



## Folk, Traditional and Conventional Medicine among Elderly Yemenite Immigrants in Israel

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### Abstract

**Background:** Migration leads to changes in almost all areas of life including health. But how far are health beliefs also preserved, and how far are they affected by the process of acculturation to the host society?

**Objectives:** To examine the difference between behavior and attitudes towards conventional and traditional medicine among elderly Yemenite immigrants.

**Methods:** A community-based study was conducted in the Yemenite neighborhoods in the city of Rehovot. All inhabitants of Yemenite origin over the age of 70 were identified from the population register, excluding those who were institutionalized or demented. Social work students interviewed them at home. The questionnaire inquired after health problems in the preceding month. For each of these problems, the respondent was asked whether any mode of treatment had been employed – Yemenite folk remedies, conventional medical care, or other. Their attitudes towards Yemenite folk medicine and conventional medicine were recorded. Socioeconomic data included their current age, age at immigration, year of immigration, marital status, gender, religiosity, and education.

**Results:** A total of 326 elderly people were identified who fulfilled the selection criteria, of whom 304 (93%) agreed to be interviewed. Of these, 276 (91%) reported at least one health problem in the preceding month, providing 515 problems of which 349 (68%) were reported to a conventional medical doctor while 144 (28%) were treated by popular folk remedies. Fifty-nine problems (11.5%) were treated by specifically Yemenite traditional remedies, mostly by the respondents themselves (38/59) rather than by a traditional healer. Immigrants who arrived in Israel over the age of 30 years, as compared to respondents who immigrated at an earlier age and grew up in Israel, were more likely to use traditional Yemenite remedies (24.4% vs. 8.2%,  $P < 0.005$ ).

**Conclusion:** Aged Yemenite Jews in Israel prefer modern medicine. The earlier the immigrant arrived in Israel, the more positive the attitude towards modern medicine and the less use made of traditional Yemenite healing.

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It is well known that migration leads to changes in almost all areas of life, including health as evidenced by research literature in the field of migrant health [1,2]. Of particular interest is the impact of migration to a land with a different culture and different health beliefs [3]. When a group of migrants live together as an isolated community, they usually preserve the customs and clothing of the country of origin. But how far are health beliefs also preserved, and how far are they affected by the process of acculturation to the host society through contacts via the younger generation, the media and, in particular, the local health services?

There remain to this day several neighborhoods in Israel that are inhabited almost exclusively by immigrants from Yemen who preserve their own customs to a great extent. Customs such as habitat, clothing, food, and liturgy have proven to be very stable over many years. Most of these immigrants arrived in two major waves of migration; the first was a steady trickle in the 1920s and 1930s, and the second was the mass immigration in 1949–51 just after the foundation of the State of Israel [4].

Anecdotally, doctors who look after Yemenite immigrants have reported their impression that the elderly tend to use modern institutional medicine rather than traditional Yemenite remedies. By way of contrast, their expressed attitudes show greater faith in Yemenite folk medicine and in traditional healers.

Our aim in this community-based questionnaire study was to examine this difference between behavior and attitudes towards

conventional and traditional medicine among elderly Yemenite immigrants.

## Methods

### Sample

The study was conducted in the Yemenite neighborhoods in the city of Rehovot. All inhabitants of Yemenite origin over the age of 70 were identified from the population register. Only people living at home were included, excluding those who were institutionalized or demented. The study was conducted in conjunction with a population screening project for dementia (unpublished data).

### Data acquisition

Social work students who had no other connection with the healthcare delivery services or the municipal social services visited and interviewed the elderly people at home. A three-part structured interview questionnaire was used based mainly on open questions (the questionnaire is available from the authors on request).

The first section inquired after health problems in the preceding month, and up to four problems were listed and recorded. For each of these problems, the respondent was asked whether it had resolved without treatment, or whether any mode of treatment had been employed – Yemenite folk remedies either self-administered or through a traditional healer, other self-care, medical care, popular remedies, complementary medicine, or non-Yemenite folk remedies. Yemenite traditional remedies and other popular folk remedies were defined as such by the respondents. The second section of the questionnaire examined the immigrants' attitudes – their definition of Yemenite folk medicine and what they perceive as its advantages, the advantages of conventional medicine, and the relative efficacy of both for various health problems.

The third section of the questionnaire recorded socio-economic data including their current age, age at immigration, year of immigration, marital status, gender, religiosity, and education.

