Assessment of Knowledge, Attitude and Practice of Complementary and Alternative Medicine among Elderly People Attending Health Insurance Outpatient Clinics in Ismailia Governorate

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Abstract:
Background: Recent surveys concluded that the elderly people are using complementary and alternative medicine (CAM) frequently. Use of CAM among older patients is considered significant challenge. Preventing adverse reactions and drug interactions associated with CAM use is complicated by the fact that only less than 50% of older patients disclose CAM use to their treating physicians. That is why it is essential for family physicians to explore knowledge, attitude and practice of elderly people towards CAM. Objective: This study aimed to assess knowledge, attitude and practices of elderly people towards complementary and alternative medicine. Methods: This is a cross sectional descriptive study; it was conducted in March and April 2016, in health insurance outpatients clinics in Ismailia governorate. Sample size was 150 elderly people allocated consecutively over the two months. Results: About 84% of elderly have some knowledge regarding CAM; herbs were known by (75%) of the selected sample and their source of knowledge was mainly the media (56%) followed by their family and friends. The reported success rate of CAM to relieve symptoms of the study population was (54.7%). Regarding beliefs of the study participants about the use of CAM; (76%) believe in CAM safety, (58.7%) believe that CAM is effective, while (54.7%) do not believe that CAM are better than drugs, (64%) perceive that they need health education about CAM. Conclusion: The current study concludes that CAM use is highly prevalent among people. However, there is a demand for better and consistent information about herbal medicine regarding effectiveness and safety. Keywords: Complementary medicine, alternative medicine, elderly, knowledge, attitude, practice, herbal medicine.

Introduction: Elderly people are always willing to search ways which improve their health and found to use complementary and alternative medicine (CAM) more often than other age groups.¹ In Egypt, a family-based study was carried out in Bir El Abd district, North Sinai Governorate to study complementary and alternative practices in Bedouin revealed that 38% of the studied population had used CAM at some time in their past life. Herbal/nutritional therapies were the most frequently used (37 %) as CAM therapy, followed by cupping (36%).² There are many definitions for CAM, according to The National Center for Complementary and Alternative Medicine in United States (NCCAM), CAM is defined as a group of diverse medical and healthcare systems, practices, and products that are not

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generally considered part of conventional medicine\(^{(3)}\). The World Health Organization (WHO) defines traditional medicine as those including diverse health practices, approaches, knowledge and beliefs incorporating plant, animal and/or mineral based medicines, spiritual therapies, manual techniques and exercises applied singularly or in combination to maintain wellbeing, as well as to treat, diagnose or prevent illness.\(^{(4)}\)

The CAM services are often used alongside (and in addition to) conventional medical treatments. So, a vast informal and silent healthcare sector exists in all countries, and no comprehensive picture of this sector exists as yet in any country.\(^{(5)}\) Data on the current patterns of use and effectiveness of multiple CAM treatments being used alone and in combination are inadequate. CAM is used by people for the management of chronic conditions that are expensive to society, such as arthritis and chronic pain, and more life-threatening diseases such as heart diseases and cancer.\(^{(6)}\) Nearly half the population in many developed countries regularly use some form of CAM (United States represents 42 \%,\(^{(7)}\) Australia represents 48 \%,\(^{(8)}\) France represents 49 \%,\(^{(9)}\) and Canada represents 70 \%. A considerable use exists in many developing countries (Colombia 40 \%; Chile 71 \%; and up to 80 \% in African countries).\(^{(10,4)}\)

There are numerous reasons why older consumers access CAM for their health needs. These include disillusionment with conventional medicine that offers no firm answers, dissatisfaction with conventional practitioners who may exhibit poor communication, lack of empathy, and have so limited time, desire for simplicity as CAM preparations are perceived to be "simple" without complex directions, warnings and labels, perception that natural preparations promote optimum health, more compatible with health’ and, ready access via Internet, health food shops, free call hot-lines, mail-order, free home-delivery, party-plan and multi-level marketing, enticing advertising that encourages a CAMs trial, alternative lifestyles and ‘keep fighting the disease and peer pressure fashion’. Postpone age-related deterioration and mortality
and desire for autonomy over healthcare decisions.\textsuperscript{(11-15)}

Role of family physician is crucial in handling the above mentioned problems of CAM use among the practice population. Such role might be in making patients more informed towards their choice about CAM. Specifically physicians can protect, permit, promote, and partner with patients about CAM practices as appropriate.\textsuperscript{(16)} As there are limited studies in this area of Medicine in Egypt, the question arising is: What are the prevalence, socio-cultural and personal factors (knowledge, beliefs, attitudes, motivations) underlying a person’s decision to use CAM? Hence, the present work will assess knowledge, attitude and practice of the elderly people attending health insurance outpatient clinics in Ismailia towards CAM.

