

# The Evaluation of Attitude, Knowledge and Practice of Alternative Medicine

(Among Females at Multiple Centers in Riyadh City)

## **DIDICATION**

WE dedicate our work to our families and many friends. Words of encouragement and push for tenacity ring in my ears. A special feeling of gratitude and special thanks to our doctors: Dr. Mona Hassan who was the supervisor of the work and also, Dr. Hanin Osama, for her support till the end of this work, teaching us many skills and a lot of we can not numerate. We also dedicate this work to many of our friends and who have supported us throughout the process, we will always appreciate all they have done.

Finally, we dedicate this work to our college.

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## Abstract:

**Background:** Alleviating pains and improving patient's health status are the fundamentals in practice of medicine over many years. Unfortunately, health care providers neglect the use of natural products. The side effects of the medical therapy led the people to seek the use of alternative therapies.

**Objectives:** This study focused on the knowledge, attitude and use of CAM among a sample of women in Riyadh practice.

**Methodology:** An observational, cross sectional, community based, and multi-center study was conducted. After obtaining verbal consent, data were collected using a face-to-face interview based questionnaire.

**Results:** The awareness was great among the participant and most of participants preferred to use AM in combination with conventional medicine. Most patients with diabetes, dermatological disease, headache, and tiredness don't prefer AM for treatment, but was commonly used in the treatment of menstrual pain. The commonest reasons for preferring CAM that they are natural products and to avoid the side effects of drugs. Most of participants had no side effects after using CAM, 97% reported improvement after using it and are willing to use it in the future.

**Conclusion:** This study showed the advanced knowledge about CAM among study sample. More awareness in the community required from health care providers and governmental efforts in order to shed a light on the importance of CAM as a recognized treatment modality.

## Introduction

Interest in and use of traditional medicine and complementary and alternative medicine (T/CAM) has been well documented. <sup>(7)</sup> Almost half the population in many industrialized countries now regularly use some form of T/CAM (e.g. United States, 42%) <sup>(14)</sup>

According to WHO, alternative medicine is a broad set of health care practices that are not part of the countries own tradition and are not integrated into the dominant health care system <sup>(20) (8)</sup>

While, Merriam-Webster dictionary described it as any of various systems of healing or treating disease that are not included in the traditional medical curriculum of the United States and Britain. <sup>(21)</sup>

In developing countries, where T/CAM has long been practiced both within and outside the dominant health care system, interest has been building over the past decade for a policy framework for T/CAM within national health care

systems, and some guidelines have been created. <sup>(5,6)</sup> E.g. Yoga has its roots in Indian philosophy and has been a part of traditional Indian spiritual practice for around 5000 years. <sup>(1)</sup>

In the United State, approximately 38 percent of adult (about 4 in 10) and approximately 12 percent of children are using some forms of alternative medicine. <sup>(8)</sup>

Eastern countries have a long standing tradition of teaching medicine, but until recently, most western hospitals didn't provide any alternative treatments and western medical school didn't teach them. <sup>(22)</sup> Patients there are becoming more receptive to trying alternative techniques and have been asking for them, therefore some hospitals and doctors are supplementing their regular medical care with alternative techniques. <sup>(22)</sup> Drug induced complications pushed countries to study more and more about natural therapies, and they spent a lot of their income on it <sup>(22)</sup>.

Alternative therapy includes wide ranges of practices but most commonly used methods are whole medical systems

such as homeopathy which is based on the belief that a disease can be cured by a very low dose of substance that creates similar symptoms in a healthy person, naturopathy which is based on a belief in vitalism, posits special energy called vital energy or vital force guides bodily processes such as metabolism, reproduction, growth and adaptation.<sup>(23)</sup> Mind-body medicine which attempts to use the mind to affect bodily symptoms and functions; examples include yoga, spirituality and relaxation.<sup>(23)</sup> Biologically based practices include the use of herbal medicines, special diets or very high doses of vitamins. Manipulative and body-based practices such as massage and acupuncture (which is a Chinese method used to insert needles at specific sites in the body to relief pain and propel blood) and finally Energy medicine which is designed to influence energy fields (biofields) that practitioners believe that it surrounds and enters the body<sup>(23)</sup>.

Many conditions involve the use of alternative medicine, such as migraine treatment, abdominal aches, knee and back pain, skin rashes, joint problems, burns and many more. Alternative medicine therapies fall into five major categories:

### 1. Alternative Medical Systems

- Alternative medical systems are built upon complete systems of theory and practice. Often, these systems have evolved apart from and earlier than the conventional medical approach used in the United States.<sup>(24)</sup>
- Examples of alternative medical systems that have developed in Western cultures include homeopathic medicine and naturopathic medicine.<sup>(24)</sup>
- Examples of systems that have developed in non-Western cultures include traditional Chinese medicine and Ayurveda.<sup>(24)</sup>

### 2. Mind-Body Interventions

- Mind-body medicine uses a variety of techniques designed to enhance the mind's capacity to affect bodily function and symptoms.<sup>(24)</sup>
- Some techniques that were considered CAM in the past have become mainstream (for example, patient support groups and cognitive-behavioral therapy).<sup>(24)</sup>
- Other mind-body techniques are still considered CAM, including meditation,

prayer, mental healing, and therapies that use creative outlets such as art, music, or dance.<sup>(24)</sup>

### 3. Biologically Based Therapies

- Biologically based therapies in CAM use substances found in nature, such as herbs, foods, and vitamins.<sup>(24)</sup>
- Some examples include dietary supplements, herbal products, and the use of other so-called natural but as yet scientifically unproven therapies (for example, using shark cartilage to treat cancer).<sup>(24)</sup>

### 4. Manipulative and Body-Based Methods

- Manipulative and body-based methods in CAM are based on manipulation and/or movement of one or more parts of the body.<sup>(24)</sup>
- Some examples include chiropractic or osteopathic manipulation, and massage.<sup>(24)</sup>

