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A REVIEW ON THE HERBAL MEDICINE USE FOR TYPHOID (PLANT- ASHWAGANDHA ROOT, MOTHER WORTH, GREEN TEA, GILOY, TULSI, CURCUMA[HALDI], APPLE CIDER VINEGAR ETC)

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ABSTRACT

Typhoid fever is a disease with high influence in India now days. Typhoid is disease caused by species of pathogenic bacteria known as *Salmonella typhi.* Handling of typhoid is become more complicated when cases of Salmonella Typhi of resistance to antibioticsc are found as a first line of treatment. Another treatment is required to counter the resistance cases, one of them by using Herbs. Health problems because of this disease have ensured to take effective step towards more study for updated source of antimicrobial products especially from medicinal plants because of more economical. This study shows medicinal plants related to the typhoid fever and mechanisms of their antimicrobial action. Review of this study investigated through Database, Google, online science research, Science and technology indices. There are some medicinal plant which is traditionally used to treat typhoid by traditional healers. There are total 59 medicinal plant species have discovered which belong to 56 genera and 33 families. Most of the medicinal plant species were harvested from the wild compared to cultivated land and semi-cultivated. Decoction was one of the most recognise method of traditional grugs preparation. Number of plants used in combination to increase the effectiveness in the treatment of disease. But knowledge of these medicinal plant remains mostly with traditional healers and old generation, who are illiterate. So it is recommended that research scholar, research institutes and University researcher carry out research on these species to the next level and spread awareness to conserve and improve their genetic constitutions.

KEYWORD: Medicinal Plant, Plant extract, Typhoid fever, Salmonella Typhi, Antimicrobial species, healers, Old generation.

INTRODUCTION

Typhoid fever is infectious disease caused by bacterium Salmonella enterica subspecies enterica serotype typhi, which is acquired by consumption of contaminated food and water which is already infected with Salmonella typhi. These bacteria live only in human. A person infected with typhoid fever carry the bacteria in their intestinal tract and bloodstream.For treatment and prevention from this disease people use both traditional and conventional medicine.

Most common symptom of this disease is prolonged fever (101.7 to 104.6 F), symptom often preceds fever and includes headache, cough, weakness, dizziness & muscle pains. There are some country where typhoid is serious concern.

Cameroon is one of the country which is located in Central-africa. This country is consist of various climatic zones and diversity of ethnic groups. Here life expectancy is about 51 to 55 year for males and females both. In 1993 WHO published a report that life expectancy is low here because of predominance of infectious disease like typhoid & paracites. And WHO said that this disease is common in the region where sanitary condition are poor like Latin America, South East Asia and Africa. **WHO** recorded globally 16 million to 33 million typhoid cases annually.

Causes of Typhoid

- **Bacteria:** Salmonella typhi is a main bacteria to caused Typhoid.
- **Oral transmission route:** bacteria of typhoid spread through contaminated food and water. And sometime it spread through direct contact with someone infected.The majority of people get infected by typhoid who are living in industrialized country.

Symptoms of Typhoid: Hyperpyrexia, Splenomegaly, Tongue coated & reddish, Flatulence, Constipation, Red spot on neck, abdomen & chest area (1^{st} week).

Hyperpyrexia, Delirium, Drowsiness(feeling sleepy), Cough, Weakness, Dry of mouth, dicrotic, Blood mixed stool (2^{nd} week)

There are some test which are used to diagnose the Typhoid. Diagnosis can be made any blood, bone marrow or stool cultures.

- **Widal Test:** This test is used to find out specific antibodies in the serum of infected person by using antigen-antibody interaction.
- **Typhidot:** This test is based on presence of specific IgM & IgG antibodies.
- **Tubex Test:** It contains two type of particles[1] brown magnetic particles coated with antigen[2] blue indicators particles coated with 09 antibody.