**Methods:** This is a cross sectional descriptive study; it was conducted in March and April 2016 at health insurance outpatient clinics in Ismailia governorate. The sample size was calculated according to the following equation;\textsuperscript{(17)} \( n = \frac{(Z_{\alpha})^2 \cdot (p-1)}{d^2} \) Where:

- \( n \) = estimated sample size.
- \( Z_{\alpha} \) at 5\% level of significance = 1.96.
- \( d \) = level of precision and is estimated to be 0.05
- \( p \) = prevalence rate of CAM use in two previous studies in the region that was 40 \%.\textsuperscript{(2,18)} So, \( n = 1.96*1.96)(0.40*0.60)/(0.40*0.10*1.96=150 \) elders.

Sample size was 150 elderly people allocated consecutively over the two months.

All Patients aged 60 years and above who attended health insurance outpatient clinics in Ismailia governorate who satisfied the inclusion criteria were recruited. Elders with impaired cognitive functions that interfere with the reliability of the given data were excluded.Data were collected using a pre-designed questionnaire including the following four sections:

1. Socio-demographic data including: age, sex, residence, education, occupation before retirement, income, current medical condition.
2. Participant background knowledge of CAM and his/her sources of information.
3. Practice of CAM: enquires about use of CAM of the participant and the medical condition he/she used CAM.
4. The fourth section is concerned to explore the beliefs of the respondents towards CAM.
The participants were invited to in depth interview with the researcher to explore their knowledge, attitude and practice towards CAM.

**Ethical approval:** The protocol was done after approval from the faculty studies Committee, the Research Committee as well as the Research Ethics Committee. Informed consent was obtained from the participants after explaining the objectives of the research. Confidentiality of data was maintained and the participants were free to accept or not to participate in the research.

**Statistical analysis:** The collected data were analyzed using Statistical Package for Social Sciences –SPSS 20.0 (SPSS Ltd, Chicago, USA). Descriptive statistics: qualitative data were presented in frequencies and percentages and quantitative data were presented in median (interquartile range), and mean ranks.

**Results:** This study was conducted on 150 elderly people in health insurance outpatient clinics, Males constituted (52.7%) of the sample and the majority of the studied population (68%) live in urban. 39% of the studied population have an intermediate educational level and (56.7%) of the sample has perceived their income as inadequate. More than three-quarters (84%) of elderly have knowledge regarding complementary and alternative medicine, only one type of CAM (herbs) was known by (75%) of the selected sample. Figure (1) shows types of complementary and alternative medicine used. It shows that; herbs are the most common type used (36.7%) followed by cupping (15.3%) then honey and honey products (8%).

Figure (2) shows methods of using complementary and alternative medicine. It is evident that; complementary medicine was used with treatment in 45.3% of the study population and alone in 26%. About one third of the study population used CAM based on advice from a family-member while (19.3%) had an advice from a friend and only 10.7% had their treating physicians recommended using CAM (Figure-3). Figure (4) shows consequences of using complementary and alternative medicine. It shows that; more than half of the symptoms 54.7% were relieved when using CAM, while only 7.3% suffered from some complications. About 28.7% used CAM
because they believed that CAM is safe, 19.3% because CAM is inexpensive (Figure-5).

**Discussion:** The aim of this study was to assess knowledge, attitude and practice of the elderly people regarding complementary and alternative medicine which may help in improvement of the quality of medical service provided for those patients. The expected probability of CAM use among our study population is significantly affected by the level of education (P<0.05). However, other socio-economic factors (residence, income and work) did not show an effect over the CAM knowledge, practice and attitude. These results were in partial agreement with the results of a study conducted in United States of America (USA) that reported that rural residence, age, income, education, and health insurance were unrelated to CAM use.\(^{(19)}\) The role of socio-demographic variables is considered to be important as predictors of CAM use. The importance of each variable will vary from country to another mainly due to cultural differences.

About 50% and 64% of the study population agreed that there is need for CAM clinics in governmental hospitals and the need for health education about CAM respectively. These results were slightly lower than those reported by Al-Faris et al.(2000) who recorded that 86.9% of participants agreed on the need for clinics for CAM practice\(^{(20)}\). In terms of safety and efficacy of CAM; the results were similar to those reported by Al-Faris et al(2008).\(^{(21)}\)

As showed in this study, CAM practices were commonly used for chronic morbidities. The situation among Americans and Indians was almost similar to this studies’ results as CAM was used to treat neck pain, joint pain or stiffness, back pain, diabetes mellitus, hypertension, arthritis and anxiety or depression.\(^{(22,23)}\) Our study showed that the use of CAM therapies involved a wide spectrum of medical problems ranging from simple, transient and self-limited up to serious, long term disabling and terminal conditions.

The relatively high use of CAM can be explained by the background of existing trans-cultural view towards use of CAM practices before seeking medical advice from medical health care
providers or even after. Also, Patients in rural areas (like our study population) face a variety of unmet needs due to less available resources to choose from, poverty, perceived reliability of these therapies based on religious or family traditions and the availability of such practices. All of these factors may contribute to the use of CAM therapies. Also, Physicians' attitudes towards CAM and poor patient–doctor communication may be other reasons why patients use CAM more and even without informing the treating physician.