### 5. Energy Therapies

- Energy therapies involve the use of energy fields. They are of two types:
- Bio field therapies are intended to affect energy fields that purportedly surround and penetrate the human body. The existence of such fields has not yet been scientifically proven. Some forms of energy therapy manipulate bio fields by applying pressure and/or manipulating the body by placing the hands in, or through, these fields. Examples include qi gong, Reiki, and Therapeutic Touch.<sup>(24)</sup>
- Bio electromagnetic-based therapies involve the unconventional use of electromagnetic fields, such as pulsed fields, magnetic fields, or alternating current or direct-current fields.<sup>(24)</sup>

**Safety.** Advocates of CAM suggest that regulation of the industry will adversely affect patients looking for alternative ways to manage their symptoms, even if many of the benefits may represent the placebo effect.<sup>(12)</sup>

#### A. Interactions with conventional pharmaceuticals.

Forms of alternative medicine that are biologically active can be dangerous even when used in conjunction with conventional medicine.<sup>(25)</sup> Examples include immuno-augmentation therapy, therapy, oxygen and ozone therapies, and insulin

potentiation therapy. <sup>(25)</sup>Some herbal remedies can cause dangerous interactions with chemotherapy drugs, radiation therapy, or anesthetics during surgery, among other problems. <sup>(15)</sup>

**B. Potential side effects.** Homeopathic preparations, termed "remedies," are extremely dilute, often far beyond the point where a single molecule of the original active (and possibly toxic) ingredient is likely to remain. <sup>(25)</sup>They are, thus, considered safe on that count, but "their products are exempt from good manufacturing practice requirements related to expiration dating and from finished product testing for identity and strength," and their alcohol concentration may be much higher than allowed in conventional drugs. <sup>(11)</sup>

**C. Treatment delay.** Those having experienced or perceived success with one alternative therapy for a minor ailment may be convinced of its efficacy and persuaded to extrapolate that success to some other alternative therapy for a more serious, possibly life-threatening illness. <sup>(13)</sup> For this reason, critics argue that therapies that rely on the placebo effect to define success are very dangerous. <sup>(25)</sup>

**D. Unconventional cancer "cures".** There have always been "many therapies offered outside of conventional cancer treatment centers and based on theories not found in biomedicine. <sup>(25)</sup>These alternative cancer cures have often been described as 'unproven,' suggesting that appropriate clinical trials have not been conducted and that the therapeutic value of the treatment is unknown. <sup>(25)</sup> However, many alternative cancer treatments have been investigated in good-quality clinical trials, and they have been shown to be ineffective <sup>(25)</sup>. The label 'unproven' is inappropriate for such therapies; it is time to assert that many alternative cancer therapies have been 'disproven'. <sup>(17)</sup>

## Literature review

A research was conducted in USA by Astin to find out why patients use alternative medicine. <sup>(2)</sup>He found out that, the majority of alternative medicine users appear to be doing so not as a result of being dissatisfied with conventional medicine but largely because they find these health care alternatives to be more congruent with their own values, beliefs, and philosophical orientations toward health and life. <sup>(2)</sup>

Another research was done on South Australian respondents over the age of 15 years, to survey the use, cost, beliefs and quality of life of users of alternative medicine. The results showed that AMs were used by 52.2% of the population. <sup>(3)</sup>

Greatest use was in women aged 25–34 years, with higher income and education levels. <sup>(3)</sup>Also the continues use of high levels of alternative therapists among Australians was obvious. <sup>(3)</sup>

In Singapore, a study was conducted to determine the prevalence of complementary and alternative medicine (AM) use, the factors influencing AM use, and the attitudes, beliefs and perceptions of the general population towards AM. <sup>(4)</sup> Traditional Chinese Medicine (88%) was the most widely used form of AM, followed by Traditional Malay (Jamu) Medicine (8%) and Traditional Indian (Ayurvedic) Medicine (3%). <sup>(4)</sup>

Barnes PM, *et al* 2004, conducted a research to estimate complementary and alternative medicine (CAM) use among U.S. adults. <sup>(10)</sup> CAM was most often used to treat back pain or back problems, head or chest colds, neck pain or neck problems, joint pain or stiffness, and anxiety. <sup>(10)</sup> Adults age 18 years or over who used CAM were more likely to do so because they believed that CAM combined with conventional medical treatments would help (54.9%) and/or they thought it would be interesting to try <sup>(10)</sup>

In Scotland, the changes in public awareness of, attitudes to, and use of complementary therapy were studied. <sup>(16)</sup> A sample of 800 participants were included to examine usage of 8 types of complementary and alternative medicine; acupuncture, aromatherapy, chiropractic, herbalism, homeopathy, hypnotherapy, osteopathy, and reflexology. <sup>(16)</sup> 6 years post-survey, more than half responded, mentioning they used at least 1 type of CAM. The main usage was for pain relief, headache, musculoskeletal problems and relaxation. <sup>(16)</sup>

In 2012, a research was done to study health awareness and popularity of alternative medicines among people of Jamnagar town. <sup>(18)</sup> The study was carried out in Jammang, India to assess the awareness of CAM among 200 responders by multiple-choice questions in an interview method. <sup>(18)</sup> Results showed that participants are well aware of non-drug therapy and its effectiveness among chronic diseases, especially home remedies Ayurvedic and allopathic treatments. <sup>(18)</sup>

Another study was done in Washington State its aim was to assess the utilization and knowledge of CAM between neurosurgery patient and neurosurgeon themselves. <sup>(19)</sup> Results showed that about 63% of neurosurgeons stated the role of CAM in their filed, especially acupuncture, herbs, massage and prayer. <sup>(19)</sup>

## Objectives

### General

To assess the awareness and practice of alternative medicine among females in multiple centers in Riyadh city

### Specific

- To assess the attitude of female in Riyadh city about the use of alternative medicine
- To verify their awareness about alternative medicine
- To determine the most commonly practiced alternative medicine in the treatment of specific diseases.

### Methodology

This is a cross sectional, observational, prospective, community based, multi-center study conducted at GhernataMall, Kingdom Mall, Dala Hospital, Girl Student Compound, Sadhan Market, Maarefa College.

The main aim was focused on the knowledge and use of alternative medicine and the most commonly used types. Using convenient sampling method 200 females (aged between 18 and 60 years) present at the time of data collection 20-30 November 2013 were included in the study.

