

The Hidden Risks Of Herbal And Natural Cures

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Abstract

Objective: A general perception shared by the people of our society is the cure of health diseases in herbal and natural cures. This is not the complete picture. Certain risks are associated with the use of herbal and natural cures. Herbal supplements, natural medicines, and traditional methods of cure collectively known as 'complementary medicines' [1] have heavy metalloids leading to the cause of chronic diseases. This paper mentions all the risks involved in complementary medicines along with the research on which it is based. Besides this, policy-making on this issue at the official level, especially in Europe, has been highlighted.

Keywords: Health and Natural cure, Metalloids, Chronic diseases, Complementary medicines

Introduction:

Since ancient times, the cure used for many diseases was present in the form of herbal medicines and other natural cures. In the past, taking herbal medicines was very tempting. These medicines and natural cures were termed safe and natural. There is plenty of literature present on the importance of the natural cure. The natural cures used in the treatment of patients were termed the harmless method of curing diseases. However, this was not the complete picture in terms of herbal and natural cures. There are many patients and even some physicians who have mentioned that certain risks are associated with the intake of herbal and natural cures, especially in chronic diseases. All the informed consumers are now conscious about the intake of herbal medicines and natural cures for their diseases. There are many researchers who are questioning the effectiveness of natural cures at the present time. In general, herbs are harmless, but there are certain herbs that have high amounts of metalloids, marking themselves as a dangerous source of curing health diseases. To anyone taking medicines for the heart, diseases should surely stay away from natural cures since, according to research carried out in 2017 [1], there is a high amount of mortality rate among patients with cardiovascular disease having an intake of herbal medicines. The reason for making cardio patients conscious is the involvement of serious adverse reactions when natural products come like ginseng and aloe vera (Commonly used) in contact with conventional cardiovascular drugs. This has been tested by the physicians of Mayo Clinic in Scottsdale, Ariz [2].

Conventional medicines, once done with the process of manufacturing, undergo various scientific tests and hard kinds of scientific study. This kind of process is not repeated once the herbal medicines

are made. Herbal medicines are supplied as it is on the market and do not undergo a hard test and trial process due to the stereotypical thoughts of people about herbal medicines being harmless. Besides increasing the heart rate and blood pressure of critical patients, herbal and natural cures increase the risk of bleeding among cardiovascular patients. The risk of abnormalities gets higher as well. Many drug interactions have revealed the fact that herbs contain certain compounds named coumarins [2, 3]. These compounds are found to be anticoagulants. Commonly, there are 15 types of typical drugs that are termed as adverse to cardiovascular diseases. From this, it has been figured out that the risk of natural and herbal cures is high. The patients at the time did not pay heed to the risk because of the belief that they were a harmless source of curing diseases. Creating chaos by indicating the harms associated with natural and herbal cures may not be the right method to eliminate their use in society. All the physicians are trying to figure out a way through which the patients can be made aware of the risks hidden in the natural cure. Future research opportunities are indulged in the issue under research. New regulations and approaches toward complementary medicines will help patients and the general public understand the safe use of herbal and natural cures.

Background Of The Issue:

A large portion of the Asian countries is found to be utilizing traditional medicine. Many Europeans are treating the disease with a high spectrum of treatment modalities present in the form of complementary medicines. Users of CAM products [4] mark them as the safest source of curing the disease; however, health professionals have shown their concern about the excessive use of these products among patients. When a higher mortality rate among patients of cardio diseases was found, the World Health Organization (WHO) emphasized that detailed research should be done on the importance of the study on the widespread use of herbal medicines. All the determinants related to the prevalence of herbal medicines should be studied, tried, and tested. Besides this, WHO mentioned that the analysis should include the entire concept of Complementary and alternative medicine (TCAM) should be covered in the research. High-income countries started the study on the utilization of herbal and natural cures having use of CAM products between 9.8 to 7.6%. It is also reported that the population in other areas like the Mekong and the Association of Southeast Asian Nations (ASEAN) are also utilizing herbal and natural cures excessively, but no statistical figure has been highlighted for this statement. By focusing on the first rule of healthcare, which is 'no harm,' WHO and the European Union (EU) continued their research on this matter.