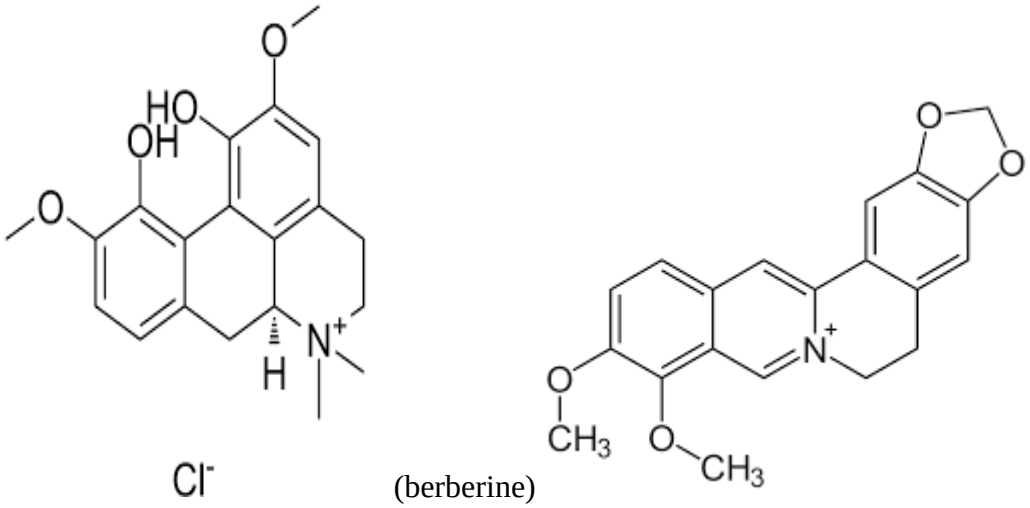
Remedies for Typhoid using Herbal Medicine:-Herbal remedies drive from natural herbs which are very effective and work accordingly. Herabal remedies are prepared according to the traditional method. These herbal remedies not only helps to get rid from disease but also work on root cause of disease & help in nourishing the body & provide strength to the body.

Some Medicinal plant: Ashwagandha root, Mother wort, Green Tea, Giloy, Tulsi, Curcuma etc.

- **Ashwagandha:** Ashwagandha is very powerful herbal product of herbal medicine. Extract of its root are most commonly used in certain disease including Typhoid as well. It helps to boost the immune system, strengthen & build the muscle, combat the fever, counteracts the effects of stress. Now days Ashwagandha is available in the market in the form pills. Consumption of Ashwadandha with the milk is effective to combat the all disease, It is very powerful tools to treat the disease since very long time.
- **Mother Worth:** Scientific name of Mother worth is leonurus cardiac. It is herbaceous perennial plant in the mint family. It also boost the immune, helps in constipation, generally it is naïve to the southeastern part of Europe & central Asia where it is cultivated since ancient time.
- **Green Tea:** It contains powerful antioxidants & nutrients that help regulate blood sugar, improve brain function and enhance metabolism. It also helps in increasing the detoxification in the body.The effectiveness of green tea in treating any type of diarrhea & Typhoid has been known in Asia since very long lime.
- **Apple cider vinegar:** It has acidic properties and is a good home remedy for treating typhoid fever. It helps to combat the high fever as it draws out heat from the bodyof the person suffering fron typhoid. It also contains some useful minerals which are very

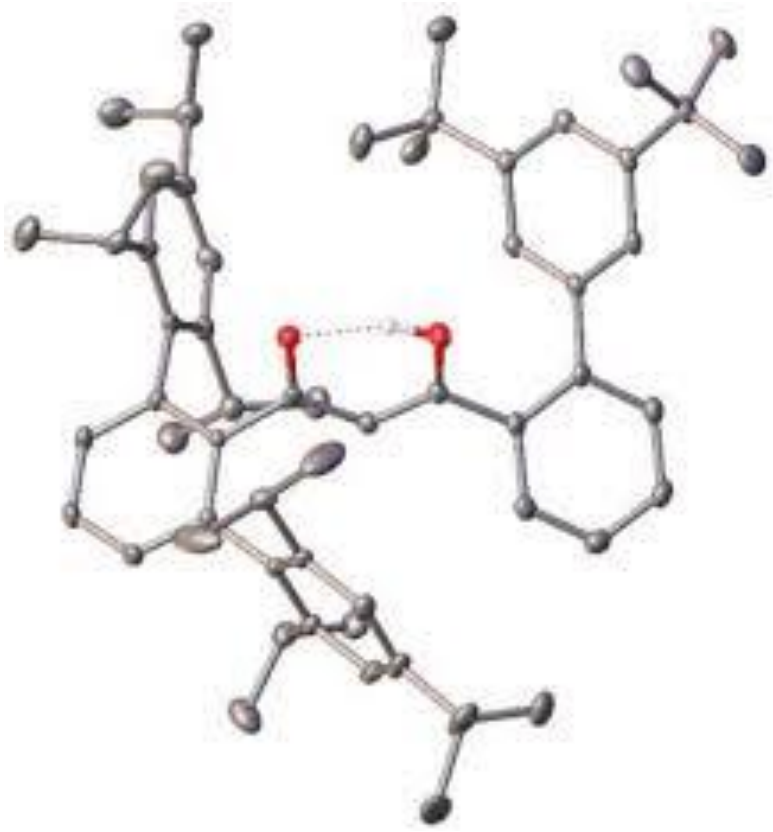
important for person who is sick. Apple cider vinegar has detoxifying properties, so also used for detoxification process of body.