It was face-to face interview based questionnaire. The questionnaire was in Arabic language to be understood by all participants. Many variables were studied to evaluate awareness, practice and use of AM in common diseases (tension headache, toothache, diabetes, menstrual pain, dermatological disease and abdominal pain)

Variables under study are age, social status, education level, occupation, if heard about AM, if she watches media talking about AM, If she think that AM is safer than conventional medicine, If she thinks AM is more effective than drugs, will she agree to use AM, does she prefers AM or conventional medicine or both, did she ever used AM before, what does she used to treat headache, toothache, dermatological diseases, diabetes, menstrual pain, tiredness and abdominal pain, who advised her to use AM, from where does she get the AM, why she prefers AM, if there is improvement after AM use, if there were any side effects after using am and would she like to use AM in the future.

Alternative medicine like: herbal medication, physical supportive measure (massage), intake of honey, soup, tea, coffee, multivitamins and others.

Frequencies of knowledge and practices for the use of AM were analyzed by SPSS. Verbal consent from each participant was taken before collecting data.

### Results

#### 1) Age

Age/ Years	Frequency	Percent
< 18	14	7.0
19-29	106	53.0
30-39	39	19.5
40-49	30	15.0
> 50	11	5.5
<b>Total</b>	<b>200</b>	<b>100.0</b>

Table 1: Showing the age distribution of the population under study. 14 were below the age of 18, 106 were between the age of 19-29, 39 were between 30-39, 30 were between 40-49 and 11 were above the age of 50 years old.

#### 2) Social status

	Frequency	Percent
<b>Married</b>	<b>77</b>	<b>38.5</b>
<b>Single</b>	<b>115</b>	<b>57.5</b>
<b>Divorced</b>	<b>7</b>	<b>3.5</b>
<b>Widow</b>	<b>1</b>	<b>.5</b>
<b>Total</b>	<b>200</b>	<b>100.0</b>

Table 2: Shows the social status of the population under study. In our study, we included 4 social statuses, 77 were married, 115 were single, 7 were divorced and 1 was a widow

#### 3) Occupation

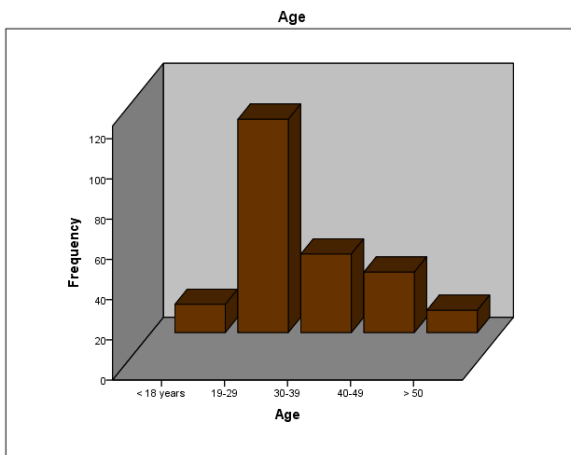
	Frequency	Percent
<b>Employed</b>	<b>63</b>	<b>31.5</b>
<b>Non employed</b>	<b>43</b>	<b>21.5</b>
<b>Student</b>	<b>94</b>	<b>47.0</b>
<b>Total</b>	<b>200</b>	<b>100.0</b>

Table 3: Shows the occupation of the population under study. Our study included 3 occupational statuses, 63 of them were employed, 43 were non-employed and 94 of them were students.

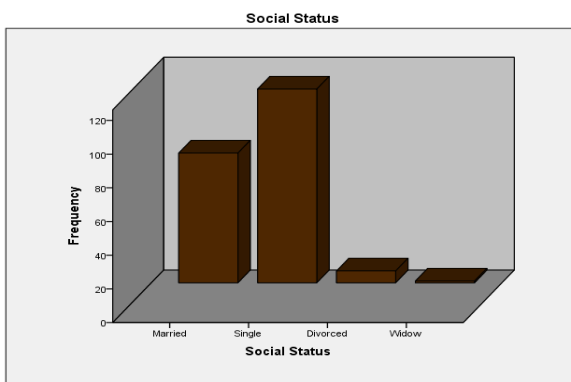
#### 4) Education level

	Frequency	Percent
<b>High School Level</b>	<b>52</b>	<b>26.0</b>
<b>Postgraduate</b>	<b>148</b>	<b>74.0</b>
<b>Total</b>	<b>200</b>	<b>100.0</b>

Table 4: Shows the education level of the population under study. Our study included 2 educational levels, 52 females were high school level and 148 were postgraduate



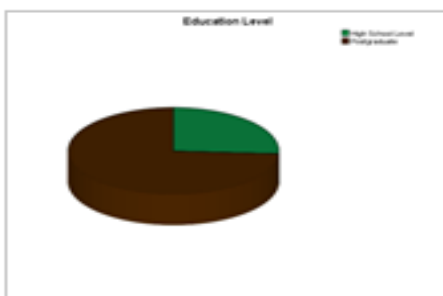
Graph1: showing the age



Graph 2: Shows the social status of the population under study



Graph 3: Shows the occupation of the population under study



Graph 4: Shows the education level of the population under study

5) Heard about AM

	Frequency	Percent
Yes	187	93.5
No	13	6.5
Total	200	100.0

Table 5: Shows the number of participants heard about AM. In our study we found out that 187 females heard about alternative medicine whereas 13 didn't hear about it.

6) Watch media talking about AM

	Frequency	Percent
Yes	122	61.0
No	78	39.0
Total	200	100.0

Table 6: Shows the Number of participants who watch media talking about AM. In our study we found that the number of females that watched media talking about AM was 122 and 78 didn't.

7) Do you think AM is safer?

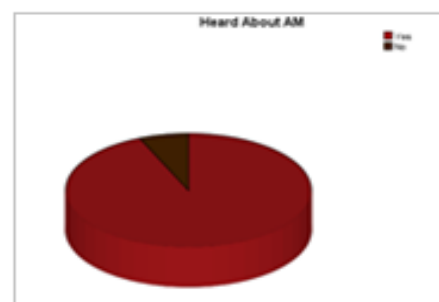
	Frequency	Percent
Yes	87	43.5
No	51	25.5
I Do not Know	62	31.0
Total	200	100.0

Table 7: Shows the number of participants who think AM is safer. Among 200 participants, 87 of them thought that AM is safer than traditional medicine, 51 thought it wasn't safer and 62 didn't know if it was safer.

