



CODEN (USA): IAJPBB

ISSN: 2349-7750

**INDO AMERICAN JOURNAL OF
PHARMACEUTICAL SCIENCES**

Available online at: <http://www.iajps.com>**Research Article**

A SURVEY OF ALTERNATIVE MEDICINE STUDIES OF DRUG USES (ALLOPATHIC, HOMEOPATHIC, AND HERBAL) IN PUNJAB, PAKISTAN

Muhammad Razi Ullah Khan^{1,2}, Syed Muhammad Aun^{2,3}, Muhammad Arsalan³, Saeed Ur Rasid Nazir¹, Farah Abdul Khaliq³, Sana Ilyas³, Sadia Kanwal³, Sadia Hassan³, Ayub Fareed³, Rana Mobeen³, Mehwish Alam³

¹Faculty of Pharmacy, University of Sargodha, Sargodha 40100, Pakistan, ²Faculty of Pharmacy, Superior University Lahore, Lahore 54000, Pakistan, ³Department of Pharmacy, The University of Lahore, Lahore 54000, Pakistan

Abstract:

Increasing numbers of complementary and alternative medicine (CAM) practitioners are interested in evidence-based medicine (EBM). Researchers are in need of further information regarding the current status of CAM practitioner's knowledge and use of EBM. A high prevalence of CAM use has been documented worldwide in children and adolescents with chronic illnesses. Only a small number of studies, however, have been conducted in the Pakistan. Primary aim of survey was performed to estimate and explore the use of alternative medicine in patients with different diseases among all age groups. A questionnaire survey was distributed in different hospitals (n =2000) in rural and urban area. Total 500 patients were observed out of which 48.66% were male and 51.34% were female. The 48% of the patients were literate while 52% patients do not know how to read or write. It was found in this study that 42.07% of population is getting allopathic treatment, 32.81% towards herbal treatment and 23.69% towards homeopathic treatment among the patient taking allopathic treatment almost 51.48% were male and 48.76 % female. The urban population almost 52.84% male and 47.16% female were using allopathic mode of treatment. While 44.52% male and 55.48% female in rural population were taking allopathic treatment In case of herbal treatment percentage ratio of rural and urban population was 31% and 19% respectively among male patients. Among females 30% patient belong to urban region while 20% patients were from rural areas 37% male and 29% female patients were taking homeopathic treatment in urban areas. In rural areas among the patients taking homeopathic treatment almost 21% patients were female while 13% patients were male Almost 60% patients agreed that they were getting required outcome of medicine however 40% patients feel that they were getting no effects in the start of these therapies Analysis of general health appearance of patients showed that almost 19% were in very good health condition. Almost 44% patients had good health while 12% were in satisfactory look. The ratio of patients suffering poor health was found to be 25%. Along with being more educated and reporting poorer health status, the majority of alternative medicine users appear to be doing so not so much 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.

Key Words: Complementary and alternative medicine, Evidence based medicine, Qualitative study, Questionnaire, Barrier

Corresponding Author:

Muhammad Razi Ullah Khan
*Faculty of Pharmacy, Superior University Lahore,
Lahore 54000, Pakistan
Tel: +92-334-7524323
Email: raziullahpharmacist@gmail.com*

QR code



Please cite this article in press as M.Razi Ullah Khan, A Survey of Alternative Medicine Studies of Drug Uses (Allopathic, Homeopathic, and Herbal) In Punjab, Pakistan, Indo Am. J. Pharm. Sci, 2016; 3(3).

INTRODUCTION:

The importance of evidence-based medicine (EBM) is undeniable. Today, in the world of mainstream healthcare, the “science” element has superseded all other components of knowledge and practice in the form of EBM. Indeed, from international conferences to ward rounds, healthcare professionals accept the importance of aligning medical practice with the best available evidence from clinical research. In contrast to conventional medicine, which was formerly opinion-based, EBM assists practitioners in determining the treatment, based on the best available evidence that is grounded in objective data. Complementary and alternative medicine (CAM) is growing in popularity worldwide and plays a substantial role in medicine. Data from national surveys performed in various countries indicate the popularity of CAM therapies and, consequently, use and expenditures for CAM have increased considerably in recent years. CAM has become increasingly popular; however, its weakness is the perception that it is opinion-based and subjective. Based on the notion that EBM would compensate for this weak point, the CAM society recently became interested in EBM. The importance of applying EBM to CAM is recognized. Complementary and alternative medicine (CAM) consists of a diverse group of medical and healthcare systems, products, and practices that are considered to be outside of conventional medicine, including nutritional supplements, vitamins, herbal remedies, diet changes, spiritual therapy, chiropractic, osteopathy, yoga, homeopathy, massage, acupuncture, and aromatherapy. Certain aspects of the practitioner-patient relationship in CAM disciplines have been documented. For example, persons who use CAM services visit their CAM practitioners more frequently than their allopathic physicians. Compared to conventional physicians, CAM practitioners may see patients for longer appointments, though chiropractic visit duration can be significantly shorter than that of acupuncture or massage therapy visits (less than 20 minutes for chiropractic vs. 60 minutes for both acupuncture and massage). Patients expect that CAM practitioners will have a holistic approach and provide information and self-help advice. In some cases, CAM practitioners engage patients in discussion of potential treatment outcomes as a way to manage treatment expectations and satisfactions. They are also more likely than conventional allopathic practitioners to use shared decision making for treatment outcomes. For some, Complementary and Alternative Medicines (CAM), such as reiki, acupuncture, herbal medicines, homeopathy, and healing crystals offer a ‘natural’ and effective alternative to conventional medicine, which is overly

