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Review Article

IMPORTANCE OF ROLE OF PHARMACIST MEDIATED ADHERENCE IN HYPERTENSIVE PATIENTS A BRIEF OVERVIEW

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ABSTRACT

Hypertension is an important risk factor for cardiovascular disease, the incidence of which it is possible to reduce by prophylactic treatment with antihypertensive drugs. Adherence to long-term therapies for chronic diseases in developed countries averages only 50%. In developing countries the rate is even lower, probably reflecting inequalities of access to appropriate health care facilities, supervised by qualified health care professionals. In clinical practice, however, only a minority of patients reach target blood pressure levels. The resulting gap between actual and potential health gains has been attributed to the fact that many patients do not take prescribed treatment as recommended. Pharmacists can play important roles in helping their patients with high blood pressure manage their condition. Serving as a partner and coach, pharmacists can provide medication therapy management services, educate patients about Hypertension. Further Pharmacists, physicians and other healthcare professionals should regard patients as partners in all decisions on treatments involving medication.

Keywords: Adherence, Hypertension, Antihypertensives, Nonadherence, Compliance.

INTRODUCTION

Hypertension is an important risk factor for cardiovascular morbidity and mortality[1]. The large numbers of clinical trials have demonstrated the benefits of blood pressure control with drugs to reduce cardiovascular morbidity and mortality[2]. Despite the availability of effective antihypertensive, it is estimated that in the developedcountries only 25-30% of the patients have their blood pressure controlled adequately[3]. A part of this uncontrolled blood pressure is caused by true treatment resistant hypertension as a result of genetic differences[4].

Adherence to treatment is another important cause of this uncontrolled blood pressure[5]. In one study demonstrated that non-adherence substantially contributed to uncontrolled blood pressure.[6] The problem of poor adherence is of major concern to all stakeholders in the health care system. This is because the risk of poor adherence increases with the duration and complexity of treatment regimens and both long duration and complex treatment are inherent to chronic illnesses. Adherence is the single most important modifiable factor that compromises treatment outcome. The best

treatment can be rendered ineffective by poor adherence. The perspective is that an understanding of basic behavioural principles and models of behavioural change is relevant to adherence to treatment for all chronic medical conditions, and more helpful than a disease-specific approach to the issue. The effectiveness of adherence interventions based on behavioural principles has been demonstrated in many therapeutic areas. like include hypertension[7].

Supporting to the hypertensive Patients

There is a tendency to focus on patient-related factors as the causes of problems with adherence, to the relative neglect of provider and health system-related determinants. These factors make up the health care environment in which patients receive care and have a considerable effect on adherence. Patients may also become frustrated if their preferences in treatment-related decisions are not elicited and taken into account. The patients who felt less empowered in relation to treatment decisions had more negative attitudes towards prescribed therapy and reported lower rates of adherence [8] Nonadherence to medication for chronic diseases leads to worse therapeutic outcomes, higher hospitalization rates, and increased health care costs.[9].

The first line of treatment of hypertension consists in applying life-style measures where these are relevant, by reducing weight, excessive alcohol consumption and salt intake, by stopping smoking and by increasing physical activity[10] In one study patients with hypertension, however, end up getting prescribed drug therapy for their condition – in the Framingham study, the lifetime risk of receiving antihypertensive drugs for all members of the population was 60%[11].

The fact, even though so many people are prescribed drugs for their hypertension, few achieve control of their blood pressure. In previous analysis of the questionnaire material used in this Work found that only 14% of medicating hypertensive patients had reached blood pressure levels 140/90 mmHg [12], and in a much larger sample of Europeans taking antihypertensive, only 8% attained the same goal [13].

Uncertainty Errors in measuring the Blood pressure:

The errors in measurement the blood pressure (BP) another source of uncertainty. This may be related to bad technique, hearing problems or digit preference on part of the measuring person, if it is done manually, or faulty equipment and environmental noise [14, 15] further uncertainty stems from the fact that the blood pressure is subjected to physiological variation, seasonal, circadian and situation-dependent. In order to obtain a representative value it may therefore be necessary to measure it repeatedly[16]. Taking the blood pressure readings may not help, however, as fluctuations tend to be systematically higher when people go to see their Health care professionals(including the pharmacists), a phenomenon known as the "white coat effect". "White-coat hypertension" is defined as having persistently elevated values in the clinic, in combination with otherwise normal daytime blood pressures. Patients often perceive stress as a major cause of chronic as well as temporarily high blood pressure levels. [17, 18]

Adherence to hypertension treatment

Hypertension has no cure therefore; patients are expected to take medications for life. Drug treatment of hypertension demands that patients comply with their medications as prescribed and they should return for a refill when medications are exhausted. They should honour their appointments for follow up visits with their clinician and adopt health actions that are recommended to lower their blood pressure [19, 20, 21]. Compliance with pharmacological and non-pharmacological treatment of hypertension has various benefits for the individual, the health care system and the society at large.