8) Do you think AM is more effective than drugs?

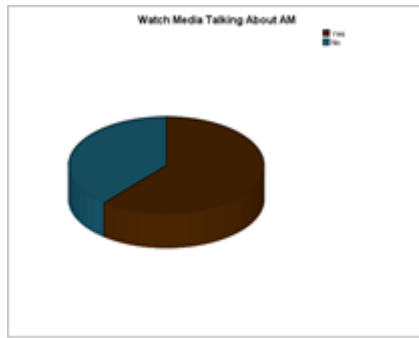
	Frequency	Percent
Yes	24	12.0
No	117	58.5
I Do not Know	59	29.5
Total	200	100.0

Table 8: Shows the number of participants who think AM is more effective. Among 200 participants, 24 of them thought AM is more effective than drugs, 117 didn't think so and 59 don't know if it is more effective.

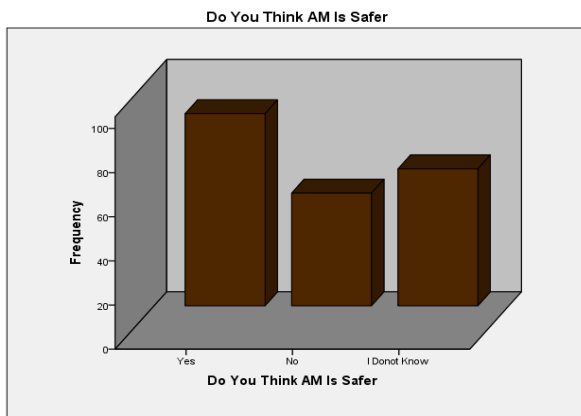


Graph 5: Shows the number of participants heard about AM.

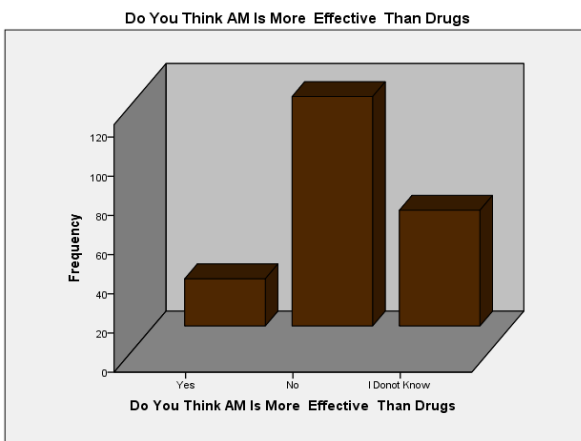




**Graph 6:** Shows the Number of participants who watch media talking about AM.



**Graph 7:** Shows the number of participants who think AM is safer.



**Graph 8:** Shows the number of participants who think AM is more effective.

**9) Do you agree to use AM?**

	Frequency	Percent
Agree	112	56.0
Disagree	6	3.0
Neutral	82	41.0
Total	200	100.0

Table 9: Shows the number of participants who will agree to use AM. Among 200 participants, 112 agreed to use alternative medicine, 6 disagreed and 82 were neutral.

**10) What do you prefer to use?**

	Frequency	Percent
Drugs	32	16.0
AM	3	1.5
Both	165	82.5
Total	200	100.0

Table 10: Shows the number of participants who would prefer to use AM. In our study we found that among 200 participants, 32 of them preferred to use drugs only, 3 preferred to use AM only and 165 preferred to use both.

**11) Have you ever used AM before?**

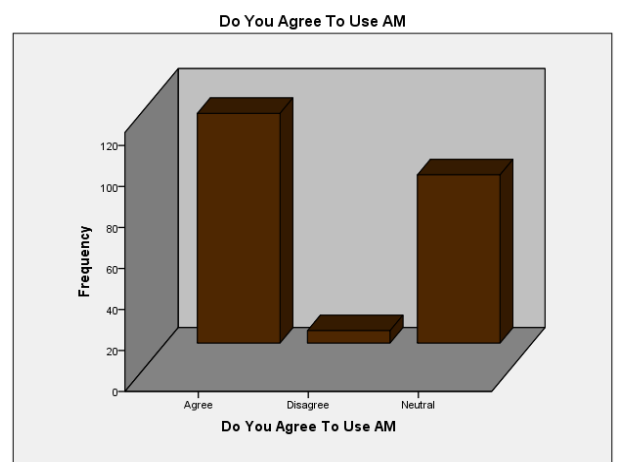
	Frequency	Percent
Yes	147	73.5
No	53	26.5
Total	200	100.0

Table 11: Shows the number of participants who used AM before. In our study we found that 147 females have used AM before and 53 of them didn't ever use it.

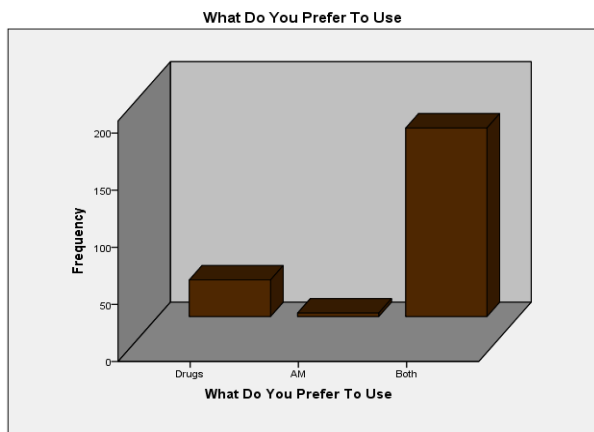
**12) What do you use to treat headache?**

	Frequency	Percent
Do Not Use AM	156	78.0
Roghiah	12	6.0
Massage	3	1.5
Others	29	14.5
Total	200	100.0

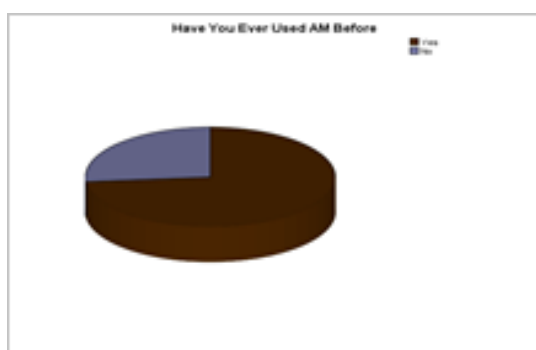
Table 12: Shows the use of AM in the treatment of headache. In our study we found that for treating headache 156 don't use AM, 12 used roqiah, 3 used massage and 29 used other modalities of AM.