- **Giloy:** Giloy is useful to reduce toxins & other microbes that are responsible for causing fever & other infections. It contains various properties like an antibiotic, anti-inflammatory & immune stimulating herbs. Giloy contains certain chemical compound like mangoflorine, ethanol, berberine, palmetin, tinosporin which are beneficial in all kind of fever & infection.



(berberine)

- **Tulsi:** Tulsi leaves are also used in specific fevers. In case of high fevers, a decoction of leaves boiled with cardamom powder in 0.5 litre of water & mixed with sugar & milk will help in combat the temperature of body. Tulsi plant has lot of medicinal properties, Tulsi has potent antibacterial activity against S.Typhi. it helps in cough, fever, stimulate immune system etc. botanical name of Tulsi is Ocimum sanctum.
- **Curcuma(Haldi):** botanical name of curcuma is Curcuma longa. It helps in purifying the blood by removing toxins from body. And also helps in stimulating digestive fire and helps in every type of fever. It function as an antibiotic help in preventing bacterial infection like typhoid. It consisting antibacterial, antispasmodic, anti-allergic properties which help in typhoid. Curcuma consist a chemical compound known as Beta-diketone that is a methane, It has a role as ametabolite, an anti-inflammmatory agent, antineoplastic agent, an antifungal agent, a hapatoprotective agent.



(hindered form of Beta-diketone)

CONCLUSION

Typhoid is a bacterial infection caused by Salmonella Typhi. It can worsen the symptoms if it is left untreated. Using herbal remedies from Planet Ayurveda help in treating Typhoid effectively without ant side effect. Most of the mentioned herbal plant is used for Typhoid have significant result in anti-microbial activity as well as clinical efficacy & also justify the concept of Ayurveda. Hence we can say that Typhoid can be treated from giving herbal drugs which is already used by traditional vaidhya & Tribes in India. Informants know which part of the plants should be taken and at which time. In preparation and administration of dosages other ingredients may be added. Loss of medicinal plants and the associated knowledge will hamper the existing health care system in the area. Therefore, in order to use traditional medicine as a valuable alternative to conventional Western medicine, further investigation must be undertaken to determine the validity, efficacy, and dosage of the plants to make it available as an alternative medicine. Though further documentation, research, experiment and all required at large level to give validity of Herbal Medicine.

It is recommended that research institutes and university researchers should carry out research on these species so as to conserve and improve their genetic constitutions. Also,

attempts must be made to encourage the documentation of plants so they are readily accessible to a larger number of the populace.

REFERENCE

1. Martin, G.J. 1995. Ethnobotany. A methods manual. Chapman & Hall, London.
2. Okoegwale, E.E. & J.U. Omefezi. 2001. Some herbal preparations among the people of Isoko clan of Delta state, Nigeria. Nigerian Journal of Applied Sciences, 4: 2350–2371.
3. WHO (World Health Organization). 2002. WHO Traditional Medicines Strategy 2002–2005. World Health Organization, Geneva, Switzerland. http://whqlibdoc.who.int/hq/2002/WHO_EDM_TRM_2002.1.pdf.
4. Dwiyanti, R., Hatta, M., Natzir, R., Pratiwi, S., Sabir, M., Yasir, Y. Noviyanthi, R.A., Junita, A.R., Tandirogang, N., Amir, M., Fias, M., Saning, J., Bahar, B. (2017). Association of Typhoid Fever Severity with Polymorphisms NOD2, VDR and NRAMP1 Genes in Endemic Area, Indonesia. J. Med. Sci, 17(3): 133-139.
5. Hatta, M., & Ratnawati. (2008). Enteric fever in endemic areas of Indonesia: an increasing problem of resistance. The Journal of Infection in Developing Countries, 2(04).
6. Tambaip, T., Karo, M. B., Hatta, M., Dwiyanti, R., Natzir, R., Massi, M. N., ... & Djawad, K. (2018). Immunomodulatory Effect of Orally Red Fruit (Pandanus conoideus) Extract on the Expression of CC Chemokine Receptor 5 mRNA in HIV Patients with Antiretroviral Therapy. Research Journal of Immunology, 11(1).
7. Muthiadin, C., Aziz, I. R., Hatta, M., Nasrum, M., Hartina, Supardan, D., … & Dasopang, E. S. (2018). Immunoreactivity of 36 kDa Outer Membrane Proteins (OMP) Salmonella enterica serovar Typhi as Candidate Immunodiagnostic for Typhoid Fever. International Journal of Pharmaceutical Research, 10(3).
8. Syamsuri, F., Hatta, M., Natzir, R., Alam, G., Massi, M. N., Bahar, B., & Rahardjo, S. P. (2018). Expression of TLR-4 in Salmonella typhi-Induced Balb/c Mice Treated by Miana Leaves (Coleus scutellaroides (L) Benth). Indian Journal of Public Health Research & Development, 9(12): 1449-1454.
9. Rosyidi, R. M., Priyanto, B., Islam, A. A., Hatta, M., & Bukhari, A. (2019). The Effect of Snakehead Fish (Channa striata) Extract Capsule to the Albumin Serum Level of Post-operative Neurosurgery Patients. Biomedical & Pharmacology Journal, 12(2): 893.