Herbal therapies are one of the most frequently used CAM practices. According to the World Health Organization (WHO), more than three-quarters of the world's population trust in traditional medicine, especially herbs. Our results (36.7%) were higher than those reported from two separate studies conducted in the United States which reported that (20%) and (24%) of participants had used medicinal herbs. More than two-thirds of our studied population; who used CAM (76%) perceived it as a beneficial treatment modality and used it widely in different medical problems. Similar result (75%) was reported by researchers in Japan.

All results obtained in our study and all other studies can show the need to make the physician as a source of information. Also, being only source of information is inadequate but to be evidence-based as reported recently by American Academy of Family Practitioners (AAFP). A good doctor–patient relationship will be one of the most important factors in this issue, where in absence of such relationship, the patient may deny such CAM rather than informing his physician.

Our study population only represents Ismailia governorate so the results cannot be generalized to all Egyptian governorates that have different cultures, habits and beliefs. Participants were not randomly selected so a consecutive sample was recruited with the application of the inclusion and exclusion criteria until the sample size was fulfilled. Open access to needed papers was restricted by payment, so availability of relevant papers was limited.
Conclusions: There is high prevalence and high interest in CAM practices among elderly people. Mass media, relatives and friends are the main sources of knowledge, and there is a positive attitude towards CAM, generally. However, most participants were reluctant to share CAM information with their physicians.

Declaration: There was no conflict of interest and there were no funding agencies.

References:


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Figure 1: Type of complementary and alternative medicine used (n=150)

Figure 2: How complementary medicine was used (n=150)
Figure 3: Person who recommended this treatment (n=150)

Figure 4: Consequences of using complementary and alternative medicine (n=150)
Figure 5: Reasons for using complementary and alternative medicine (n=150)
الملخص العربي
تقييم معرفة و ممارسة و اعتقادات كبار السن للطب التكميلي و الطب البديل المترددين على العيادات الخارجية
للتأمين الصحي بالإسماعيلة

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الخلفية: تشير الدراسات الاستقصائية الأخيرة إلى أن كبار السن هم أكثر استعداداً للأندواتية التكميلية والبديلة. يمثل استخدامها في السنين تطورات كبيرة. إن الوقاية من التفاعلات الضارة والتقدمات اليومية المرتبطة باستخدام العلاج للكيميائي معقدة بسبب حقيقة أن أقل من 50% فقط من المرضى الأكبر سنًا يشعرون عن استخدامهم لهذا النوع من التدواري لأطبائهم. وهذا هو السبب في أنه من الضروري لطب الأسرة استكشف معارف ومقاصد ومواعيد المسنين تجاه العلاج التكميلي والبديلي. الأهداف: تهدف الرسالة إلى تقييم وعي ومارسات كبار السن للطب البديل والتكميلي و معتقداتهم تجاه هذا النوع من التدواري. وقد قامت هذه الدراسة على عينة 150 مريض من كبار السن المترددين على العيادات الخارجية بالتأمين الصحي بالإسماعيلة عن طريق استمارة استبيان.

المنهجية وطرق البحث: و تتضمن هذه الدراسة دراسة وصفية قائمة على استمارة استبيان تتكون من أربعة أجزاء:

الجزء الأول: يشمل البيانات الشخصية للمريض.

الجزء الثاني: تقييم معرفة المريض بالعلاج التكميلي والبديلي.

الجزء الثالث: تقييم استخدام المريض للعلاج التكميلي والبديلي.

الجزء الرابع: تقييم معتقدات المريض تجاه العلاج التكميلي والبديلي.

النتائج: أظهرت الدراسة أن 84% على درجة بالطب البديل والتكميلي وأن 56% من العينة يستقلون معلوماتهم عن وسائل الإعلام ثم الأسرة والأصدقاء. وكذلك أظهرت الدراسة أن 69.3% يلمفهم استخدام الطب البديل والتكميلي حيث وجد أن استخدام الأعشاب هو الأكثر شيوعا (36.7%) وأكثر الأعشاب استخدامهم هو الكركدية ونعناع والعرق سوس يليهما استخدام المصلحة (15.3%). ونسبة 28% فقط من العينة هم من أخبروا الأطباء باستخدامهم للطب البديل والتكميلي. كما أظهرت الدراسة أن الغالبية (63.3%) لم يتعرضوا لأي مكاسبات جراء استخدامهم للطب البديل والتميلي. أما بالنسبة لاعتقاداتهم تجاه استخدام الطب البديل والتكميلي 76% يعتقدون أن التدواري بالطب البديل أمر فعال بنسبة 58% أما 70% يرون أن استخدام الطب البديل بالإضافة إلى العلاج التقليدي. ونسبة 50% يعتقدون بأهمية إنشاء عيادات خاصة بالطب البديل والتميلي بالمستشفيات والمراكز الطبية.

الخلاص: وخلصت الدراسة أن المرضى الأكبر سنًا لديهم بعض المعرفة والاتجاهات والمارسات فيما يخص الطب التكميلي والبديلي وهذا يضع تبعيه على أطباء الأسرة وهي ضرورة التعرف علي ذلك خلال جلسات الاستشاره الطبية. مع هذه الفئة من المرضى.