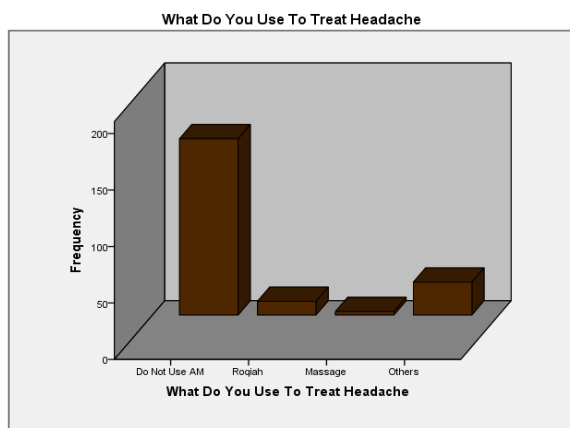
**Graph 9:** Shows the number of participants who will agree to use AM.



Graph 10: Shows the number of participants who would prefer to use AM.



Graph 11: Shows the number of participants who used AM before.



Graph 12: Shows the use of AM in the treatment of headache.

13) What do you use to treat toothache?

	Frequency	Percent
Do Not Use AM	157	78.5
Carnation	30	15.0
Herbs	7	3.5
Others	6	3.0
Total	200	100.0

Table 13: Show the use of AM in the treatment toothache. In our study, we found that for treating toothache: 157 didn't use AM, 30 used carnation, 7 used herbs and 6 used others.

14) What do you use to treat dermatological diseases?

	Frequency	Percent
Do Not Use AM	177	88.5
Creams and Oils	5	2.5
Honey	5	2.5
Myrrh	5	2.5
Others	8	4.0
Total	200	100.0

Table 14: Showing the use of AM in the treatment of dermatological diseases. In our study we found that in treating dermatological diseases, 177 didn't use AM, 5 used creams and oils, 5 used honey, 5 used myrrh and 8 used others.

15) What do you use to reduce menstrual pain?

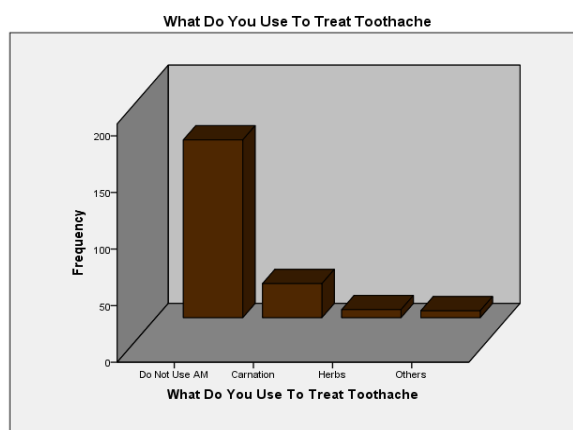
	Frequency	Percent
Do Not Use AM	101	50.5
Cinnamon	38	19.0
Herbs	26	13.0
Cumin	12	6.0
Others	23	11.5
Total	200	100.0

Table 15: Show the use of AM in the treatment of menstrual pain. Among 200 female participants, to reduce menstrual pain: 101 didn't use AM, 38 used cinnamon, 26 used herbs, 12 used cumin and 23 used others.

16) What do you use to treat diabetes mellitus?

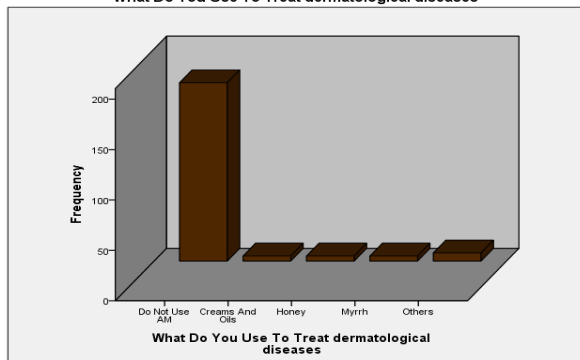
	Frequency	Percent
Do Not Use AM	195	97.5
Olive's Paper	2	1.0
Others	3	1.5
Total	200	100.0

Table 16: Shows the use of AM in the treatment of diabetes. In our study we found that for treatment of DM, 195 of participants didn't use AM, only 2 used olive's paper and 3 used others.



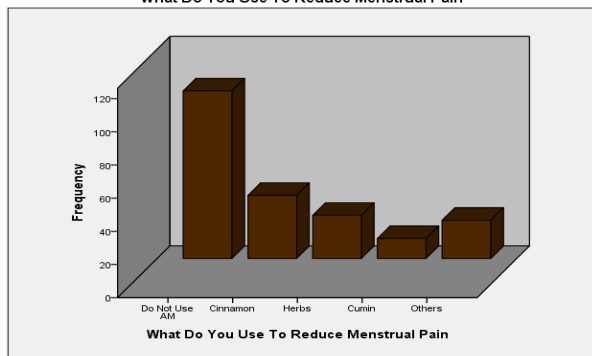
Graph 13: Show the use of AM in the treatment toothache.

What Do You Use To Treat dermatological diseases



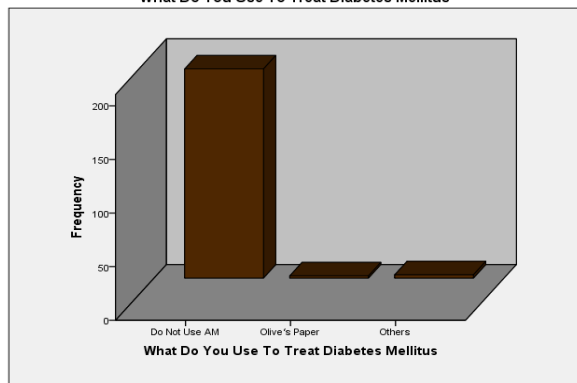
Graph 14: Showing the use of AM in the treatment of dermatological diseases.

