

Euro Pharmacognosy 2019: Some of Egyptian medicinal plants and heart, blood disease- Mohammed Sayed Aly Mohammed- National Research Center

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Short Communication

Abstract

Many medicinal plants have significant effect upon the diseases, such as diabetes, skin, liver cancer, heart, respiratory, blood and nervous system. Medicinal plants in Egypt contain high concentration of secondary metabolites, according to the suitable environmental conditions. The ancient Egyptian had written a lot of information about medicinal plants and their uses and many drugs of these medicinal plants are still used in medicine. Many of medicinal plants were cleared on wall of temples and in the papyri, famous Ebers papyrus that written in 1550 B.C. Cardiovascular diseases (CVD) can be defined according to the World Health Organization (WHO) as a defect of the circulatory system including heart and blood vessels. There are many types of CVD such as coronary heart disease (CHD), cerebro vascular disease, heart attacks and strokes. Deposition of fatty substances, cellular waste, cholesterol and other substances on the inner walls of blood vessels is the major cause for CVD ,World Health Organization (2014) . The aim of the present study is to clarification of some Egyptian medicinal plants upon heart, blood disease such as *Tropaeolum majus* L. *Urignea maritima* (L.), *Salvia* Species, *Allium cepa* and *Allium sativum*. The location, chemical components, active ingredients and position of effect of previous plants.

Introduction

Herbal medicine, also known as phyto-remedies has always been involved in assuaging human suffering since time immemorial and its use is still burgeoning worldwide. This surge in interest relates to the inability of modern medicine to successfully address the chronicity of many modern illnesses. Indeed, the scientific community can no longer ignore the worldwide exponential surge in public enthusiasm for disease management through the use of herbal products as more than half of FDA-approved drugs are natural products or derivatives. Panoply of reports have established the fact that patients with chronic diseases such as insomnia, chronic fatigue and CVD tend to use herbal therapies to manage their ailments (Williamson,2003) Herbal medicine contain a multiplicity of biologically active natural products from which various drug leads that have/are being derived for the development of commercial drug preparations. For example, ephedrine from *Ephedra sinica* (mahuang), digitoxin from *Digitalis purpurea* (foxglove), salicin (the source of aspirin) from *Salix alba* (willow bark), and reserpine from *Rauwolfia serpentina* (snakeroot) amongst others. Likewise, a number of herbal products have been employed worldwide for the management of CVD and this culture has been passed on to the modern generation.

However, it is estimated that 70 % of individuals who use herbal medications do not report such practice to their prescribers and pharmacists. For instance, whenever cases of side effects have been reported, allergic reactions and toxic effects of the concomitant intake of herbal products with drugs have been observed. Additionally, it was found that the acquaintance of health professionals to such events was poor. The lacuna of such knowledge exposes a large percentage of individuals to the possible adverse effects from herb-drug interactions and other potential side effects [Williamson, 2003].

Unless practitioners and health authorities develop appropriate approach including pharmacovigilance tools to obtain the complete medication history, including the concomitant use of herbs; monitoring and recognizing drugherb interactions will still remain a major barrier in patient's care [Lucas, 2006]. Physicians-patients communication should be enhanced and the former must be ready to investigate about patient's use of herbs in a non-judgmental approach, which otherwise will only prompt patients hide valuable information. Indeed, patients should be treated as a partner and the use of herbs must not be made unconventional [Cohen and Ernst, 2010].

Cardiovascular diseases (CVDs) remain the most prevalent cause of human morbidity and mortality all over the world (Nichols, et al. 2014). According to the survey by Global Burden of Disease Study, 29.6% of all deaths worldwide were

caused by CVDs in 2010 (Lozano, et al.) It is estimated that the number of people that die from CVDs, mainly from heart disease and stroke, will increase to more than 24 million by 2030 [Fuster,2014]. Despite progress in molecular medicine and biology and translational scientific efforts on improvement of diagnostic and therapeutic strategies over the past 20 years, CVDs continue to be a major global health problem.

The use of herbal medicines, one of the main therapeutic approaches of complementary and alternative medicine (CAM), can be tracked back thousands of years ago in the East [Liu, et al., 2013]. Currently, there is a recent resurgence of the use of herbal medicines in popularity among patients in the West and they were consumed by more than 15 million people in the US [Eisenberg,et al., 1998]. With increasing enhancement of people's awareness of self-care and concerning on the inevitable adverse effects of conventional medicine, herbal medicines are favored by people with CVDs all over the world for their unique advantages in preventing and curing diseases, rehabilitation, and health care (Tachjian, et al., 2010). There is growing evidence showing that many herbal medicines and their active ingredients contribute to the standard therapy for CVDs, for example, aspirin, digitalis, and reserpine.

Conclusion:

Traditional medicine is known as indigenous or folk medicine, comprises knowledge systems that developed over generations within various societies before the era of modern medicine. The World Health Organization (WHO) defines traditional medicine as "the sum total of the knowledge, skills, and practices based on the theories, beliefs, and experiences indigenous to different cultures, whether explicable or not, used in the maintenance of health as well as in the prevention, diagnosis, improvement or treatment of physical and mental illness. At the turn of the 20th century, folk medicine was viewed as a practice used by poverty-stricken communities and quacks.. The prevalence of folk medicine in certain areas of the world varies according to cultural norms. Some modern medicine is based on plant phytochemicals that had been used in folk medicine. The positive isotropic effect results mostly likely from blocking $\text{Na}^+ / \text{K}^+ - \text{ATPase}$ by glycoside constituent of the extract. The diuretic and natriuretic effects of the plant extract look like effects of potassium sparing diuretics. The hypertensive effect could be attributed to its diuretic property. The mechanism of bradycardia might be due to increased vagal tone, a reflex mechanism through baroreceptors.

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