10. Dougnon, T. V., Déguénon, E., Fah, L., Lègba, B., Hounmanou, Y. M. G., Agbankpè, J., ... & Assogba, P. (2017). Traditional treatment of human and animal salmonelloses in Southern Benin: Knowledge of farmers.
11. Debalke, D., Birhan, M., Kinubeh, A., & Yayeh, M. (2018). Assessments of Antibacterial Effects of Aqueous-Ethanolic Extracts of Sida rhombifolia's Aerial Part. The Scientific World Journal, 2018.
12. Koffuor, G. A., Abruquah, A. A., Audu, R., Amoah, J., & Agwah, D. (2016). Patronage and perceived efficacy of herbal antityphoid preparations, and anti-Salmonella activity of a herbal preparation used in Ghana. J. Appl. Pharm. Sci, 6(3): 1-7.
13. Etuk, E. U., & Francis, U. U. (2003). Acute toxicity and efficacy of Psidium guajava leaves water extract on Salmonella typhi infected Wistar rats. Pakistan Journal of Biological Sciences, 6(3): 195-197.
14. Zige, D. V., & Ohimain, E. I. (2017). Efficacy of Cymbopogon citratus and Carica papaya Used in the Traditional Treatment of Enteric Fever against Salmonella in Bayelsa State, Nigeria. EC Microbiology, 6: 80-88.
15. Dzotam, J. K., Touani, F. K., & Kuete, V. (2015). Antibacterial and antibiotic-modifying activities of three food plants (Xanthosoma mafaffa Lam., Moringa oleifera (L.) Schott and Passiflora edulis Sims) against multidrug-resistant (MDR) Gram-negative.
16. Raji MA, Mamman PH, Aluwong T. Emerging strains and multidrugs resistant Salmonella species in humans and animals and the use of medicinal plants in Nigeria. Global Research Journal of Microbiology, 2011; 1(1): 1- 4.
17. Mangambu M, Mushagalusa K, Kadima N. Contribution à l'étude phytochimique de quelques plantes médicinales antidiabétiques de la ville de Bukavu et ses environs (Sud-Kivu, R.D.Congo). Journal of Applied Biosciences, 2014; 75: 6211-6220.
18. Fah L, Klotoé JR, Dougnon V, Koudokpon H, Fanou VBA, Dandjesso C et al. Étude ethnobotanique des plantes utilisées dans le traitement du diabète chez les femmes enceintes à Cotonou et Abomey-Calavi (Bénin). Journal of Animal & Plant Sciences, 2013; 2647-2658.
19. Tardio J, Pardo-De-Santayana M. Cultural Importance Indice: A Comparative Analysis Based on the Useful Wild Plants of Southern Cantabria (Northern Spain). Economic Botany, 2008; 62: 24-39.
20. Fah L, Klotoé JR, Dougnon V, Koudokpon H, Fanou VBA, Dandjesso C et al. Étude ethnobotanique des plantes utilisées dans le traitement du diabète chez les femmes

enceintes à Cotonou et Abomey-Calavi (Bénin). Journal of Animal & Plant Sciences, 2013; 2647-2658.

21. Igue AM, Saidou A, Adjanohoun A, Ezui G, Attiogbe P, Kpagbin G et al. Evaluation de la fertilité des sols au sud et centre du Bénin. Bulletin de la Recherche Agronomique du Bénin, 2013; 1840-7099.