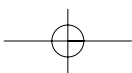
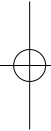
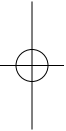
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|--|--------|-------|
| 1. Do you often have headaches?  | 1. Yes | 2. No |
| 2. Is your appetite poor?  | 1. Yes | 2. No |
| 3. Do you sleep badly?   | 1. Yes | 2. No |
| 4. Are you easily frightened?  | 1. Yes | 2. No |
| 5. Do your hands shake?  | 1. Yes | 2. No |
| 6. Do you feel nervous, tense or worried?  | 1. Yes | 2. No |
| 7. Is your digestion poor?   | 1. Yes | 2. No |
| 8. Do you have trouble thinking clearly?   | 1. Yes | 2. No |
| 9. Do you feel unhappy?  | 1. Yes | 2. No |
| 10. Do you cry more than usual?  | 1. Yes | 2. No |
| 11. Do you find it difficult to make decisions?  | 1. Yes | 2. No |
| 12. Is your daily work suffering?  | 1. Yes | 2. No |
| 13. Are you unable to play a useful part in life?  | 1. Yes | 2. No |
| 14. Have you lost interest in things?  | 1. Yes | 2. No |
| 15. Do you feel you are a worthless person?  | 1. Yes | 2. No |
| 16. Has the thought of ending your life been on your mind?   | 1. Yes | 2. No |
| 17. Do you feel tired all the time?  | 1. Yes | 2. No |
| 18. Do you have uncomfortable feelings in your stomach?  | 1. Yes | 2. No |
| 19. Are you easily tired?  | 1. Yes | 2. No |
| 20. Do you feel that somebody has been trying to harm you in some way?                               | 1. Yes | 2. No |
| 21. Have you noticed any interference or anything else unusual with your thinking?                   | 1. Yes | 2. No |
| 22. Do you ever hear voices without knowing where they come from, and that other people cannot hear? | 1. Yes | 2. No |
| 23. Do you easily get angry at other people?   | 1. Yes | 2. No |
| 24. Do you feel that someone has insulted or humiliated you?   | 1. Yes | 2. No |
| 25. Do you feel that someone has cursed you?   | 1. Yes | 2. No |



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- |   |        |       |
|---|--------|-------|
| 26. Do you feel that someone is jealous of you?                           | 1. Yes | 2. No |
| 27. Do you feel crawling sensations under your skin?                      | 1. Yes | 2. No |
| 28. Do you feel burning sensations in your scalp or all over<br>the body? | 1. Yes | 2. No |
| 29. Do you often feel your heart is beating too fast?                     | 1. Yes | 2. No |



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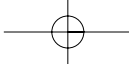
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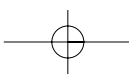
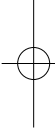
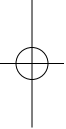
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