Study of market potential of plant based medicine
A study of Dengue and Malaria

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ABSTRACT

Treatment of illnesses with plants and plant based concentrates has been a vital piece of the tropical regions. With the progression of innovative work in medication, there has been an expansion in the consideration of plant based concentrates and side-effects utilized in treatment of numerous ailments, use of conventional medications of sicknesses are getting incorporated into present day prescription technique alongside the normal medicines. Every year all inclusive, the treatment of dengue and Malaria’s consolidated expenses is around USD 20 Billion every year. This paper centres around the market potential in plant based treatment of Dengue and Malaria as the diverse plants utilized in the treatment are broadly well known and is developed in nations like India, African nations and Latin America. It additionally tosses light on the recent trends in dengue and Malaria, customary strategies for treatment and Dengue in the present day.

Keywords: Dengue, Malaria, Conventional treatment, market potential.

Introduction

Recent trends in the development of Dengue and Malaria

Dengue fever is caused by the virus DENV; around fifty million people are affected by this virus. According to World Health Organization, Dengue affects nearly four hundred million lives. WHO reported that all the states and union territories are being affected by the dengue virus.¹ The vector Aedes aegypti is being the main contributor that affects India, South Asia and some parts of Latin America. The average treatment costs around ten thousand seven hundred and fifty rupees INR.²

¹ WHO, South East Asia Regional Office, http://www.searo.who.int/india/topics/dengue/en
The treatments of dengue and different diseases have been to a great extent home grown based. Indian Tulsi, pepper, coriander, cumin, guava leaves, fenugreek and different herbs are utilized as mixtures, blended with water and taken for getting alleviation from the ailment. The recuperation of platelets in dengue patients is seen to be quicker when the leaves of papaya have been crushed and the concentrate is taken with water. This sort of medicines have been prevalent in the Indian subcontinent for centuries as India was home to a substantial assortment of plant species that were distinguished to have relieving properties. This is a very popular treatment technique in India as the plants are available very easily. Hence, the cost of production of medicine also reduces by a large percentage.

Malaria or Miasma also known by the name jungle fever, again a mosquito irresistible infection, that causes migraines, heaving, seizures in some cases prompting coma or demise. The early indications of jungle fever take a few days to start appearing in an individual. The examination indicated India reports the most astounding cases in south-east Asia. The WHO revealed that there have been 29.1 crore cases universally in the year 2017. The average expense of treatment of malaria costs around two thousand two hundred and eighty one rupees INR.³

Treatment of malaria involves usage of plants like Mango, Neem, castor and Cinchona. India’s has a long history of using traditional medicines where a ‘Vaidya’ or a Doctor has different prescriptions, formulae and medicine for different ailments.

An expansive segment of Ayurveda Pundits, Siddhas and Hakims (Practitioners of Unani) have been treating distinctive ailments in India. There is a pop culture among the Indians to utilize traditional technique for treatment over the advanced strategies as there is a general impression of reactions and side effects. Be that as it may, inclination to traditional medication has been quickly diminishing as there has been an expansion in individuals who Individuals additionally question the quality affirmation in the customary medications and uncertainty in the potential for fix in these modern ailments.

India is as yet home to various huge makers of customary drugs. A portion of the well-known makers incorporate Patanjali, Arya Vaidya Sala, B.V Pundits customary and home grown medicinal services and so forth who deliver and treat different afflictions with plant and plant based Medicine. The drug isn’t just prominent among Indians yet it is additionally extremely well known among the general population who want normal medicine from various nations. India is likewise home to numerous retreats which take into account the necessities of individuals’ wellbeing. Distinctive chains of littler players in the plant based medications have begun to rise in the Industry which obliges the requirements of nearby network.

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5691839/
Modern day plant based treatments have grown substantially as the practitioners have developed proper products through various R&Ds; have made the product trustworthy being able to capture both domestic and international market.

The treatment of dengue and malaria combined costs around USD 20 Billion per year. This opens up a huge market potential for the traditional Indian herbal treatment. The following reasons state the necessary and the market potential for herbal treatment of different diseases.