### Data analysis

Two independent family physicians analyzed and coded the responses. In the event of disagreement the two coders discussed the response until a consensus was reached. Rates among groups were compared using the chi-square test, and continuous variables were analyzed using the *t*-test and ANOVA as appropriate, depending on the number of groups.

## Results

Altogether, 326 elderly people were identified who fulfilled the selection criteria, of whom 304 (93%) agreed to be interviewed. Of these, 276 (91%) reported at least one health problem in the preceding month. This group forms the basis for the analysis, providing 515 problems in total, in 36 different categories. Table 1 shows the 10 most frequent categories. The sociodemographic

**Table 1.** The ten most frequent problems among 276 elderly Yemenite Jews

Problem	N
Leg pain	74
Headache	59
Unsteadiness	51
Back pain	50
Breathing difficulties	38
Visual disturbances	28
Common cold	23
Joint pains	19
Abdominal pain	18
Constipation	17

**Table 2.** Demographic details of 276 elderly Yemenite immigrants who reported at least one health problem in the preceding month

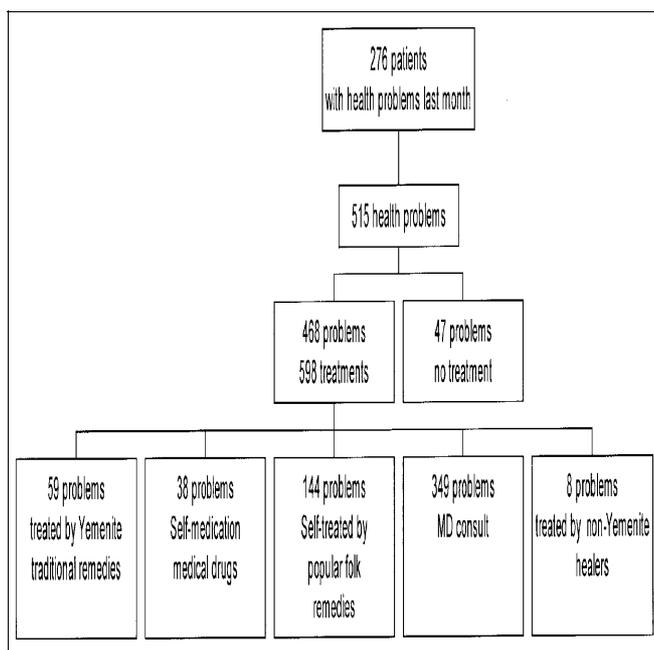
Mean age	78.4 ± 5.5
Male	56%
<b>Date of immigration</b>	
Before 1949	36%
After 1949	46%
Not known	18%
<b>Age at immigration</b>	
Over 30	31%
Under 30	48%
Not known	21%
<b>Marital status</b>	
Married	62%
Widowed	34%
Other	4%

details are given in Table 2. A total of 66% of the respondents had no formal education.

Forty-seven of the 515 problems reported (9.1%) were self-limited and did not require any treatment. For the other 468 problems various treatment modalities were employed [Figure 1]. Overall, 349 problems (68%) were reported to a conventional medical doctor, and 83% of the remedies prescribed by the doctor were used, either completely or in part. Popular folk remedies were used by 144 (28%), and 38 of the 515 problems (7.4%) were treated by self-medication using official medical drugs. Fifty-nine of the problems (11.5%) were treated by specifically Yemenite traditional remedies, mostly by the respondents themselves (38/59) rather than by a traditional healer.

The most common problems taken to the doctor were leg pain, back pain, unsteadiness, and headache. The commonest self-treated problems were headache, leg pain, back pain, visual disturbances, common cold, and unsteadiness. The most common problems treated by traditional methods were unsteadiness, headache, back pain, and leg pains.

Twenty-eight different methods of healing, including herbal, physical and occult, were defined by the respondents as belonging to the category of traditional Yemenite healing. Ten



**Figure 1.** Treatment modalities for health problems in 276 elderly Yemenites

of these methods were reported as being in actual use, including: branding (61 responses), henna applications (46 responses), herb ingestion (37 responses), amulets (35 responses), massage (33 responses), incantation (21 responses), foods rubbed into the skin (13 responses), cupping glasses (13 responses), scarification (11 responses), and herbal applications (6 responses).