Several sources described the estimated use of traditional medicines in Europe as strong and widely spread in the entire area. There are many sources of providing herbal and natural cures to the native people in the area. These providers are present in the form of religious bodies that enlighten the benefits of herbal medicines in the light of religion [5]. There are other people as well who have been using herbal and natural cures from the times of ancestors and know the hidden formulas of these medicines. Providers of such medicines mostly work in their homes, religious places, or the private sectors reserved for their purpose. Besides this, the manufacturers of herbal medicines make sure

that the medicines are now widely available and cheap in comparison to other conventional medicines so that people keep on using these products. Due to the low utilization of public health facilities by the government sector in certain areas people are bound to visit the private sector for their treatment. To avoid the costly treatment of the private sector people move towards the utilization of herbal medicines [5]. World Health Organization (WHO) believes in eliminating erroneous medicines to save the lives of people from adverse effects. To provide safe and high-quality health care in Europe efforts are being made by analyzing the prevalence type of medicine intake in this area.

Examples Of Different Countries:

The prevalence of herbal medicines is high in underdeveloped countries or countries following their traditions strictly. One of the common examples of the prevalence of herbal medicines in the country is present in the form of Thailand. Thai people seeking care in the public healthcare sector receive Thai traditional medicine for the treatment of their diseases. The ratio of such people is 10% [6] in the country. Thai Traditional treatment includes Thai Massage, herbal steam baths, and herbal medicines. The providers of herbal medicines are named traditional healers in the country. They work from home to provide different treatments to the people. The belief of the Thai people in using supernatural powers to cure diseases like colds, heart diseases, and much more is now unacceptable to the literature and well-aware people. They believe when the disease gets sensitive, consultation with a specialist is the first thing to be done. European Union, despite its focus on a Safe and healthy lifestyle, is receiving criticism. A study recently documented quoted that CAM in Europe is not according to the current safety theory generated by the government for patient safety. Besides this, the regulation of CAM does not seem to be founded on the basis of scientific knowledge, testing, and trials. There is no understanding of the common risks associated with CAM. The lack of common risk knowledge is questionable for the people utilizing it frequently. This research, as a whole, will contribute to making people aware of the common risks in the use of herbal cures, along with future scopes related to this research.

Another example of the prevalence of herbal medicines among the native people is present in the city of Vietnam. Vietnamese herbal medicine is influenced by the herbal medicine of Chinese people. This traditional medicine forms the basis of their treatment in the national health care system in Vietnam. 30% of the healthcare in the public sector is treated with the traditional medicine found in this area. People following the trend of traditional medicine keep on following it blindly. In this case, the scientific researchers are at fault since they took too much time to realize that herbal medicines also need to undergo some experiments to give a finalized product to the people to follow. The components of traditional medicines include massage, acupuncture, and massage given by national health insurance. People living in rural areas constitute 60% of the people who utilize herbal medicine and natural cures for getting treated naturally. After a higher amount of people using traditional medicine, the researchers found out that the people using complementary medicines suffer from chronic diseases. There were some patients who suffered from mental illness as well. In the lower Mekong countries, people using CAM were further found to suffer from diseases like Cancer, diabetes,

and hypertension as well. 47.85% [2,4,6] of the people suffered from diabetes after they started to use traditional and conventional medicines together. (Traditional medicines refer to herbal cures, and conventional medicines here highlight the prescribed medicines given by the physicians.)

Current Research Done On Herbal And Natural Cures:

Research done at the present time has highlighted the clinical approach to the risks associated with herbal and natural cures. The Black side of the herbal cures is mentioned by questioning the composition of the herbal medicines. Since herbs are natural products, their composition varies from product to product. Several factors contribute to deciding the composition of herbal products. These factors are the species the herbs belong to, the anatomical part of the herbs, and the merchandized products used in these herbs. This point of view may result in changes in the pharmaceutical utilization of herbs used worldwide. Besides this, pharmacodynamic and pharmacokinetic issues may arise after the keen evaluation of the composition of the herbal products. The adverse side effect of herbal medicines is an open problem being faced by many researchers out there. Citizens in nearly every country have a special place for naturally occurring medicines and cures. They are not ready to accept the adverse effects of the medicines. The cultural-fashion-based thinking of the people makes them move towards natural herbs without realizing that they are exposing the patients to chemical substances of vegetal origin.

