

## Survey on the effect of integrative Medicine approach on chronic disease patients' wellbeing and satisfaction in Shahid Beheshti University of Medical Sciences: A one year follow up

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**Abstract:** Integrative medicine (IM) is the interdisciplinary of conventional and complementary alternative medicine. We report the creation of IM for the first time in Iran. Method: In this prospective case series study, 215 chronic disease patients were visited. Different kind of CAM performed according patients' need assessment. Fifty one eligible patients followed in one year. Result: The mean age of 215 patients was  $39.8 \pm 15.7$  (7 -78) years and 42.3% (n=91) were male. Most of the patients were educated. Chronic sinusitis, asthma and allergy totally, affective disorders and musculoskeletal pain were the most problems. More than 75% of the patients were satisfied from integrative therapy. In the meetings the text book of IM was exposed to the 6 physicians. Discussion: This study experience suggests that an integrative medicine approach made patient's better satisfaction by achieving well being on life style changes. We really need more studies and supports.

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**Key Words:** Integrative medicine, complementary alternative, conventional, satisfaction, Life style.

### Introduction

Integrative medicine (IM) is defined as the interdisciplinary of conventional and complementary alternative medicine (CAM) with the purpose of promoting the patients' health. (1) It is healing oriented and focuses on the physician- patient relationship which included the least invasive, least toxic, least costly methods. It sounds this approach is "The way of the future medicine". (2) CAM therapies have different kinds of health care and medical practices such as: dietary, vitamins, supplements and behavioral interventions, mind body therapies, botanical, herbs and also traditional systems of medicine like Islamic, Chinese and ayurvedic practices. It also addresses patients and their diseases individualized. (3) There is increasing evidence that integrative medicine is the best way to provide optimal health care for its wide beneficial for both patients and clinicians. Despite of increasing IM application in some countries, there is no definite consensus as well as insufficient evidence research

supporting, which makes it difficult to determine who practice it. (1, 4) For this reason it has not been yet implemented in Islamic Republic of Iran Health Ministry system. Sundberg T in Sweden demonstrated IM model based on Swedish primary care to clear its clinical effectiveness by randomized controlled trial. (4) Pelletier KR showed IM should be defined by clinical and cost effectiveness evidence. (3) In Kligler B study by integrative medicine approach showed that yoga therapy and holistic nursing can decrease use of medications among oncology patient which was cost savings. (5)

