Letter to the Editor

DOI: 10.1089/acm.2008.0445

Attitudes of Patients with Diabetes About Complementary Medicine in Israel: A Cross-Cultural Perspective

Dear Editor:

Cultural diversity is an increasingly acknowledged factor for complementary and alternative medicine (CAM) use by patients with diabetes. Patterns of CAM use based on traditional practices may have significant medical implications. In the diverse society of Israel, historical and ethnopharmacological evidence for herbal use in diabetes care is abundant for both the Jewish and Arab communities. The purpose of the present study was to evaluate diabetes patients’ perspectives on CAM integration within primary care clinics in a cross-cultural context.

The study was performed after recruitment of a convenient sample of patients visiting primary care physicians for medical or administrative services. The study setting included seven family medicine clinics operated in varying urban and rural settings by the Clalit Health Services in northern Israel that serve a variety of Jewish and Arab populations (Muslims, Christians, and Druze). Prior to its initiation, the study was reviewed and approved by the Clalit Health Services Internal Review Board.

A questionnaire was developed based on a comprehensive literature review as well as on a focus group discussion with patients attending a primary care clinic. Complementary and alternative medicine was defined as “therapies often named alternative, complementary, natural, folk/traditional medicine, which are not usually offered as part of the medical treatment in the clinic.”

Data were evaluated with the SPSS software program (SPSS, Chicago, IL). Pearson’s chi-square test and Fisher’s exact test were used to detect differences in the prevalence of categorical variables and demographic data between the Arab and Jewish participants.

Research assistants administered the survey to patients attending family medicine clinics during the years 2005 and 2006. Of 3972 eligible subjects, 132 refused to participate (response rate 96%). Of the 480 respondents who reported having diabetes, 271 defined themselves as Arabs (56.5%) and 209 (43.5%) as Jews. The participants’ demographic characteristics are shown in Table 1. Jewish and Arab diabetes respondents were equally distributed by gender but differed in other characteristics.

Jewish and Arab diabetes patients reported similar rates of CAM use (47%) and CAM practitioner consultations (31%–35%) during the last year. Arab respondents reported higher use of traditional medicine (61.4% versus 25.5%; \( p < 0.0001 \)) than Jews. Compared to Jewish patients with diabetes, Arab patients reported more consultations with practitioners concerning herbal (45.8% versus 27.7%; \( p = 0.022 \)), traditional (39.6% versus 7.7%; \( p < 0.0001 \)), and nutritional supplements (33.3% versus 13.8%; \( p = 0.006 \)). In contrast, Jewish diabetes patients consulted more frequently with homeopaths (9.2% versus 1%; \( p = 0.018 \)) and chiropractors (15.4% versus 5.2%, borderline significance \( p = 0.05 \)).

Both Jewish and Arab respondents expected their family practitioners to initiate the referral to CAM in a theoretical scenario where CAM is integrated within primary medical care (83%). Arab respondents supported the option that non-M.D. practitioners of CAM would provide their services in integrative settings (68% versus 36.4%; \( p < 0.0001 \)) more than the Jewish respondents did.

Compared to Jewish respondents, Arab respondents were more supportive of the addition of herbalists to the primary care team (34% versus 21.6%; \( p = 0.008 \)). Jewish respondents with diabetes were significantly more supportive of adding movement/manual healing practitioners (19.3% versus 8%; \( p = 0.001 \)).

The reasons for a culture-based CAM approach in our study population are multifaceted and may be related to historical, cultural, political, and socioeconomic causes. In a recent report, Sawalha suggests that CAM and herbs are popular among Arabs for the following reasons: relatedness to the local Arabic and Islamic heritage, cost considerations, greater accessibility compared to modern medicine, and herbal/CAM proven efficacy. Many of the CAM users in this survey reported that they collected herbs from the surrounding natural habitat. This finding not only emphasizes the economic motive for herbal use among the respondents but may also suggest their connectedness to nature and sense of belonging to traditional healing. Moreover, Arab patients with diabetes may be more open to traditional practitioners, who often are integral members of the community and who come from the same cultural background, speak the same language, and live in the same village or nearby community. Further research, preferably based on qualitative methodology, could better elucidate the role of CAM practitioners in diabetes care in herbal and other traditional modalities, such as nutrition, mind-body, and manual healing.