dependent on the synthetic remedies of multinational ‘big Pharma’. Most frequently used to treat more minor issues; CAM is often utilized for neck, back, or joint pains. It is also common in treatment of anxiety, depression, or symptom relief in other diseases. Less frequently, CAM treatments are used for treatment of insomnia, stress, stomach illnesses, hypertension, fibromyalgia, diabetes, or coronary heart disease. In younger individuals, CAM is more popular for treating back or neck pains, anxiety, ADHD, ADD, insomnia, asthma, or other allergies. Different forms of CAM, however, that have been the subject of intense scrutiny and critique from sections of the scientific community. Perhaps because of the seemingly widespread acceptance of the merits of CAM within the general public and amongst many medical practitioners, these more controversial treatments have faced sustained opposition from those who advocate an evidence-based approach. Homeopathy, in particular, has been the source of sustained criticism from scientists on both evidential and plausibility grounds. Such concerns relate not only to the quality and robustness of the underlying science but also to the consequences of patients relying on demonstrably ineffectual treatments when conventional medicines have, or should have been prescribed, with potentially fatal consequences. This and other critical evidence led a recent UK Parliamentary Select Committee to recommend that homeopathy should not be funded through the National Health Service and that all regulatory licenses allowing homeopathic products to be sold as medicines should be withdrawn. From the (what we shall call) ‘strong scientific’ perspective, then, there is little or no evidence to support the contention that homeopathy can be a useful and safe complement, let alone alternative to, conventional treatment. For those adhering to this strong scientific position, support for the principles, processes and structures of conventional medicine must be considered fundamentally incompatible with a belief in the validity of treatments which have no evidence of clinical efficacy nor a plausible underlying mechanism. Yet, while binary opposition between support for controversial CAM treatments such as homeopathy and conventional medicine is how the positions are often characterized within prominent public and scientific discourse, it is not clear whether this is an accurate characterization of the beliefs and behaviors of the general public. Do citizens adhere to a ‘science versus CAM’ binary opposition, or do they (at least in part) feel comfortable in supporting conventional and scientifically controversial alternative treatments simultaneously? If so, how can this apparent inconsistency be accounted for?

By definition, CAM practices are not part of conventional medicine because there is insufficient proof that they are safe and effective. Complementary interventions are used together with conventional treatments, whereas alternative interventions are used instead of conventional medicine. Generally, persons who choose CAM approaches are seeking ways to improve their health and well-being or to relieve symptoms associated with chronic, even terminal, illnesses or the side effects of conventional treatments for them. Other reasons for choosing to use CAM include having a holistic health philosophy or a transformational experience that changes one's world view and wanting greater control over one's own health. Many types of CAM practitioners try to treat not only the physical and biochemical manifestations of illness, but also the nutritional, emotional, social, and spiritual context in which the illness arises. The overwhelming majority of patients using CAM approaches do so to complement conventional care rather than as an alternative to conventional care. According to the 2002 National Health Interview Survey (NHIS), One-third of adults used some form of CAM. 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 or depression. Although less prevalent, strong associations were still seen for individuals using CAM approaches to treat or provide symptom relief for cancer, cardiovascular diseases, and lung diseases. Explanations for this growth in CAM use have been proposed, including marketing forces, availability of information on the Internet, the desire of patients to be actively involved with medical decision making, and dissatisfaction with conventional (western) medicine. This dissatisfaction may be related to the inability of conventional medicine to adequately treat many chronic diseases and their symptoms such as debilitating pain. Rates of CAM use are also exceptionally high among individuals with life threatening illnesses such as cancer or HIV. Several systems of CAM are practiced as part of the health care system. For example, Ayurvedic is practiced in India at a national level within the Federal health system. Traditional Chinese medicine, which includes acupuncture, acupressure, herbal medicine, tai chi, and qi gong, is often practiced in the same hospitals or clinics as conventional medicine in China. Kampo, the system of traditional herbal medicine in Japan, is covered by the national health insurance plan and is practiced by many medical doctors. Mainly the herbs are popular among Malay may due to the high number of Malay population in Shah Alam. Based on the perceptions towards herbs, almost all of the respondents assumed

that herbs are cheaper, safe and more effective if compared with conventional medicine. Therefore, this study has showed that consuming herbs for treating chronic disease are still practiced even though there is a lack of local scientific evidence for most forms of herbs. In future, a proper documentation of the therapeutic uses and methods of preparing the herbs could be useful for medical counseling and intervention for diabetes. Immigrants from these and other countries of origin may continue to rely on CAM as part of their medical treatment in the United States and others European country's even they seek care from conventional health care providers. Some of these systems may eventually prove to be low cost health care options for use by the public.

Despite the diverse ways in which these systems and therapies developed, they appear to have several characteristics in common: the use of complex interventions, often involving the administration of many medications or medicinal substances at the same time; individualized diagnosis and treatment of patients; an emphasis on maximizing the body's inherent healing ability; and treatment of the "whole" person by addressing their physical, mental, and spiritual attributes rather than focusing on a specific pathogenic process as emphasized in conventional medicine. Notwithstanding the growing scientific evidence that some CAM therapies may be effective for specific conditions, the public's wide use of many untested CAM therapies might have unanticipated negative consequences. For example, the U.S. Department of Health and Human Services banned the sale of the herbal supplement ephedra in 2003 after concluding that the risks associated with use of this product by the general public greatly outweighed any potential benefit. It has been found that other herbal products interact or interfere with the normal pharmacology of some pharmaceutical drugs with potentially fatal consequences. CAM users often do not share information about such use with their conventional health care providers, thereby increasing the possibility of serious interactions. Even when conventional health care providers are aware that their patients are taking herbal products, serious interactions could result if providers are unfamiliar with the scientific literature on CAM. Understanding the prevalence and reasons for CAM use is a first step toward improving communication between health care providers and their patients.