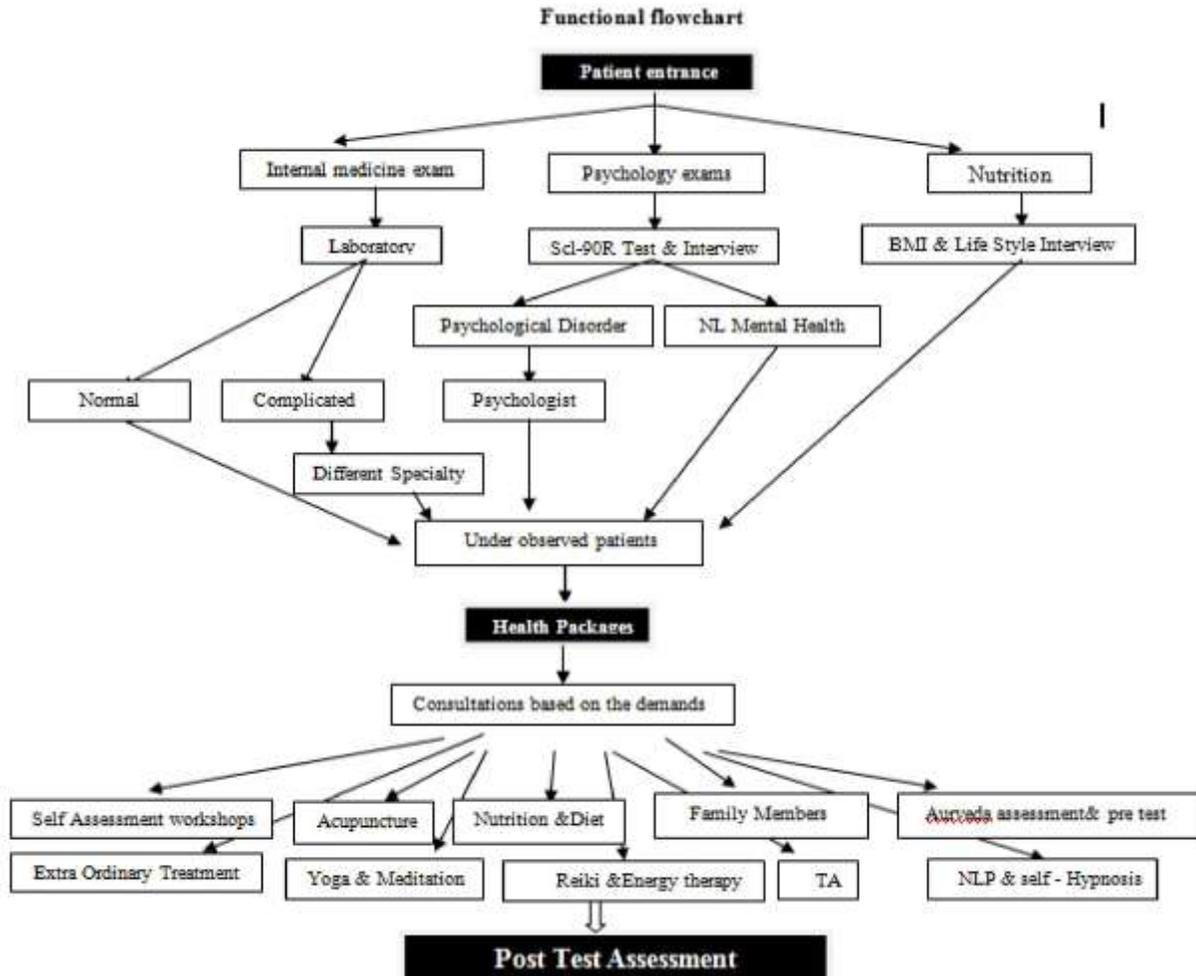
Scherwitz and her colleagues recommended considering a wide variety of patient's lifestyle modifications and CAM therapies in a Community Hospital by Integrative Medicine method. (6) The objective of this study is to explain how to develop and implement IM model in clinical practice. In this project we considered the patients' symptoms with deep assessment to explore underlying causes of their disease in mental, physical, spiritual level or a

combination of them to achieve patients' wellbeing and satisfaction for the first time in Iran.

**Materials and Methods**

This research project was approved by the regional ethics committee at SBMU with code number 115. In our prospective case series study, 215 chronic

disease patients participated. Before the initial visit, patients completed a comprehensive intake questionnaire and interview (Clinical, Integrative approach, nutrition, SF36, Iranian modified MMPI and SCL-90R).



The initial visit lasts 1hour and 40 minutes for each patient. In this interview, the practitioners and patients explore the fundamental causes of their symptoms and underlying conditions as well as potential treatments. The visits conducted by an internal physician (20 min); nutritionist (40 min) and psychologist (40 min). The goal of this comprehensive assessment is to develop an individualized, integrated treatment plan for each patient.

**Study design**

All patients were visited and interviewed based on functional flow chart as below:

Different kinds of CAM were used. According to the patients' need assessment, alternative approach

such as acupuncture therapy, a variety of massage, transactional analysis (TA), reiki and energy therapy, auerovedic therapy, neuro linguistic programming (NLP), Yoga and meditation performed. Less than 20 % ( n=40) of the participants omitted from the study for incomplete files. More than fifty percent (n=124) cases with mild to moderate problems with wellbeing feeling and did not return back for follow up. Just fifty one available eligible patients completed the one year fallow up. During the IM practice 88 meetings and 3 scientific conferences were held. The text book of Integrative Medicine was exposed to the 6 physicians and they were trained by several methods in some educational session from those executive meetings.

### Statistical analysis

Data was reported as mean± SD, frequency and relative frequency for quantitative and categorical data respectively. Repeated measure analysis was done for evaluating the trend of continuous variables. SPSS version 16 statistical package for Windows (SPSS Inc., Chicago Illinois, USA) was used for all statistical analysis.