What Do You Use To Reduce Menstrual Pain



Graph 15: Show the use of AM in the treatment of menstrual pain.

What Do You Use To Treat Diabetes Mellitus



Graph 16: Shows the use of AM in the treatment of diabetes.

17. What do you use when you are tired?

	Frequency	Percent
Do Not Use AM	154	77.0
Herbs	14	7.0
Lemon	7	3.5
Vitamins	3	1.5
Others	22	11.0
<b>Total</b>	<b>200</b>	<b>100.0</b>

Table 17: Sows the use of AM in treatment of tiredness. In our study we found that when getting tired, 154 of participants didn't use AM, 14 used herbs, 7 used lemon, 3 used vitamins and 22 used others.

18. What do you use to treat abdominal pain?

	Frequency	Percent
Do Not Use AM	151	75.5
Cumin	9	4.5
Herbs	32	16.0
Anise	8	4.0
<b>Total</b>	<b>200</b>	<b>100.0</b>

Table 18: Shows the use of AM in the treatment abdominal pain. In our study we found that for treatment of abdominal pain, 151 of participants didn't use AM, 9 used cumin, 32 used herbs and 8 used anise.

19. Who advised you to use AM?

	Frequency	Percent
Medical Staff	9	4.5
Relatives	113	56.5
Media	50	25.0
Popular Processor	7	3.5
<u>Quraan And Sunnah</u>	21	10.5
<b>Total</b>	<b>200</b>	<b>100.0</b>

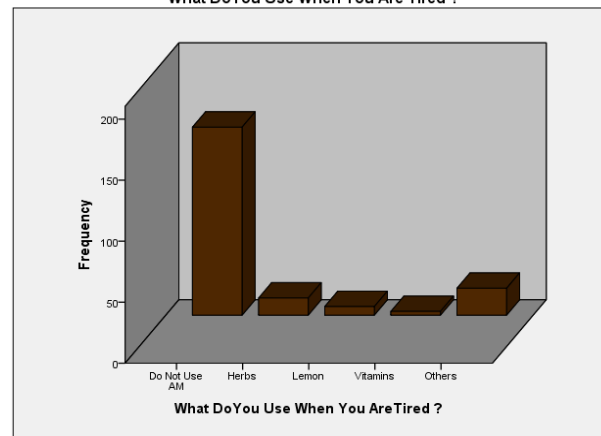
Table 19: Shows who advised the participants to use AM. In our study, we found that 9 participants were advised to use AM by a medical staff, 113 were advised by relatives, 50 were advised by media, 7 by popular processor and 21 by Qur'an and Sunna

20. From where do you get the AM?

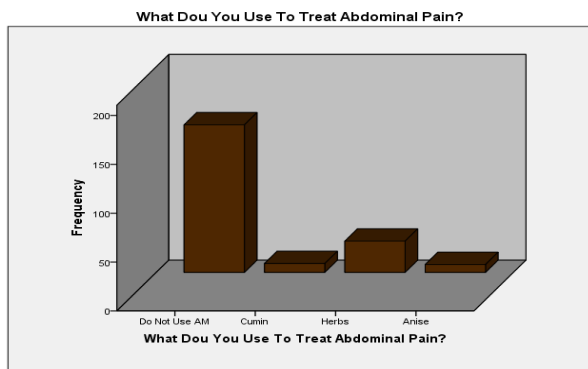
	Frequency	Percent
Pharmacy	32	16.0
Attar	156	78.0
Stalls	12	6.0
<b>Total</b>	<b>200</b>	<b>100.0</b>

Table 20: Shows from where participants got their AM. Among 200 participants, 32 of them got AM from a pharmacy, 156 from attar and 12 from stalls.

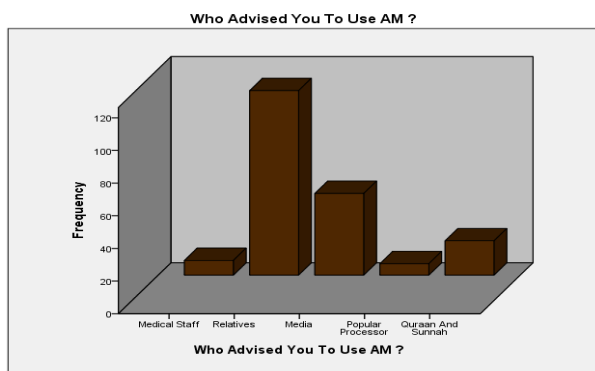
What Do You Use When You Are Tired ?



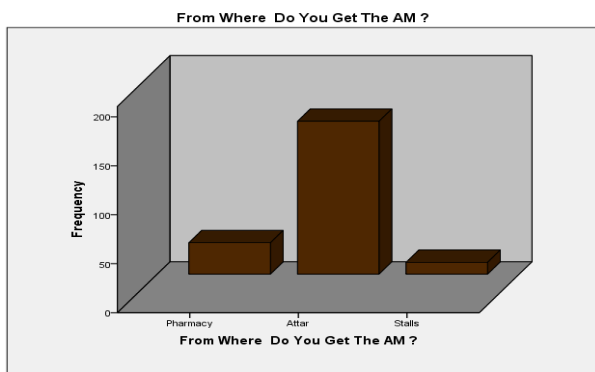
Graph 17: Sows the use of AM in treatment of tiredness.



Graph 18: Shows the use of AM in the treatment abdominal pain.



Graph 19: Shows who advised the participants to use AM.



Graph 20: Shows from where participants got their AM.

21. The Cause of using AM

	Frequency	Percent
Medical Drugs Are Not Effective	19	9.5
You Prefer The Natural Products	68	34.0
To Avoid The Side Effects Of Drugs	67	33.5
The Physician Prescription Is Not Suitable For You	6	3.0
AM Are Of Low Cost	7	3.5
AM Are Easily Found	33	16.5
Total	200	100.0

Table 21: Shows the main causes of using AM. 19 saw that medical drugs are not effective, 68 prefer natural products, 67 to avoid SE of drugs, 6 found that the physicians prescription is not suitable for them, 7 found AM are of low cost and 33 found that AM are easily found.