A certain ingredient in the composition, like glucosides, [4,6] may be responsible for allergic reactions in the body of human beings. The use of herbal and natural cures during the pregnancy period of women should be done under strict supervision and medical guidance. This is because of the reason that no research has been done on pregnant animal creatures, especially pregnant mice which are often used in scientific research. The article published in the Medical Journal of Australia mentioned some other diseases caused by the intake of herbal medicines as well. These diseases also include the failure of kidneys, liver diseases, and all diseases of a similar kind. Toxic metals in the herbal compounds react vigorously with the drugs present in the body, causing a fatal reaction in certain severe cases. According to the recent observation carried out in scientific observation, the researchers believed that the actual issue lies in the lack of a systematic approach to the use of herbal medicines. The use of traditional medicines should never be done along with doctor-prescribed medicines. The plant species involved in the adverse reaction have not been figured out yet. However, efforts are being made to find out the adverse effects of the excessive use of natural ingredients.

Discussion:

The utilization of herbal and natural cures in the past is not hidden from any person. This shows that there are definitely some good effects associated with it due to the long consumption associated.

Scientists and other researchers working in this field are not sure about the working of herbal and natural cures. Even the present researchers have highlighted the positivity in alternative cures, while there are researchers who are working on finding the composition of the herbal cures so that the hidden risks can be mentioned with more authenticity. In this section of the research paper, the general risks associated with herbal and natural cures, the risks in commonly used herbal cures, and the positive side of the topic will be highlighted as well.

General Adverse Effects Associated With Herbal And Natural Cures:

Any kind of substance that enters the body brings some kind of changes in the body. It is not necessary to say that only medicines can harm the body. In some cases, the food can have adverse effects as well. Anyone with an intolerance to lactose can easily relate to this situation. Herbs are plant-based substances that are used as medicines widely in curing many diseases. It is found that the herbs have hidden risks associated with them. When it comes to the interaction of herbal medicines with pharmaceutical medicines, the outcome can be fatal. In this case, the patients need to speak up with their patients so that they can share their concerns about the drug interaction. Some of the general risks associated with herbal medication and natural cures are mentioned below:

Photosensitivity

St. John's wort is one of the herbal cures for treating anxiety and pressure. People found to have the amount intake of this specific herbal medicine will observe themselves to be allergic to excessive sunlight. Their skin becomes sensitive to the skin. In certain cases, the skin of some people gets severe burns in different places of the body. In this case, people with fair skin tones or even light skin tones show higher sensitivity to the sunlight. However, this kind of allergy is found to be rare in the world. People suffering from this kind of allergy undergo serious conditions since its cure is even rarer than its existence. The intake of this herbal medicine causes skin allergy only when the herbal medicine is taken for a long period of time or in excessive amounts. Hence, all the anxiety and depression patients taking St. John's Wort should expose their skin less to the sun because of the issue of photosensitivity.

Skin Irritation

The full-strength utilization of topical herbal antifungal and antibacterial agents has the chance of causing rashes or skin irritation in some cases. Topical herbal antifungal and antibacterial herbs include herbs like tea tree oil and lavender. In case the person is thinking of using the topical herbal product, the person should try a test patch on the skin so that the possible reactions can be observed. The test patch should be applied on the inner side of the elbow of the arm only. It is mentioned in

research that if any reaction is to be seen, it pops up after a certain amount of days. If the area on which the test patch was applied is clear, then the person is not allergic to tropical herbal products.

Sleepiness

The reaction of herbal medicine intake is different in different human bodies. Some people are more sensitive to this intake, while some have a less or minimal reaction after taking the herbal medicines. All kinds of herbs used in treating anxiety, insomnia, and depression show the symptoms of excessive sleep among the patients. Besides this, the intake of such herbs may increase daytime sleepiness in the patients.[3] This is due to the composition of such herbs. Anxiety-treating herbs have chamomile and valerian, which seem to be the culprit in this issue. Until the person is under the effects of such drugs, it is recommended that the person should stay away from all kinds of machinery, such as driving cars.