**Table 1.** Frequency of the participants' education levels

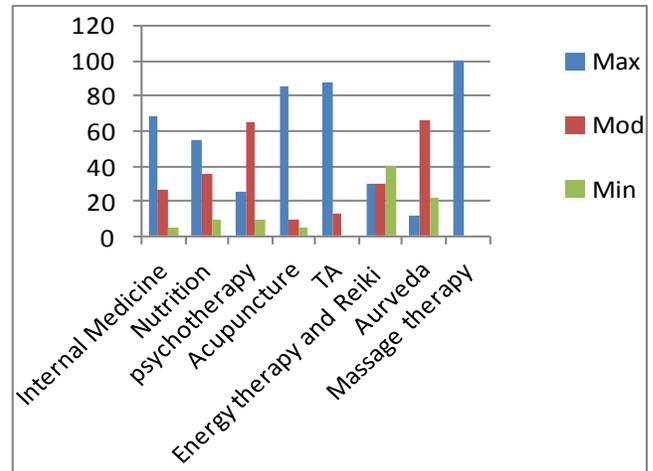
Education level	number	frequency
Primary school	14	6.5
High school	8	3.7
Diploma	62	29
Bachelor	95	44.2
Master	23	10.8
PHD	9	4
Associate Degree	4	1.8
total	215	100

**Table2.** Frequency of patients' problems

Patients' problems	N	%
Chronic sinusitis, asthma and allergy	56	26.0
Affective disorders	43	19.9
Musculoskeletal pain	36	16.7
Anxiety disorder	12	5.4
Irritable bowel syndrome	3	1.1
Suicide attempted by drug poisoning.	14	6.5
Communication problem	11	5.1
Infertility, Endometriosis, Fibrocystic breast	3	1.5
UTI	8	4
GI disease(Dyspepsia, Ashallazy, Constipation)	7	3.5
Miscellaneous(MS, Hepatitis, strabismus, Anemia, fatigue)	22	10.3
Total	215	100

**Table3.** Frequency of Relaxation methods in followed cases

Relaxation methods	N	%
Sport	5	9.5
Praying, meditation and yoga	9	19.5
Driving and traveling	2	3.5
Drug and medication	3	5.5
Music, TV, computer and writing	4	7.5
Miscellaneous (Sleeping, showering and crying)	5	9.5
Without any performance	23	45
Total	51	100



**Figure 1.** The levels of patients' satisfaction of the methods of therapy

### Results

Totally 215 patients with mean age  $39.8 \pm 15.7$  (7 -78) years were registered in this study. Of these, 91(42.3%) were male and 124 (57.7%) female. 60.8% of the patients had academic education at least bachelor. (table1) Just 10% of the followed cases had integrative medicine experience in the past. The frequency of patients' problems was showed in table 2. Chronic sinusitis, asthma and allergy totally, affective disorders and musculoskeletal pain were the most frequent problems (62.6%) and 6.5% of the patients had history of suicide attempted by drug poisoning. External stimulators were the main cause of stress (84.3%) among 51 followed patients. Relaxation techniques which included by Praying, meditation and yoga were recognized in 19.5 %. (Table3) In 28 patients from 51 followed, nutrition life style improved. Alternative therapy, such as acupuncture (n= 9), aurveda (n= 9), reiki(n=7),TA(n=6) energy therapy (n= 5) and massage therapy (n=4) in followed patients performed. Of 51 patients, SCL- 90R test was done in 40 cases. Paranoid, depression and obsessive were the most common issues. More than 75% of the patients were satisfied from different kind of integrative therapy. (Figure 1)

Based on our functional flowchart, chronic patients were under treatments of three IM trained practitioners (internal physician, nutritionist and psychologist), which reduced the various refers.