22. If there is improvement after AM use?

	Frequency	Percent
Large Improvement	77	38.5
Moderate Improvement	101	50.5
Mild Improvement	16	8.0
There Is No Improvement	6	3.0
Total	200	100.0

Table 22: Shows the number of participants improved after AM use. In our study we found that, 77 participants found large improvement after using AM, 101 found moderate improvement, 16 found mild improvement and 6 found no improvement.

23. There were any side effects after using AM?

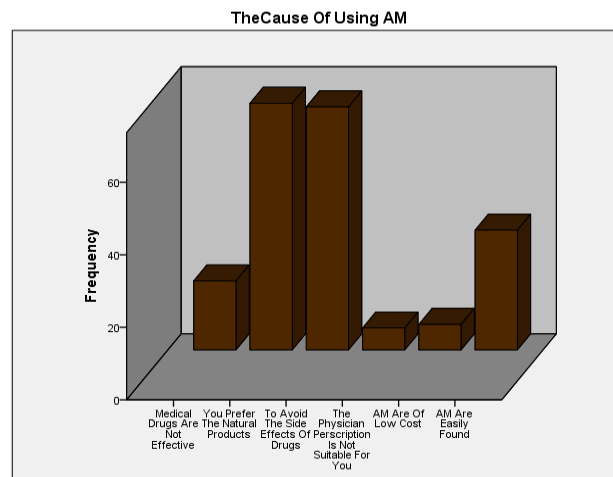
	Frequency	Percent
Yes	15	7.5
No	185	92.5
Total	200	100.0

Table 23: Shows the number of participants who had side effects after using AM. Among 200 participants, 15 found side effects after using AM and 185 didn't find any side effects after using AM.

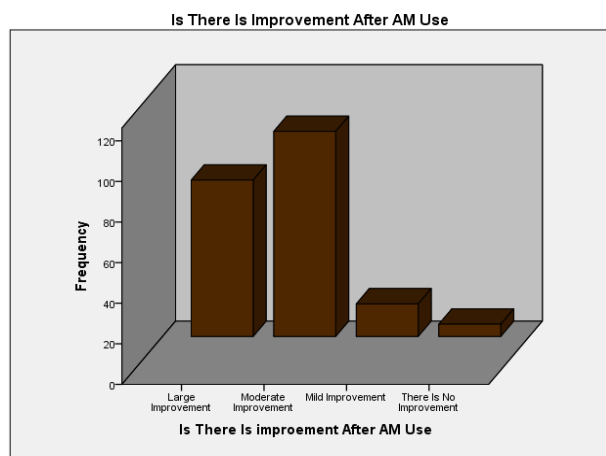
24. Would you like to use them in the future?

	Frequency	Percent
Yes	176	88.0
No	24	12.0
Total	200	100.0

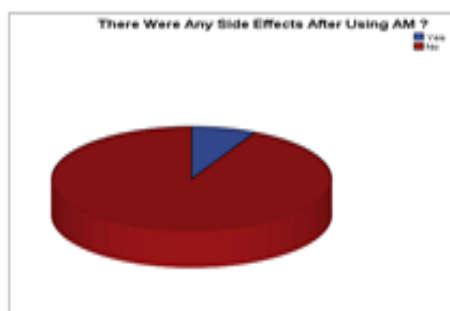
Table 24: Shows the number of participants who would like to use AM in the future. In our study we found that among 200 participants, 176 would like to use alternative medicine in future and 24 wouldn't like to do so.



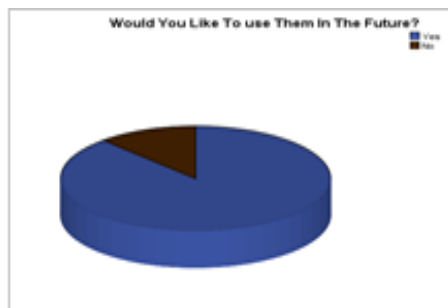
Graph 21: Shows the main causes of using AM.



**Graph 22:** Shows the number of participants improved after AM use.



**Graph 23:** Shows the number of participants who had side effects after using AM.



**Graph 24:** Shows the number of participants who would like to use AM in the future.

**Discussion**

Alleviating pains and improving patient's health status are the fundamentals in practice of medicine over many years. Unfortunately, health care providers neglect the use of natural products but the side effects of the medical therapy let the people to return to the use of alternative therapies.

Many studies showed the effectiveness of multi-disciplinary management in the treatment of series illness. The National Center for Complementary and Alternative Medicine (NCCAM), part of the National Institute of Health (NIH) is committed to educate both consumers and health care providers about A.M with the aim to convey evidence-based information required for health care provision. <sup>(26)</sup>

In our study we focused on the important role of alternative medicine as a recognized treatment method and the awareness of females in the Saudi community about this method. Using convenient sampling method, 200 females were included in this research; most of them were between 19-29 years (Table 1, Graph 1).

Strikingly, the awareness towards alternative medicine was high among participant (93%) (Table 5, Graph 5), this can be partly due to that most of the participants were postgraduate university students and also like to watch media talking about alternative medicine (Table 4,6 , Graph 4,6). Similar results was found in a research was done on South Australian respondents over the age of 15 years, to survey the use, cost, beliefs and quality of life of users of alternative medicine. The results showed that AMs were used by 52.2% of the population.<sup>(3)</sup>Greatest use was in women aged 25–34 years, with higher income and education levels.<sup>(3)</sup>Also the continues use of high levels of alternative therapists among Australians was obvious.<sup>(3)</sup>

73% have used alternative medicine before (Table 11, Graph11). Similar results were found in Jamnagar town were researches participants are well aware of non-drug therapy and its effectiveness among chronic diseases, especially home remedies Ayurvedic and allopathic treatments.<sup>(18)</sup>also similar results in another research conducted in Washington State its aim was to assess the utilization and knowledge of CAM among neurosurgery patient and neurosurgeon themselves. <sup>(19)</sup> Results showed that about 63% of neurosurgeons stated the role of CAM in their filed, especially acupuncture, herbs, massage and prayer. <sup>(19)</sup>

When participants were asked whether they think that alternative medicine was safe, 43% responded with yes but there is also 31% of them didn't know (table7, graph7). 58% said that drugs are more effective treatment method than alternative medicine, but 82.5% prefer to use both drugs and alternative medicine (Table8, Graph8).