Traditional Yemenite remedies were thought to help in the following conditions: headache in 22, anxiety in 20, general pain in 16, back pain in 11, abdominal pain in 10, and leg pain in 10. Conventional medicine was thought to help most for: "everything" (56 responses), general pain (8 responses), headache (8 responses), common cold (6 responses), and diarrhea. At least one advantage of traditional Yemenite remedies was listed by 82 of the 276 respondents (30%), chief among them being: religiously inspired (26 responses), effective in Yemen (18 responses), and always use natural remedies (10 responses).

Of the 276 respondents 128 (46%) listed at least one advantage of conventional medicine: namely, based on knowledge (78 responses), professional competence (24 responses), diagnostic and therapeutic potency (23 responses), and availability (13 responses).

Users of traditional Yemenite treatment, in comparison to non-users, were more likely to see its positive attributes (43.5% vs. 27.8%,  $P<0.05$ ). No such association was found between utilization of conventional medicine and seeing its positive attributes.

Immigrants who arrived in Israel over the age of 30 years, as compared to respondents who immigrated at an earlier age and grew up in Israel, were more likely to use traditional Yemenite

remedies (24.4% vs. 8.2%,  $P<0.005$ ), and more recent immigrants were more likely to express its positive attributes (37% vs. 25.4%,  $P=0.05$ ).

## Discussion

The validity of these results is contingent on a number of assumptions. One basic problem is the fidelity of self-reported behavior. Although it is not possible with this research design to assess the reliability of the information on utilization, the attitudinal data may be accepted at face value, since the context of the survey would neither encourage nor discourage the respondents to express their honest opinions. Since the overall utilization rates were very high indeed, with medical care sought in 67% of all health problems reported, it is unlikely that the utilization rates for Yemenite treatments are an overestimate. The further observation that those who expressed positive attributes for Yemenite treatment were also more likely to report using these methods adds credence to the results.

The results of this survey suggest that when elderly people in this population fall ill, they turn to conventional medicine for treatment in two-thirds of cases, and to popular remedies or self-medication with recognized drugs in one-third. Specifically Yemenite remedies were used in 11%. Consistent with this reported behavior, two-thirds of the respondents expressed advantages for conventional medicine such as its knowledge base, diagnostic capacity, efficacy and availability; and one-third expressed advantages for traditional Yemenite healing for its naturalness, efficacy, and consistency with their religious belief system.

We had originally surmised that elderly Yemenites only used conventional medical services because they were freely available at no direct cost, while maintaining their basic beliefs in traditional Yemenite methods of healing. Our results suggest that this is not the case, and that a considerable degree of change in basic attitudes occurred over the years since immigration. The use of conventional medicine by these immigrants is not confined to consultation with medical doctors, but also encompasses self-medication with modern medical drugs, indicating that they subscribe to modern medical science and have not simply replaced one set of experts with another.

Previous studies of this topic among the Yemenite immigrants in Israel have indicated that traditional remedies were used extremely widely, with 45% of people over the age of 60 years bearing the scars of physical treatments such as scarification or branding. Other commonly used methods include the more esoteric methods of amulets and knotting, as well as herbal medicines, as described fully in the chapter in Weingarten's book on this subject [4]. Traditional herbal treatment is still taught by mothers to daughters as part of domestic wisdom [5]. The pattern of use of modern medical resources by Yemenite patients in Israel cannot be discussed in isolation from their socioeconomic condition, which has been among the most difficult in the country. Poverty is a strong risk

factor for illness, disability and dependence on medical care. Furthermore, the frequency of use of medicine by elderly patients in general is affected by the development of multi-system age-related pathologies, by increasing functional incapacity, and by cognitive decline [6]. A high prevalence of limb pain, back pain and visual disturbances was also found in a survey of aged people in Rosh HaAyin, another Yemenite community [1], but unsteadiness, mentioned so frequently in this study population, was not reported there.

Health and healthcare are culturally determined constructs and each immigrant population brings with it its own sets of ideas [1]. Specifically Israeli examples include hypertension in Moroccans [7], abdominal pain among Ethiopians [8], and functional somatic symptoms in Iranians [9]. The Yemenite health belief system is a complex combination of religious Jewish tradition and traditional Arab medicine, but is best described as fatalistic as compared with the rationalist assumptions of modern medicine [1]. The process of cultural transition includes both a change in the basic model of the cause and the meaning of disease, and a transfer from traditional healers who had an accepted place in the culture of origin, to medical experts who represent the dominant forces of government and industry in the new host society [10]. Thus the extent of dependence of aged Yemenite immigrants on modern Israeli medical institutions was no surprise. What was more surprising was the extent to which they had abandoned their health belief system.

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