METHODOLOGY:

Study Design:

This study was conducted on 400-500 patients including both urban and rural areas in males and females. This survey was performed to estimate and

explore the use of alternative medicine in patients with different diseases among all age groups.

Inclusion Criteria:

Generally population having experiences in alternative medicine was included.

Exclusion Criteria:

People with mental disabilities were excluded.

Plan of Work:

The study design was prospective. The data was collected by using data collection forms from the general population treating their ailments through allopathic, homeopathic, and herbal sources. The information obtained included demographics (name, age, sex, qualification and marital status) self and medically diagnosed problems, duration of diagnosis, source of information about alternative medicine,

type of treatment, current use of prescription medications, adverse effects of medications, desired outcomes and the reason of choosing current way of treatment. The data was compared keeping in view the different parameters and analyzed by using Microsoft excel thus a list of graphs and tables was obtained.

RESULTS AND DISCUSSION:

This descriptive cross-sectional study was conducted on patient data collected from different regions of Punjab Pakistan. Total 500 patients were observed out of which 48.66% were male and 51.34% were female. The 48% of the patients were literate while 52% patients do not know how to read or write.

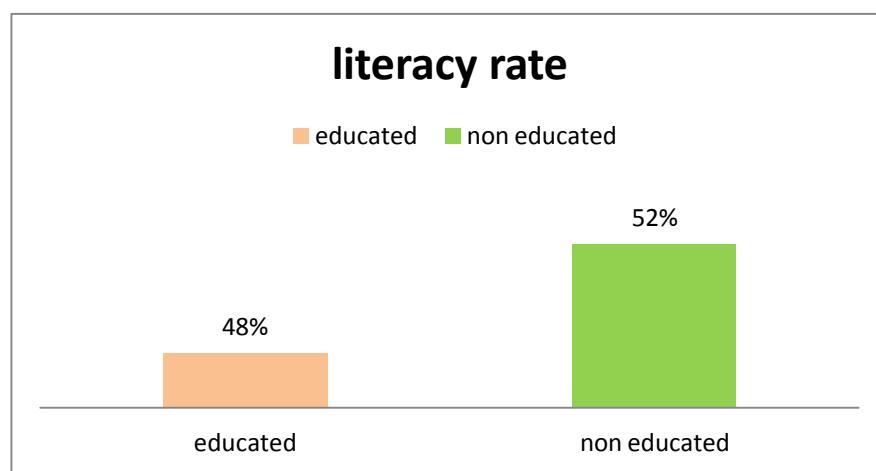


Fig 1: Literacy Rate Comparison of Patients.

Age distribution of patients varies in range of 10 to 90 years. Almost 50% of patients had age between 20 to 50 years.

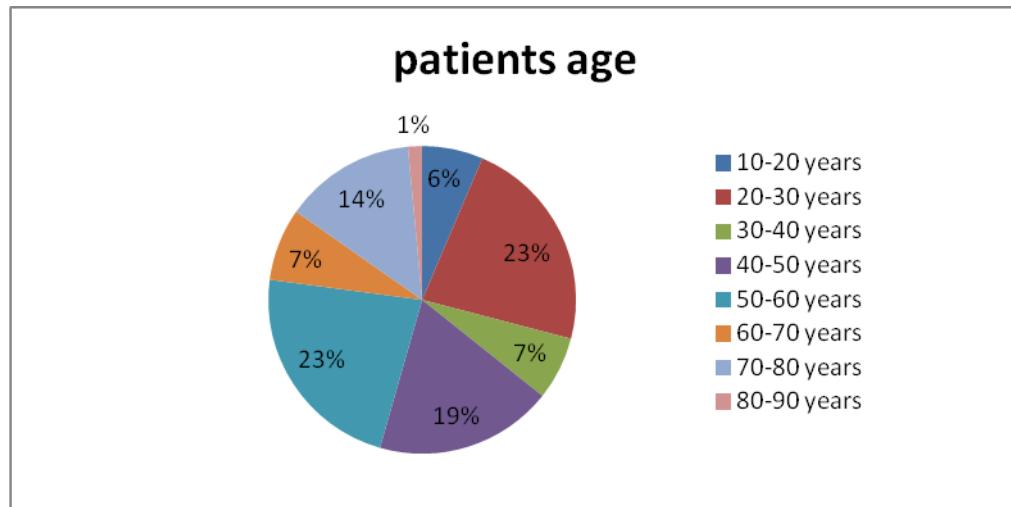


Fig 2: Age Distribution of Patients.

It was found in this study that 42.07% of population is getting allopathic treatment, 32.81% towards herbal treatment and 23.69% towards homeopathic treatment.

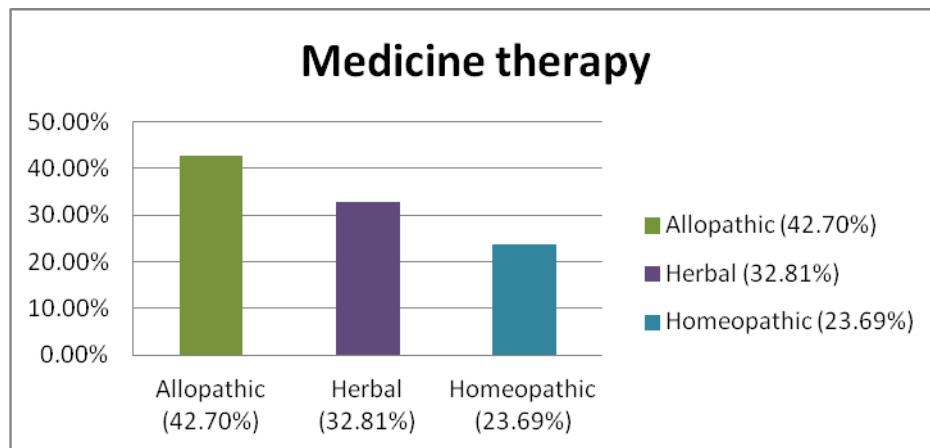


Fig 3: Population in all Over Punjab Getting Different Type of Treatments.