Most of our participants prefer to use AM due to their few side effects which made them safer than conventional therapy since they are natural products. Another point for preferring alternative medicine is their easy accessibility, low cost, and sometimes ineffectiveness of meditational prescription despite the limitation of small sample size. (Table21, Graph21)

In comparison to Astin study which showed that the majority of alternative medicine users appear to be doing so because they find these health care alternatives to be more congruent with their own values, beliefs, and philosophical orientations toward health and life.<sup>(2)</sup>

Barnes PM, et al 2004, found that CAM was most often used to treat back pain or back problems, head or chest colds, neck pain or neck problems, joint pain or stiffness, and anxiety. (10) Adults age 18 years or over who used CAM were more likely to do so because they believed that CAM combined with conventional medical treatments would help (54.9%) and/or they thought it would be interesting to try (10)

The good thing that most of participants (56%) agreed to used alternative medicine and 41% they didn't refuse or agree and these are the ones targeted by this study. (Table9, Graph9)

Since family relationships are tight in this country, most of our participants heard about alternative medicine from a relative (Table 19, Graph19). The most commonly used alternative medicines are: massage, roqyah, carnation, oils, cupping, honey, myrrah, cumen, cinnamon, olives leaves, herbs, multivitamins. It is very easy to get alternative medicines mostly from Attar (78%) (Table20, Graph20).

In Singapore, a study was conducted to determine the prevalence of complementary and alternative medicine (AM) use, the factors influencing AM use, and the attitudes, beliefs and perceptions of the general population towards AM. (4) Traditional Chinese Medicine (88%) was the most widely used form of AM, followed by Traditional Malay (Jamu) Medicine (8%) and Traditional Indian (Ayuverdic) Medicine (3%).(4)

In our research, we focused on common symptoms and what type of alternative medicine do they use for. Tension headache is one of the most common complains. For some people a headache may be a minor irritation once or twice a year, while others can suffer disabling pain on an almost daily basis. 156 patients do not used alternative medicine in the treatment of tension headache, few they use Roqia, massage or other forms of AM for treatment (Table12, Graph12). Also in the treatment of toothache most patients do not use alternative medicine (157) (Table13, Graph13), this can be explained by the agony related to headache and toothache that lead the patient to use more aggressive forms of treatment.

In dermatological disease, abdominal pain, diabetes patients tend prefer drugs over alternative medicine. (Tables 14, 16, 18) (Graphs14, 16, 18)

Alternative medicine is used extensively in the treatment of dysmenorrhea (49.5%). Some use Cinnamon, Herbs like mint tea, Cumin and other modalities like hot bottle. (Table15, Graph 15)

Most of candidates using alternative medicine reported some improvement in their symptoms (97%). But this improvement ranges from small-moderate-large improvement (Table22, Graph 22)..In Scotland, researchers found that 6 years post-survey, more than half responded (of 800 participants), mentioning they used at least 1 type of CAM. (16) The main usage was for pain relief, headache, musculoskeletal problems and relaxation. (16)

While doing our research, we faced some difficulties and limitations. One of the limitations was the small-sized sample consisting of 200 participants, which didn't allow us to make a detailed analysis of complementary and alternative medicine. A larger sample would be a better index of various alternative medicine systems existing in different sections of our society.

Only few were aware of the term alternative medicine itself, so we had to explain to the majority about it before they fill the surveys. Also, alternative drugs were hard to be categorized because the use is different from one respondent to another. One of the most disappointing things was, people think the term (alternative medicine) refers only to herbs, and others thought that pain killers are an A.M also.

## Conclusion

- Most of the participants were between 19-29 years of age (106)
- Most of them were single (115) and married (77)
- 94 were students and 63 were employee
- All were educated (52) high school level and 148 were postgraduate either diploma or bachelor degree
- 187 participants heard about AM
- 122 participants watch media talking about AM
- 87 participant think that AM is safer than conventional medicine, 62 they didn't know
- 117 think that AM is less effective than drug therapy, 59 didn't know
- 112 agreed to use AM but 82 participants they either refuse nor agree
- 165 participants prefer use the combination of AM and conventional medicine
- 147 participants used AM before

- 156 participants do not prefer the use of AM in the treatment of headache the others use Roqiah, massage and other modalities of AM
- 157 participants do not prefer the use of AM in the treatment of toothache the others use carnation, herbs and other modalities of AM
- 177 participants do not prefer the use of AM in the treatment of dermatological diseases the others use creams, honey and other forms of AM
- 99 participants use AM in the treatment of menstrual pain
- 195 participants do not prefer the use of AM in the treatment of diabetes the others use olive's papers and other forms of AM
- 156 participants do not prefer the use of AM in the treatment of tiredness the others use herbs, lemon, vitamins and other forms of AM
- 151 participants do not prefer the use of AM in the treatment of abdominal pain the others use herbs, Cumin and other forms of AM
- 113 participants heard about AM from a relative, 50 from media and only 9 from medical staff
- Most of participants get their AM from Attar (156) and pharmacy (32)
- Participants use AM for different reasons, some prefer natural products (68) and to avoid the side effects of drugs (67).
- 97% reported some improvement after using AM although the improvement varies from small-moderate-large
- 185 reported no side effects after using AM
- Most of participants are willing to use AM in the future (176)

### Recommendation

- Since many patients have some improvement using AM, it is reasonable considering it as a supportive modality of treatment adjacent to traditional therapy
- Holding more symposiums, meetings and using public educational facilities seems to be important methods in improving our local community's

awareness, knowledge and attitude towards alternative medicine

- Increase the awareness for health care providers of the important role of AM and formulate protocols using AM
- Conduct more researches to identify the efficacy of individual types of alternative medicine that can be effective in specific types of disease

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