Drug Interactions

Interaction of drugs with herbal medicines causes fatal reactions. Commonly used medicines often have to interact with herbal medicines or even herbs in the purest form. When the herbs interact with drugs, the reaction of the drugs gets amplified. This amplification is higher in cases of blood-thinning medicines, anesthetics, and sedatives of different kinds. In some cases, the working of the drugs stops working [5, 6]. This is one of the most dangerous consequences of the herb and natural cures intake.

Interaction With General Anesthesia

One of the most dangerous interactions between drugs and medicine is present in the form of herbs and anesthetics. General anesthesia is given to patients undergoing some operation of medical procedures. Herbs like Kava Kava increase the effect of the anesthesia or any other kind of sedative being used by the patient. In this case, the patients should consult their doctors before any kind of interaction with the herb immediately after going through a surgical procedure involving general anesthesia.

Liver Inflammation

People having weak immune systems face issues in completing their tasks efficiently. In such cases, the herb of Echinacea is used to increase the strength of the immune system of the person having this issue. However, this herb is known for causing liver inflammation when it interacts with certain pharmaceutical drugs.

Commonly Used Herbal Variables And Their Adverse Effects:

At the present time, patients are using herbal medicine to gain temporary relief from joints or arthritis and give themselves permanent issues related to the heart. Some herbal and natural cures are frequently used in the cure of diseases. The research carried out by Canaway mentioned that people having the issue of obesity or having a cough for a couple of days prefer using Ephedra, which is a natural remedy for curing obesity. However, such people are not even aware that the utilization of this herbal cure after a certain amount becomes dangerous and a big threat to life since it increases the heart rate and blood pressure of the person. In some cases, the interaction with cardiac medicines of his herbal cure can result in fatal reactions. Commonly, it is believed that Garlic is good for lower cholesterol; however, in some cases, the use of garlic, along with the use of blood-thinning medicines, can increase the risk of the increase in bleeding [3,6]. Excessive bleeding may lead to death in severe cases. Gingko is another herbal medicine that can increase the risk of excessive bleeding among patients with high blood pressure taking medicines to control it. The herbal medicine of Goldenseal is usually used in treating the issues of constipation. However, the patients taking this herbal medicine regularly have reported fluctuation in their blood pressure.

At times, their blood pressure becomes high, while at times, the blood pressure becomes so low that it becomes impossible for the patients to be treated immediately. This is because of the abnormalities observed in the functioning of the heart rate of the human body. The list of risk-giving herbal medicines is not confined to the above-mentioned herbal medicines, there are more to it. Hawthorn and Licorice root are some other herbal medicines that increase the risk of bleeding among patients with high blood pressure. There are other herbal supplements that cause heart issues whether or not other conventional medicines are undertaken. One of the herbal medicines for this cause is Aloe Vera. Prolonged use of Aloe Vera can cause an abnormal rhythm of the heartbeat. Arnica, if taken internally, causes the same kind of issues. Besides this, Black cohosh, Feverfew, Ginger, and stinging nettle are among the herbal cures whose intake can make patients suffer from cardiovascular issues. One of the sad aspects of this issue is the non-recognition of the toxic herbal medicines used by pharmacists for recognizing potentially dangerous drugs. Technological advancement cannot figure out the solution to this issue for now. The solution and the development of the computer software accordingly depend on the advanced research on herbal medicines. For now, the patients are advised to consult their doctors before taking any kind of 'safe' method of treatment.