Among the patient taking allopathic treatment almost 51.48% were male and 48.76 % female. Among the urban population almost 52.84% male and 47.16% female were using allopathic mode of treatment. While 44.52% male and 55.48% female in rural population were taking allopathic treatment.

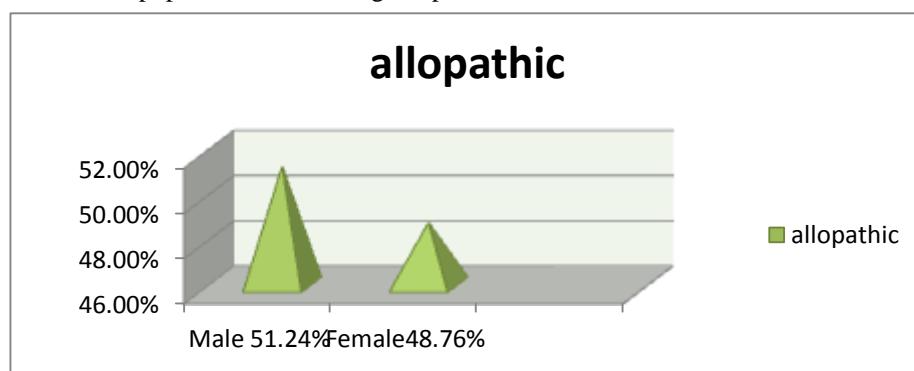


Fig 4: Gender Wise Distribution of Patients Taking Allopathic Treatment

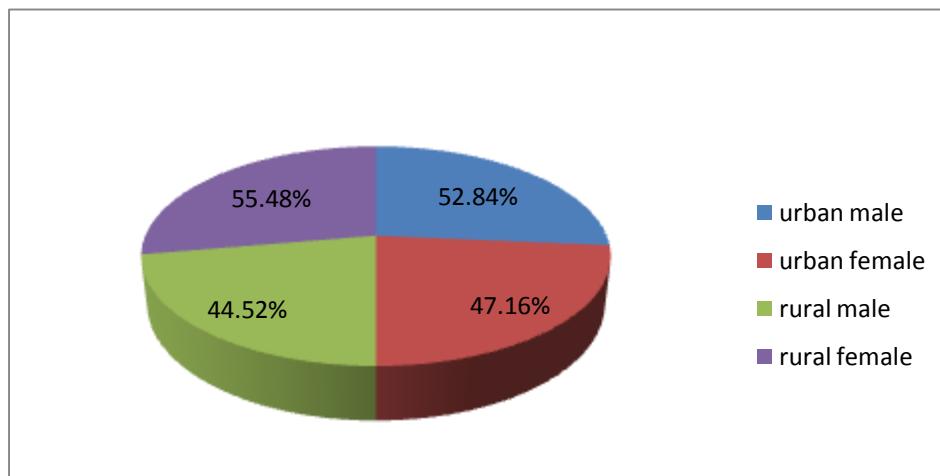


Fig 5: Gender Wise Distribution Of Patients Taking Allopathic Treatment In Different Demographic Locations.

In case of herbal treatment percentage ratio of rural and urban population was 31% and 19% respectively among male patients. Among females 30% patient belong to urban region while 20% patients were from rural areas.

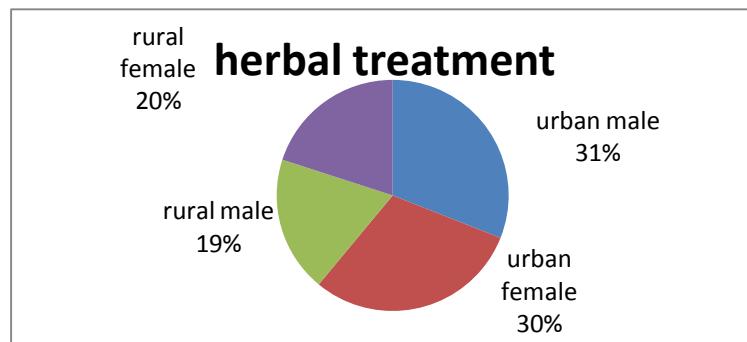


Fig 6: Gender wise distribution of patients taking herbal treatment in different demographic locations.

Almost 37% male and 29% female patients were taking homeopathic treatment in urban areas. In rural areas among the patients taking homeopathic treatment almost 21% patients were female while 13% patients were male.

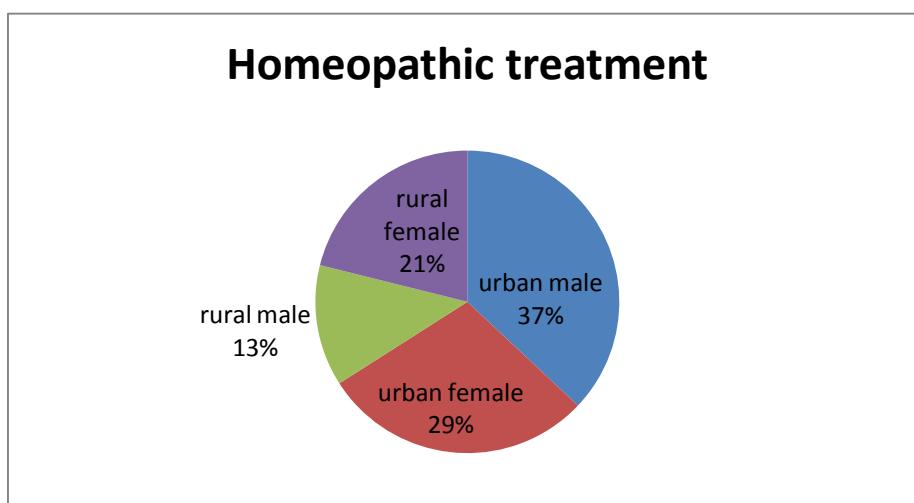


Fig 7: Gender wise distribution of patients taking homeopathic treatment in different demographic locations.