1) The study showed that there is an enormous potential for production of these medicine bases. The commonly found plants and their extracts can yield a lot of profits. Research shows that there are 10000 licenced pharmacies manufacturing the plant based drugs and India alone exports nearly 500 crore worth of plant based drugs. In the treatment of Dengue and Malaria, The study was conducted for dengue on different online platforms, the cost of papaya leaves extract came up to 1250 rupees Kilogram (India Mart), A 30 ML bottle of extract on a retail site cost 68 rupees, Holy Basil (Tulsi) costs around 790 rupees a kilogram (India Mart).

2) Central Institute for Medicinal and Aromatic Plants of Council of Scientific and Industrial Research give technology to makers and encourage for improvement of ventures creating concentrates, oils and they additionally offer business advancement bolster for up and coming business visionaries. There is a necessity in research collaboration in India for the improvement of natural items.

3) The study demonstrated that gatherings and conferences make space for research and improvement. Numerous conferences procedures have recommended for collaboration between Independent research associations, University examine associations, Industry and Corporate R&Ds, Government associations, approach producers and agriculturists to make mindfulness among the general population for a business opportunity for plant based medication.

4) Under the schemes of National Ayush Mission of Ministry of health and family welfare of the Government of India, they offer different subsidies (about 30%) for production of different medicinal plant under the article 8.1.5 under the support and cultivations of the medical plants (8.1) of the operational guidelines of medicinal plants.

5) Global Requirements of Plant based medicine

- The study also showed that there is a global requirement and market for India’s herbal medicines. As the global share of Indian herbal export is only 0.5% of the world exports. This clearly shows that there is potential for India’s Herbal Market.4

- The study also showed that, WHO reported that 80% of the world relies on herbal medicine and around 4 billion people use plant based drugs.

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4 India's share in global herbal medicinal market just 0.5%; Government. (2016). The Economic Times.
6) Requirements in India for the plant based medication is large as 66% of the population in the nation utilize customary drug. The investigation demonstrated that the expense of Herbal treatment of sicknesses is low; subsequently, individuals depend on it. This remains constant for dengue and intestinal sickness just as the expense of creation and treatment with plant based concentrates is low when contrasted with medications with current strategies. Natural medicines utilize prominently developed plants, for example, Carica papaya (Papaya) and Magnifera indica (Mango), neem, Holy basil in the treatment of dengue and malaria which makes the treatment very cost effective. The treatment likewise has been ended up being free from any kinds of reactions as these are generally expended in India.

7) The government has provided different provisions under the AYUSH scheme through its contribution of funds, research and development, supplying AYUSH medicines (Ayurveda, Yoga, Unani, Siddha and Homeopathy) such as Ark Ajwain, Soubhagya Shunti and Balarasayana in primary healthcare centres.

Research Implications:

1. The study shows that there is high potential for the development of plant drugs in India.
2. There is high necessity for research and development in the herbal treatment of diseases as India is home to thousands of species of medicinal plants.
3. Government Support is required in research and development of traditional and herbal medicine that is found in India.
4. The development of low cost, government sponsored medicine can be used in treatments of diseases like fever, dengue and malaria. This would reduce the cost of obtaining the treatment for people.
5. Integrate research organisations, universities, academicians and industries to promote research and development and market for the herbal based treatment.
6. Promote co-operatives and FPOs that can produce different semi-finished and finished medicinal products with standard technology & provide quality assurance for the products.
7. The fundamental reason the worldwide offer of Indian home grown medication is low is because of the absence of value confirmation. The expert should setup a conventional prescription quality confirmation office that opens up more extensive market open doors for the items in India and abroad.

Conclusion:

The research has shown that there is a market potential for the traditional herbal medicine for the treatment of dengue, malaria and various diseases. The necessity for further research is required as there
has been an increasing demand for plant based medicines. Advanced study and proven experiments creates an assured market for upcoming entrepreneurs, creating a worldwide market for plant based medicine. The research paper also shows a certain degree of limitations due to the insufficiency of time series data as there has been no continuous statistical observations and research on the trade of plant based and herbal medicine. The study has also shown that there can be a drastic reduction in the costs of treatment of these diseases.