We conclude that this study points out a need to base integration of CAM in diabetes care on cross-cultural foundations and recommend that future researchers base their research on both qualitative and quantitative methodology.

Acknowledgments

The authors are grateful to Dr. Sonia Karkabi, Dr. Moshe Frenkel, and Ms. Dalia Naser El Deen for their assistance in developing the Arabic and Hebrew versions of the questionnaire, and to Ms. Marianne Steinmetz for editing the manuscript.

In addition, the authors thank the medical directors and the staff members of the clinics and the research team from...
the International Center and College of Natural Complementary Medicine for their cooperation in this effort.

Disclosure Statement

No competing financial interests exist.

References


Eran Ben-Arye, M.D.1,2
Elad Schiff, M.D.3,4
Khaled Karkhabi, M.D., M.M.H.1,2,5
Efraim Lev, Ph.D.6

1Complementary and Traditional Medicine Unit
Department of Family Medicine
Technion-Israel Institute of Technology
Haifa, Israel
2Clalit Health Services, Haifa, Israel
3Department of Internal Medicine
Bnai-Zion Hospital, Haifa, Israel
4The Department for Complementary/Integrative Medicine, Law and Ethics
The International Center for Health, Law, and Ethics
Haifa, Israel
5Rapaport Faculty of Medicine
Technion-Israel Institute of Technology
Haifa, Israel
6Department of Erets Israel Studies and School of Public Health
University of Haifa, Haifa, Israel

Address reprint requests to:
Eran Ben-Arye, M.D.
Clalit Health Services
6 Hashulat Street
Haifa 35013
Israel

E-mail: eranben@netvision.net.il

---

### Table 1. Demographic Characteristics of Respondents

<table>
<thead>
<tr>
<th></th>
<th>No. of diabetes respondents (n = 480)</th>
<th>Jewish diabetes respondents (n = 209)</th>
<th>Arab diabetes respondents (n = 271)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mean age in years ± SD (median)</strong></td>
<td>55.4 ± 13.8 (55)</td>
<td>61.1 ± 13.6 (60.5)</td>
<td>50.5 ± 12.1 (49)</td>
</tr>
<tr>
<td><strong>Sex, male:female (%)</strong></td>
<td>194:251 (43.6:56.4)</td>
<td>94:113 (45.4:54.6)</td>
<td>111:156 (41.6:58.4)</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elementary school</td>
<td>126 (30.7%)</td>
<td>31 (16.2%)</td>
<td>109 (45.4%)</td>
</tr>
<tr>
<td>High school</td>
<td>217 (52.8%)</td>
<td>108 (56.5%)</td>
<td>114 (47.5%)</td>
</tr>
<tr>
<td>Academic</td>
<td>68 (16.5%)</td>
<td>52 (27.2%)</td>
<td>17 (7.1%)</td>
</tr>
<tr>
<td><strong>Religiosity</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Secular</td>
<td>135 (28.2%)</td>
<td>96 (47.1%)</td>
<td>37 (13.8%)</td>
</tr>
<tr>
<td>Traditional</td>
<td>231 (48.3%)</td>
<td>83 (40.7%)</td>
<td>145 (53.9%)</td>
</tr>
<tr>
<td>Religious</td>
<td>105 (22.0%)</td>
<td>24 (11.8%)</td>
<td>81 (30.1%)</td>
</tr>
<tr>
<td>Ultrareligious</td>
<td>7 (1.5%)</td>
<td>1 (0.5%)</td>
<td>6 (2.2%)</td>
</tr>
</tbody>
</table>

Data analysis was performed by Pearson’s chi-square test and Fisher’s exact test. SD, standard deviation.