Almost 60% patients agreed that they were getting required outcome of medicine however 40% patients feel that they were getting no effects in the start of these therapies.

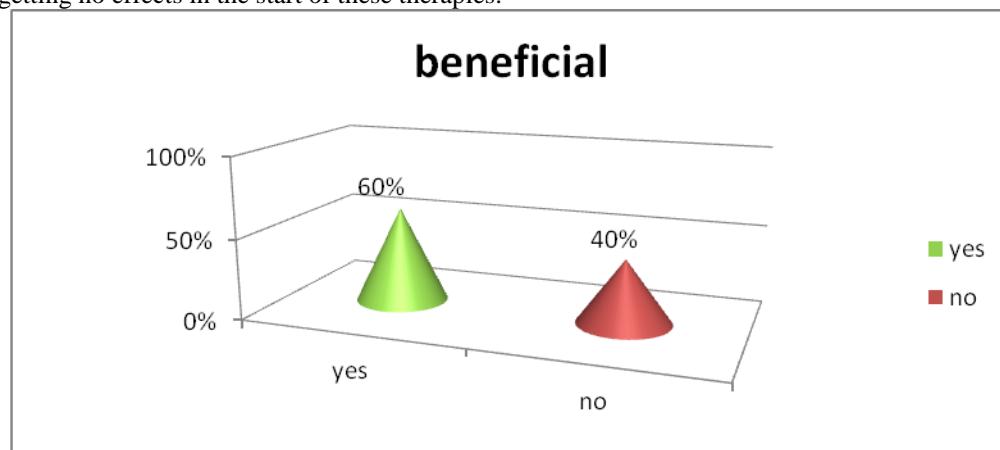


Fig 8: Comparison of patient satisfaction with particular method of treatment.

According to patient preferences towards treatment plan, 24% patients considered chosen treatment plan as most effective way of treatment. Less side effects of particular method of treatment was attracting 47% people contributing major reason for the choice of therapy by patients. Almost 19 % people chose treatment considering it easy to approach while 10% took interest into particular method of treatment due to cost effectiveness.

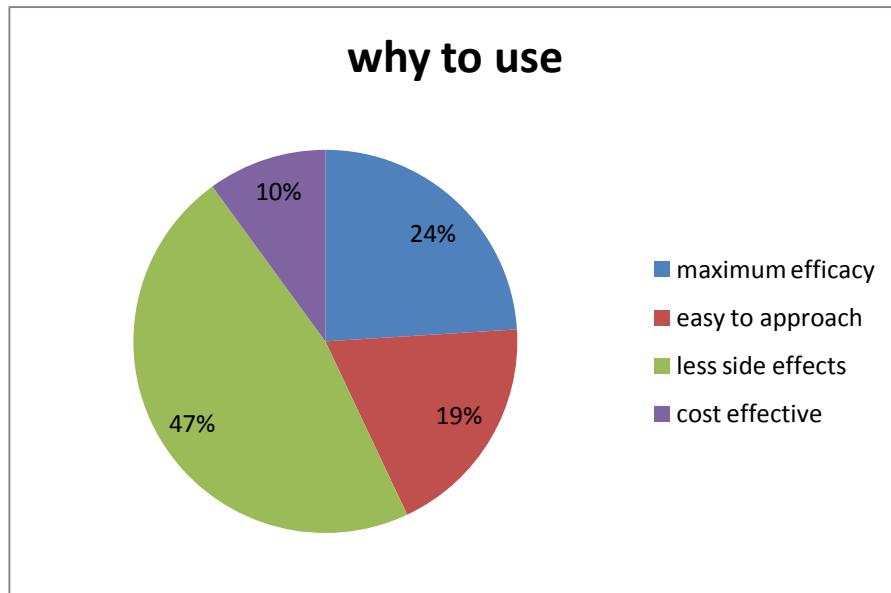


Fig 9: Comparison of root cause of interest of patients in particular method of treatment.

Analysis of general health appearance of patients showed that almost 19% were in very good health condition. Almost 44% patients had good health while 12% were in satisfactory look. The ratio of patients suffering poor health was found to be 25%.

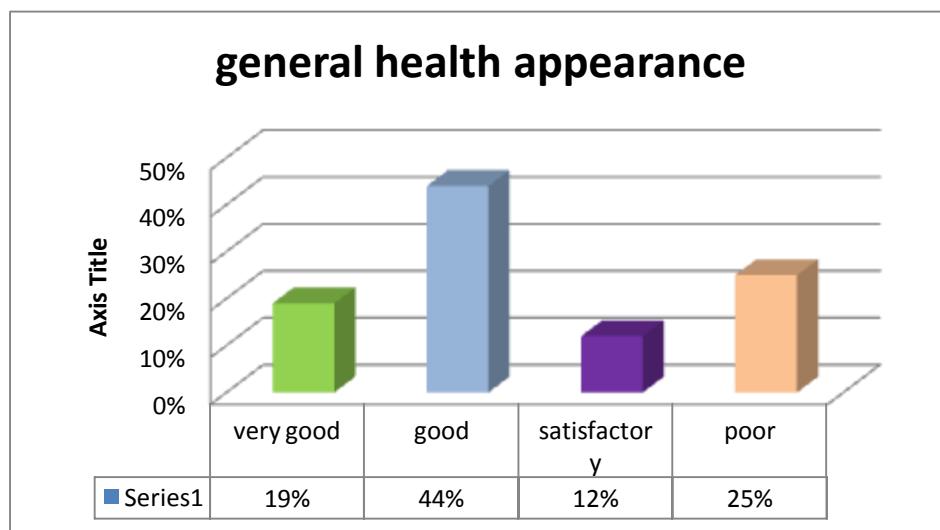


Fig 10: Analysis of general health appearance of patients.