Positive Effects Of Herbal And Natural Cures:

Herbal medicines have great benefits associated with them as well. At the present time, the amount of people suffering from a migraine is very high. There are nearly 14.2% of people in the United States who are suffering severe migraine pain. The pain, in some cases, becomes irresistible. Globally 14-17% of people are having this issue. Pharmaceutical medicines have been successfully curing the

mild or acute type of migraines, however, the severe kind of migraine is not under the control of pharmaceutical medicines [7]. In this case, pharmaceutical medicines show less efficiency with some adverse effects as well. In this case, complementary medicines are like a blessing in disguise for patients with severe migraine issues. Complementary and alternative medicines are used in curing headaches and for the prevention of migraine in patients having severe kinds of migraine. The literature existing about the treatment of migraine has shown that the efficiency of alternative and complementary medicines is more than that of pharmaceutical medicines when it comes to treating headaches and migraines. Patients with headaches are now frequently diverting towards CAM. According to recent research carried out, there are approximately 49.5% of patients, especially the adults in this ratio, are turning towards the use of CAM to give their issues of migraine a self-treatment using naturally occurring herbs. One of the common types of therapy used in CAM is mind-body therapy.

This therapy includes exercises like Yoga and meditation, which are believed to be good for the body and soul [7, 8]. The utilization of CAM among women is more than that of men. The most commonly used modalities by these women patients are herbal supplements, massage, and other natural curing methods. Besides this, recent research also signified that women having mental distress felt a little relief after the intake of herbal medicines as the cure for their disease. Besides the prevalent use of CAM in curing chronic mental distress or headaches, there is little knowledge about the reason for using a natural cure for the disease of a migraine. Adults have been using CAM for self-care [9] and well-being for the past many decades; however, they are not aware that natural cures are good for the regulation of the blood if done within a certain amount limit. Other than this, natural and herbal cures foare used r relieving pain during the menstrual cycle of women as well. Many hormone issues are cured with the help of naturally occurring medicines [10]. However, it is recommended for all women, especially pregnant women, to ask their doctors before taking any kind of herbal or conventional medicine.

Recommendations:

Undoubtedly herbal medicines have been working for years to serve humanity in many forms. Herbal medicines are one of the best solutions for curing diseases like headaches and migraines, but there is a bad side to this picture that needs to be figured out. Although in the present time people are using conventional medicines more there is always a hidden doctor lying inside every person who aims at suggesting cures for himself. This hidden doctor recommends the use of herbal cures for treating patients. In this case, the first and foremost research that needs to be done is on the composition of herbal medicines. It is recommended that scientists make sure to try these herbal medicines and all naturally occurring cures on subjects found in the form of animals. Only after the detailed research will the doctors be able to tell their patients about the dos and don'ts related to herbal medicines.

In this situation, doctors are recommended to have a detailed history of their patients. The doctors should develop a good understanding that the patients are at ease while telling about the natural

cures they are using and what cures they have used in the past. It is observed that the doctors are not spending enough time finding the true needs of the patients. Despite the advancement in technology and even in the field of medicine people are still finding alternative medicines to be more attractive than the conventional methods being used at the present time. In this situation, both the doctors and the patients need to cooperate. While it is the duty of doctors to ask patients about everything, it is also the duty of the patients to keep them aware of all the changes they have observed in their health and the use of alternative methods for their situation of disease. Another recommendation is for the doctors, other than making themselves aware, they make their patients and surroundings aware of the herbal cure's hidden risks so that the stereotype of 'safe' treatment can be managed by informing the general public about the hidden risks.

A prominent and valuable role in this situation can be played by the government of the countries, especially in the lower Mekong countries. The government can arrange seminars, informative sessions, and activities that signify the importance of health and the awareness of taking every treatment seriously. The government should teach about consulting doctors in case of diseases rather than finding alternative ways of treating one's disease. The seminar can highlight how the use of unproven and non-tested products can be lessened by highlighting the possible risks. An important point that should be considered while conducting seminars is to create a happy atmosphere for the patients so that they do not get pressured by the hidden risks of herbal and natural cures. For now, the evidence of the side effects of herbal and natural medicines is less. According to the World health organization, there needs to be more pieces of evidence so that the general public can be made aware accordingly.

