Attitude and Practice on Herbal Usage for Prevention and Management of COVID-19 among Diabetic Patients at Tertiary Hospital in Sri Lanka

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ABSTRACT

Background: Herbal medicine usage is common amongst people in the COVID-19 pandemic. Sri Lanka has a rich history of using herbs to treat various diseases, which is embedded in an Indigenous system of medicine. The existence of diabetes as a risk factor for COVID-19 creates a greater tendency among diabetic patients to use herbal usage. Aim: The study aims to describe the attitudes and practice of herbal usage and associated factors on herbal usage among patients with diabetes at a tertiary hospital in Sri Lanka. Materials and Methods: It is a hospital-based cross-sectional descriptive study. Four hundred and twenty-seven patients with diabetes were included in this study. Data were collected using an interviewer-administered questionnaire and data extraction form and analyzed using SPSS version 23. The chi-square test was used to assess the association between herbal usage and factors at the 95% confidence interval and a p-value less than 0.05 was considered a significant association. Results: Out of 427 patients, 72.1% used herbals to prevent and manage COVID-19. Coriander and ginger were the most commonly used herbals. Only 27.3% of patients revealed their herbal usage to the doctor. Socio-demographic factors such as Education level (0.000) had a significant association with herbal usage. Additionally, the disease-related factors such as duration of disease (0.041) and complication of diabetes (0.039) had a significant association with herbal usage. Conclusion: Most of the patients have a positive attitude towards herbal usage. Healthcare professionals should be aware of the patient's herbal usage, especially among diabetic patients with low level of education, having diabetic complications and having diabetes for a long period when treating them.

Keywords: Herbal usage, Attitude, Practice, Diabetes, Patients, COVID 19, Sri Lanka.

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Received: 13-08-2024; **Revised:** 19-08-2024; **Accepted:** 17-09-2024.

INTRODUCTION

The Novel Coronavirus Disease 2019 (COVID-19), which is also recognized as SARS-CoV-2, is a communicable disease caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) virus¹ that belongs to the Coronaviridae family. They are enclosed and are RNA viruses with a single strand.² Coronaviruses produce primarily respiratory tract infections.³

In Sri Lanka, the first confirmed locally acquired case of COVID-19 was reported on 11th March 2020.⁴ COVID-19 symptoms involve fever, sore throat, shortness of breath, coughing and fatigue and it may be mild and moderate disease (81% of cases) or severe (14% of cases). In 5%, life-threatening illness has happened

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DOI: 10.5530/ijopp.20250091

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with respiratory failure, multiple organ dysfunction or failure and septic shock.⁵ Risk factors of COVID-19 infection comprise co-morbidity like diabetes and age, where the elderly are at an increased risk of infection.^{6,7}

Diabetes mellitus is one of the foremost causes of mortality and morbidity worldwide. It has many severe complications that are strongly associated with its severity. Natural herbal treatments have a long history compared to conventional medicine in Sri Lanka for treating and managing diabetes mellitus.⁸ Unregulated immune response, changed expression of ACE2 enzyme and dysfunction of the endothelial system in diabetic patients make them more vulnerable to COVID-19 infection.⁷

People have also used herbal medicines to treat diabetic-related complications for many years. Many studies advocate that herbal medicines can be used as an adjuvant to prescribed medications to treat COVID-19 in diabetic patients and can also be used as a source to find newer therapeutic targets for COVID-19. However,

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