Compliance with treatment at the individual level improves the quality of life by preventing complications and thereby premature death. To the immediate family, it prevents the negative psychological impact associated with sudden death or living with a family member suffering from a chronic debilitating disease such as a stroke. It also conserves family resources that would have been utilised to obtain health care. To the larger society, compliance with drug treatment is a cost saving measure since it decreases the incidence of complications and the need for additional medications. This is particularly crucial in a public financed health care system such as Seychelles. The economic fortunes of the country, which in 2003 necessitated the introduction of the Macro Economic Reform Programme signals the compelling need to maximise treatment outcomes by utilizing resources effectively and efficiently. To the health care system,

compliance reduces the need for hospitalizations and decreased workload on staff. Moreover, satisfactory outcomes of treatment could help boost the morale of the attending clinician whereas treatment failure could be a source of frustration[22]. Non-Adherence with prescribed medications or adopting lifestyle modifications is associated with uncontrolled hypertension and the risks of developing complications [23, 24]. The increased longevity, both the incidence and the complications of the disease are simultaneously increasing thus spelling the urgent need to orchestrate increased population sensitisation to compliance with prescribed medication and lifestyle modification regimens consistent with lowering blood pressure. Such population-based measures would help prevent avoidable complications and improve the quality of life of hypertensive patients [25, 26].

A review of 15 studies of hypertensive patients was conducted to determine adherence and BP control as a result of pharmacist interventions.[27] The interventions were medication management (regimen simplification, resolving adverse drug reactions, and monitoring or adjusting drug therapy); patient education (on hypertension and lifestyle modification or BP self-monitoring); BP self-monitoring and documentation, including education, encouragement, and validation; medication reminders (adherence aids or telephone- or computer-based appointment reminders); improved administration system (MEMS or blister packs); increased follow-up appointments or contacts; HCP (e.g., physician or nurse practitioner) educational interventions; and visits with a clinical pharmacist. Significant improvements in clinical outcomes (systolic, diastolic, or controlled BP) occurred in 88% of studies; however, only 44% had significant increases in adherence. The difference in improved adherence and improved clinical outcomes was proposed to be due to medication adjustments made by pharmacists; if a regimen was improved, BP could be improved without a change in adherence.[27]

Role of Pharmacists in management of hypertension

The adherence, or compliance, studies about the hypertension are frequently focused on only the Pharmacological interventions. In some studies, the diet has also been interrogated[27]. Medication dispensing is the best-known function of the pharmacist, pharmacists—through counselling, medication therapy management (MTM), disease-state management, and other means—can play a pivotal role in patient care. There are opportunities in every type of pharmacy practice to improve patients' adherence and therapeutic outcomes, and pharmacists must embrace and act on them.

Pharmacists play an important role for helping to hypertensive patients in many ways

- Educating the hypertensive patients over old age people on the importance identifying and managing of hypertension Identifying at-risk individuals with pre-hypertension and talking with them about lifestyle modifications to lower BP.
- Recommending appropriate drug therapies to Health care professionals and ensuring patients with right dose.
- Educating patients on why multiple medications may be needed, how they work together and why adherence to their therapies is so important; and, providing self monitoring equipment to patients with hypertension and teaching them how to use them properly.
- Giving the information to hypertensive patients that each drug lowers blood pressure in a unique and individual manner to help achieve their blood pressure goals.
- Offering patient's compliance aids like patient information leaflets etc, to assist them in adhering to their therapy.
- Talking with patients about refilling about antihypertensive drugs in pharmacy.
- Advising patients to carry a personal medication record (PMR) and develop a relationship with their pharmacist to help with medication therapy adherence.
- Working closely with patients and their physicians when patients require medication therapy changes.
- Reminding patients to take their medication

everyday as prescribed.

- Cautioning patients to see how they react to therapy before they drive, use machinery or engage in other tasks requiring alertness.
- Talk to their physician if they experience any difficulty breathing, or if any congestive heart failure symptoms get worse[28].

CONCLUSION

Patient education and adherence particularly in hypertensive patients as it is an important responsibility of health care team members, especially the pharmacists. The education of chronic disease patients should include both pharmacological and non-pharmacological approach. In this regard, hypertension, as a chronic disease, deserves a special consideration because the nonadherence rates are very high. The causes of nonadherence may differ according to the category of adherence. Therefore, each category of adherence should be evaluated individually to increase the adherence rates in hypertensive patients.

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