Conclusion:

To sum up, the research has highlighted the general issues found as a result of the intake of herbal medicines. The hidden risks are often overlooked, believing the stereotypes present in our society that herbs and natural cures are 'safe' sources of treatment. The general risks associated with the intake of drugs are present in the form of excessive periods of sleep, fatal interaction with anesthetic and blood-thinning medicines, liver inflammation, skin allergy, and photosensitivity. However, this is not the complete side of the picture. There are many people who are using herbs to cure the disease of migraine and severe headaches. The use of herbs for curing migraine is very high. No doubt this debatable issue has both sides of the story. In this case, it is the duty of the patient and the doctors to keep both sides equally updated and informed. The patients should be aware of the doctors about the herb intake, and the doctors should keenly analyze and be aware the people about the hidden risks. Above all, awareness is the most important thing of all.

References:

1. Bolan S, Kunhikrishnan A, Kirkham M, et al. Sources, distribution, bioavailability, toxicity, and

- risk assessment of heavy metal(loid)s in complementary medicines. *Environment International* [serial online]. November 2017;108:103-118. Available from: GreenFILE, Ipswich, MA. Accessed February 18, 2018.
2. Wiesener S, Salamonsen A, Fønnebø V. Which risk understandings can be derived from the current disharmonized regulation of complementary and alternative medicine in Europe?. *BMC Complementary And Alternative Medicine* [serial online]. January 10, 2018;18(1):11. Available from: MEDLINE with Full Text, Ipswich, MA. Accessed February 18, 2018.
 3. Siyan Y, Ngin C, Tuot S, Chhoun P, Fleming T, Brody C. Utilization of traditional, complementary and alternative medicine and mental health among patients with chronic diseases in primary health care settings in Cambodia. *International Journal Of Mental Health Systems* [serial online]. September 22, 2017;11:1-13. Available from: Academic Search Complete, Ipswich, MA. Accessed February 18, 2018.
 4. Leggett S, Koczwara B, Miller M. The Impact of Complementary and Alternative Medicines on Cancer Symptoms, Treatment Side Effects, Quality of Life, and Survival in Women With Breast Cancer—A Systematic Review. *Nutrition & Cancer* [serial online]. April 2015;67(3):373-391. Available from: CINAHL Plus with Full Text, Ipswich, MA. Accessed February 18, 2018.
 5. Thomas J, Beinhorn C, Norton D, Richardson M, Sumler S, Frenkel M. Managing Radiation Therapy Side Effects with Complementary Medicine. *Journal Of The Society For Integrative Oncology* [serial online]. Spring2010 2010;8(2):65-80. Available from: Academic Search Complete, Ipswich, MA. Accessed February 18, 2018.
 6. Canaway R. Research, WHO and support for traditional and complementary medicine: From Local to Global Perspectives Part 2. *Journal Of The Australian Traditional-Medicine Society* [serial online]. Summer2017 2017;23(4):204-207. Available from: CINAHL Plus with Full Text, Ipswich, MA. Accessed February 18, 2018.
 7. Rhee T, Harris I. Reasons for and perceived benefits of utilizing complementary and alternative medicine in U.S. adults with migraines/severe headaches. *Complementary Therapies In Clinical Practice* [serial online]. February 2018;30:44-49. Available from: CINAHL Plus with Full Text, Ipswich, MA. Accessed February 18, 2018.
 8. Kelso-Chichetto N, Okafor C, Harman J, Canidate S, Cook C, Cook R. Complementary and Alternative Medicine Use for HIV Management in the State of Florida: Medical Monitoring Project. *Journal Of Alternative & Complementary Medicine* [serial online]. November 2016;22(11):880-886. Available from: CINAHL Plus with Full Text, Ipswich, MA. Accessed February 18, 2018.
 9. Zhang Y, Dennis J, Adams J, et al. Complementary and Alternative Medicine Use Among US Adults With Headache or Migraine: Results from the 2012 National Health Interview Survey. *Headache: The Journal Of Head & Face Pain* [serial online]. September 2017;57(8):1228-1242. Available from: SPORTDiscus with Full Text, Ipswich, MA. Accessed February 18, 2018.
 10. Höfer J, Hoffmann F, Bachmann C. Use of Complementary and Alternative Medicine in Children and Adolescents with Autism Spectrum Disorder: A Systematic Review. *Autism: The International Journal Of Research And Practice* [serial online]. May 1, 2017;21(4):387-402.

Available from: ERIC, Ipswich, MA. Accessed February 18, 2018.