### Discussion

Therapeutic approaches of Integrative medicine are originated from conventional and alternative medicine. IM as a potential solution to the healthcare crisis in America has been created but in Iran's health system it is not meaning yet. (7) Our study is based on patient centered; healing oriented, by insisted on

empathy and sympathy between patients and treatment groups. In the Hassed survey, the importance of patient-centered care, patient empowerment, behavior change, continuity of care, outcomes research, and the challenges to successful integration are discussed. The authors suggest a model for an integrative healthcare system grounded in team-based care as same as ours. In their study similar as ours the aspect to the management involves a range of therapeutic options such as conventional care, lifestyle management, psychosocial approaches and evidence based complementary medicine (CM).(8) In Sweden IM model was settle done in primary health care(PHC) setting but we could not use it in PHC because the lack of well organized family medicine in our country yet. (4) In our study beside of care we focused on patients' satisfaction too. We concentrate on treating the patient as a whole, body, mind and spirit, while in the Chang survey they focused more on mind and body.(9). The evidence-based clinical research drives the management and treatment of diseases in conventional Western medicine, CAM is based on unproven yet potentially throughout ancient cultures in the Middle East, Africa, and China. Besides our panoramic Ave Sina traditional method as ancient culture, we tried to use evidence-based according to the David Rakel's Integrative medicine text book. Our study was the first investigation based on the IM therapy in Iran and more than 75% of the followed patients were satisfied from different kind of IM. Likewise, Wu AW and his colleague's survey that showed IM approach is safe and may improve symptoms and quality of life for chronic rhino sinusitis patients. (10) In the present study more than a quarter of the subjects suffered from chronic sinusitis, asthma and allergy. It is noticeable that diet and supplement can help in the prevention of these episodes and antioxidants such as vitamins E, C and selenium and also vitamin B6 can relieve the asthma symptoms. (11) So we considered it in nutrition therapies for these patients. In our study, 55% of the followed patients showed maximum satisfaction by nutrition therapy methods. Several studies showed dissatisfaction of conventional therapies make patients to use IM management as if more than 50% of asthmatics patients benefit from different kind of CAM. Massage, relaxation exercises, diet, and vitamins are the most common therapies for children, while dietary and nutritional therapies, herbal remedies, meditation and homeopathy are chosen more by adults for its safe control. (12-14) Also we mentioned them in our survey. Kligler B recorded that modified yoga therapy decreases stress and anxiety levels among pediatric cancer patients and adults with breast cancer. (5) We used cognitive behavior therapy to improve patient stress, anxiety and mood disorders,

also their maladaptive thought were challenged. These techniques reduced anxiety, stress and increased positive attention to their lives.

Increasingly, integrative techniques that have been validated by scientific research used to relieve pain. (15) We had the same experience by yoga therapy in patients with chronic osteoarthritis, which it was useful and improved the patient's WOMAC scores. (16). In this study, more than 80% of the followed patients had the maximum satisfaction from acupuncture and massage therapy. Acupuncture has been introduced as a very safe therapy (2.4 serious adverse effects in 10000 patients). (10)

In the current study, the mean age of the patients was 39.8 years and 90% of them had diploma and higher education. In Birdee GS study, higher age and education were significantly associated with IM use and it is similar to data that reported by Wilson and colleagues. (17, 18) One of our studies 'limitation was the usage of multiple CAM treatments, two or more methods. It potentially made difficult to identify which modality is more benefit. For solving this problem we evaluated the patients' satisfactions at the end of each treatment methods. Likewise Wu AW and his colleagues which their methods of therapy were based on the philosophical foundation of CAM with a variety of coordinated and individualized interventions. (10) Since our study was case series, patients with variety of problems were enrolled to this study. Based on the Boon HS findings, two questions were developed:

- 1) Can an integrative medicine program evolve without a champion?
  - 2) What happens to integrative medicine programs?
- (1) Also in our country we need brave academic physicians to establish this issue because not only the physicians should be believed IM but also people beliefs should be improved well, so it's why this process sounds prolonged, we really need more studies and supports.

### Conclusion

In our country the history of traditional medicine based on botanical and Avesina approach exist for a long time. This study experience suggests that an integrative medicine approach made patient's better satisfaction by achieving well being on life style changes. It seems this method may be cost benefit. We really need more studies and supports.

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