Analysis of source of patient trend towards particular method of treatment showed that almost 56% patients were being referred by their relatives. Almost 42% patients were inclined due to their past experience and only 2% people were inspired by internet search towards particular treatment plan.

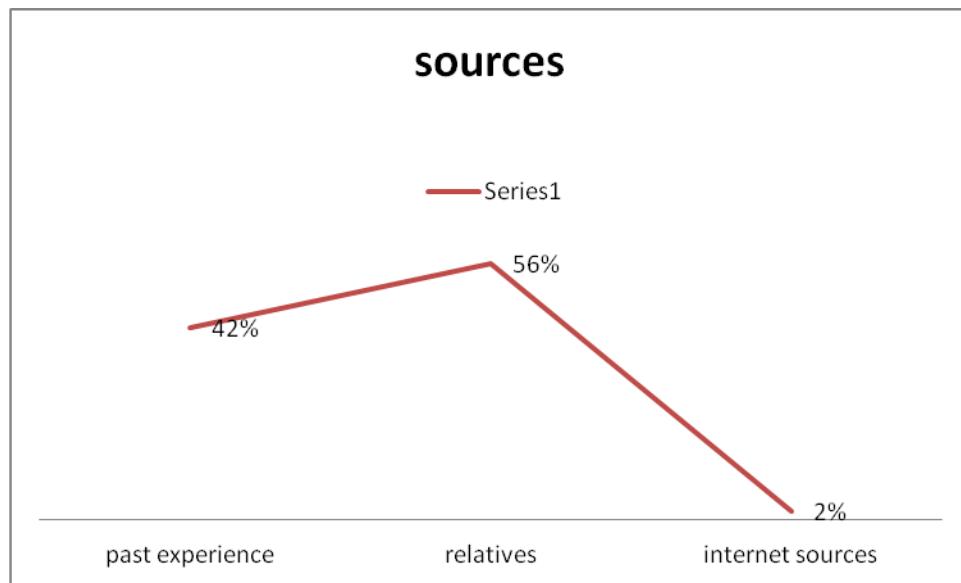


Fig 11: Analysis of source of patient trend towards particular method of treatment.

Analysis of routes of administration showed 49% patients taking it by oral route. On other hand intramuscular and intravenous methods were being used by 26% and 20% patients respectively. Almost 5% patients were using medicines subcutaneously.

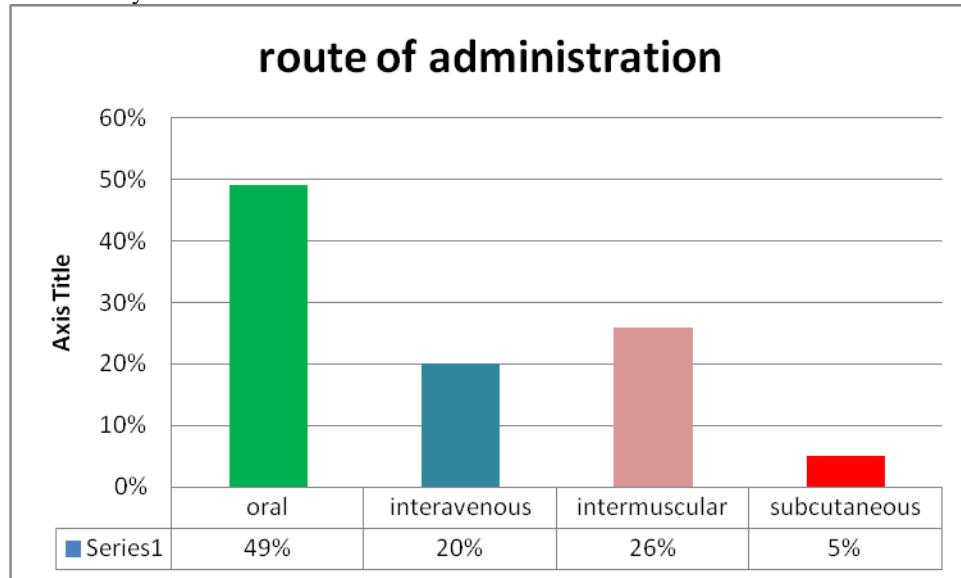


Fig 12: Analysis of route of administration of medicine.

Analysis of side effects of treatment showed that almost 56% patients were facing allergic reaction due to medicines while 71% patients boosting themselves by the use of supplements.

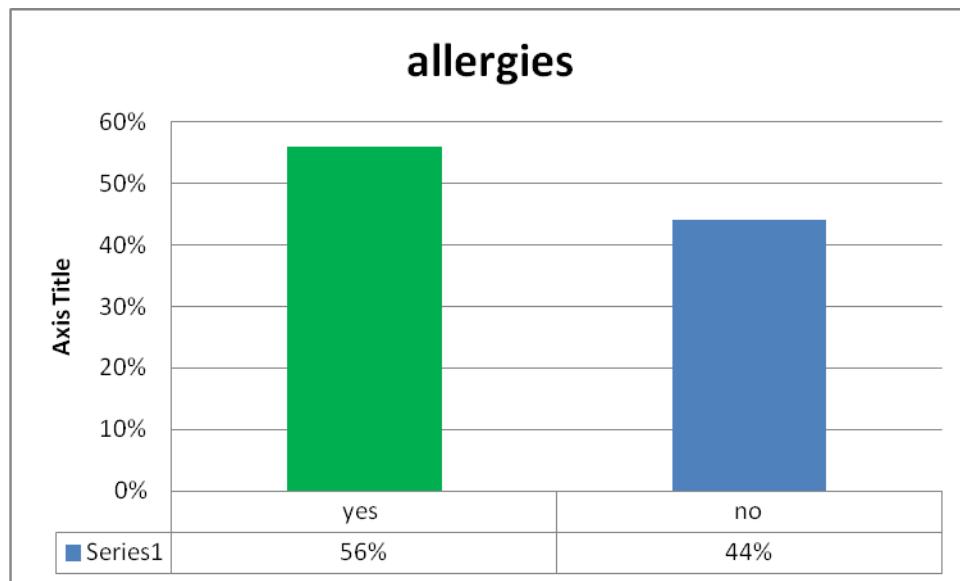


Fig 13: Analysis of side reactions of particular treatment plan.

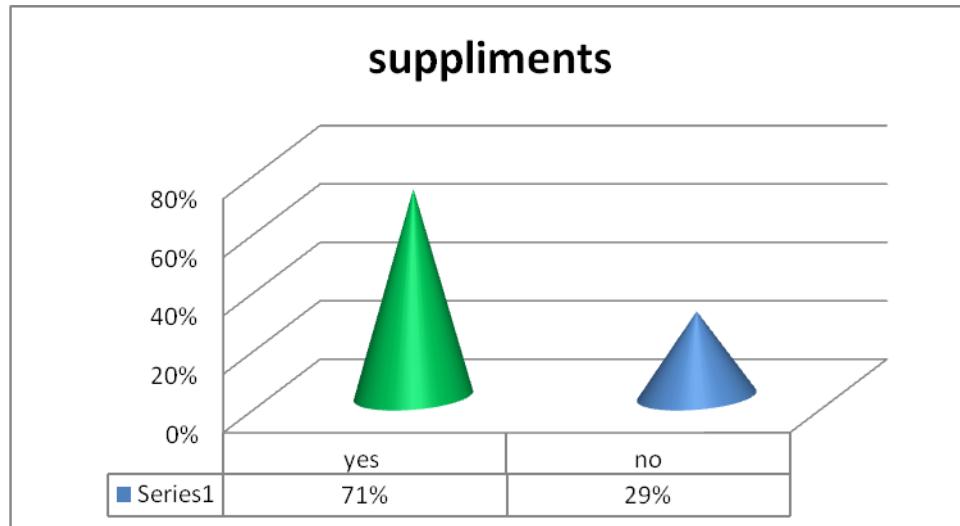


Fig 14: Analysis of patients using supplements to boost treatment.

According to defined barriers of male and female population of rural and urban eras this study revealed that allopathic treatment was taking as beneficial among population. All over the Punjab 89% of the patients taking over the counter drugs among them analgesics and antibiotics were of big choice.

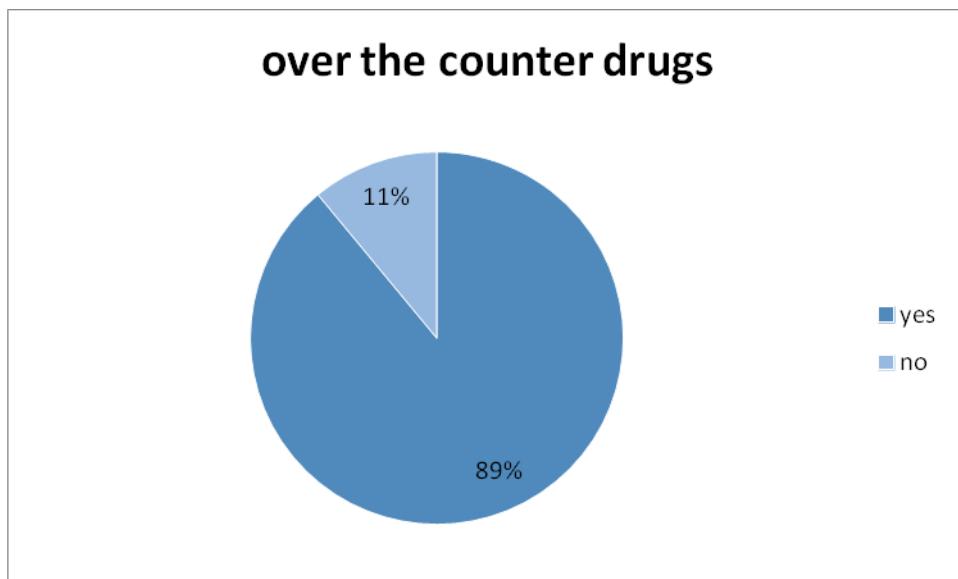


Fig 15: Comparison of trends towards counter drugs.

Comparison with past patient history showed that almost 62% of patients had diseases in past and similar ratio have undergone surgery in past.

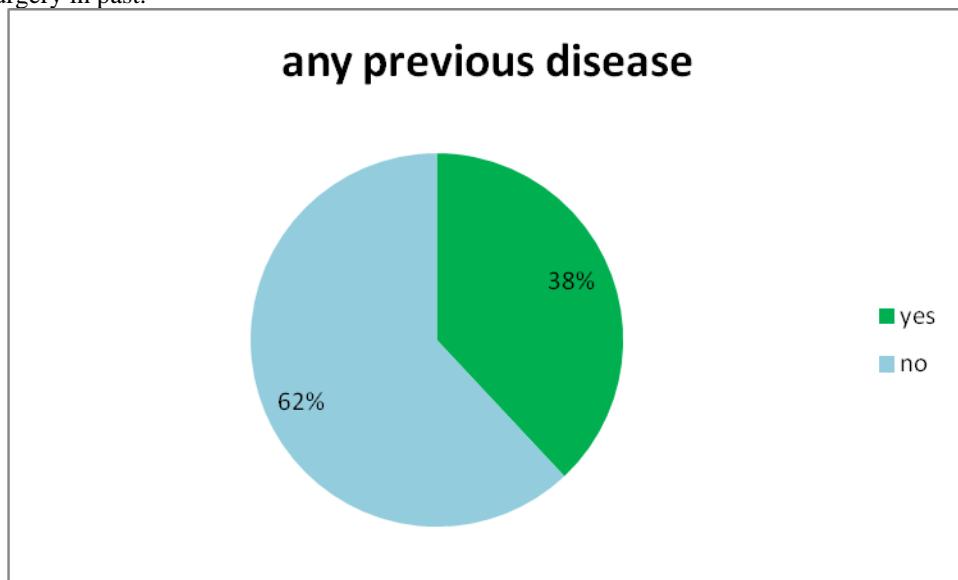
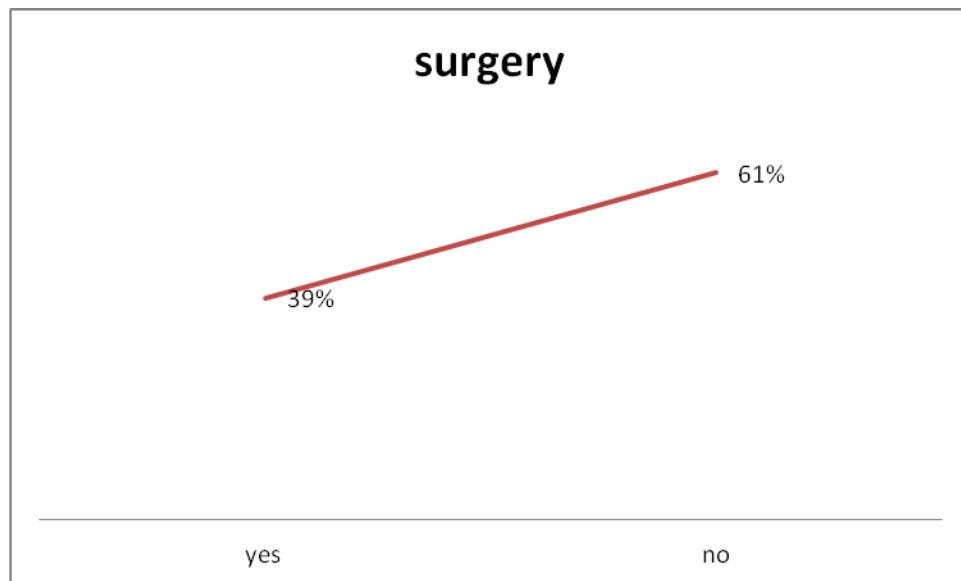


Fig 16: Comparison of patients having past infection.

**Fig 17: Comparison of patients' undergone surgery.**

There has been a significant increase in the use of CAM worldwide. CAM is used by more than 50% of the world's population, and evidence concerning the benefits of CAM, as well as possible adverse effects, has been accumulating. According to one estimate, around 75-90% of the developing world's population still depends on the complementary and alternative systems of medicine. The studies had showed that 42% of Americans, 52% of Australians, and between 20% and 65% of Europeans use some form of CAM. The primary focus of the present study was to assess attitudes of people in Pakistan towards CAM and their prevalence. Pakistan is considered less educated, low-income and old-world country. This may be the reason behind the high use of CAM therapy by the people. As the study stipulated, about 58% patients use CAM besides using allopathic medicine. The contribution of both genders was almost equal in our study. The ratio of non-educated persons that contributed in this study was higher than literate ones.

Herbal medicine followed by homeopathic medicine was the preferable CAM in the study as it was in past studies. The ratio of person preferring allopathic treatment was higher than females but interestingly in rural areas females was more interested in allopathic treatment as compared to males. Urban population is more interested in CAM such as homeopathic and herbal treatment as compared to rural areas. This is not in agreement with past studies which showed that in Pakistan, alternative system of medicines has been considered to be the first line of treatment in rural areas where 80% of the country's population lives. A significant number of patients were satisfied with output of treatment and preferred it due to fewer side effects. This is in agreement with past study by.

Mostly patients were in good health condition and was interested in CAM due to their past experience or recommendations by relatives. Some people were suffering side effects of CAM and boosting their treatment with help of supplements. Mostly people having past infection or undergone surgery preferred CAM.

In the setting of the developing world, CAM can be effectively used to reduce load on the overburdened health delivery systems. The health care system the world over and more so in developing countries, seems to have become more complex in the last half century, quite contrary to the astonishing advances in medical sciences and technologies. Against modern medicine, CAM may not appear much but they are like catalysts and enzymes in biological processes small in size and amount but beacons and guides to macro-processes. It is hoped that researchers, policy makers and practitioners will see the pivotal place of CAM in the global health-care system and use them wisely to enable the peoples to alleviate their miseries due to number of diseases.

CONCLUSIONS:

The people of Islamic Republic of Pakistan have a great faith in CAM, which has thousands of year's history. The practice/prescriptions are traditionally and empirically passed from generation to generations despite relatively less research in the modern era, concerted efforts have been made to revive to improve and promote the CAM by introducing change in the education and bring reforms in the policy of sale, storage, import and export of CAM. Commitments have been shown by the Government to bring it into main health care

system in spite of numerous challenges being confronted by CAM.

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