

Role of Family Physician on Life Style Modifications for Improvement of Hypertension

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Abstract: Objective: To improve the health outcomes in hypertensives through lifestyle interventions.

Study design: Non- systematic review.

Rationale: In this study we tried to provide to review the effects of healthy lifestyle modifications on lessening blood pressure to provide family physicians with evidence based clues in their practice.

Methods and analysis: Electronic searches was performed in the Medline Library, PubMed, etc., along with manual searches in the relevant papers. that emphasize the role of the lifestyle changes to lower the high blood pressure, either through the pharmacotherapy or the healthy lifestyle modifications.

Conclusion: Blood pressure control and prevention of hypertension can be achieved by both pharmacotherapy and healthy lifestyle modifications. Lifestyle changes should be a premium approach to control hypertension through dietary interventions (reducing salt, increasing potassium, alcohol avoidance, and multifactorial diet control), weight reduction, smoking cessation, physical exercise, and stress management. Family physicians have major role in this aspect.

Keywords: Hypertension, family physician, lifestyle interventions and preventive measures.

1. INTRODUCTION

Hypertension is considered of the most important public health challenges world wide due to the associated morbidity being one of the most significant risk factors for cardiovascular morbidity and mortality resulting from target-organ damage to the blood vessels in the heart, brain, kidney, and eyes, mortality as it causes 7.1 million premature deaths per year worldwide accounting for 13% of all deaths, globally, besides the economic burden it costs [1].

The contributing factors of occurrence of hypertension include aging and adverse changes in risk factors such as tobacco use, low physical activity, and unhealthy diet, especially high salt consumption.[2], they an be classified into modifiable and non-modifiable factors, where age, gender, ethnicity and heredity are notable non-modifiable risk factors and smoking, physical inactivity, obesity and diet high in saturated fats are considered modifiable risk factors.[3]

In spite the safety and effectiveness of the pharmacotherapy in controlling hypertension, yet. lifestyle modifications, have major role in preventing hypertension and lowering blood pressure levels [4].

Hypertensive patients should stick to the lifestyle measures capable of reducing blood pressure include: (i) salt restriction, (ii) moderation of alcohol consumption, (iii) high consumption of vegetables and fruits and low-fat and other types of diet, (iv) weight reduction and maintenance, (v) regular physical exercise and (vi) cessation of smoking [5]. Family physicians have important role in motivating patients to implement lifestyle changes for managing hypertension [1].

The study objective was to review the effect of lifestyle modifications on controlling hypertension.

Research question

What are the contributing factors of occurrence of hypertension?

What are the preventable lifestyle interventions for controlling hypertension?

Objective

The objective of the study is to improve the health outcomes in hypertensives through lifestyle interventions.

2. MATERIALS AND METHODS

2.1 Research method and design

This is a non- systematic review which displays the reviews and other studies done about the lifestyle interventions and preventive measures by family physicians to control hypertension.

2.2 Data-collection methods:

For reviewing this topic, firstly, researches that displayed the definition of hypertension, its contributing factors, the associated co-morbidities and its impact on the patients. The existing research that has been done on this issue were re-analyzed. The rationale for doing a literature review was that one will gain insight by examining the best studies done by other researchers, by looking at the range of answers, by examining if and why those answers vary, and by attempting to summarize them.

We tried to give an accurate picture of the role of the lifestyle interventions and preventive measures by family physicians to control hypertension, previous researches done to investigate this issue, identify a set of hypotheses that may possibly shed light on how to improve the health outcomes of hypertensive patients and to produce an unbiased and reliable summary of existing evidence. To find studies that cover the same topic of our review without any bias in the selection of studies is the first and most important step.

The search included meta-analyses, randomized controlled trials, clinical trials, guidelines, and reviews.

3. DISCUSSION

Lifestyle modifications are recommended for all patients with hypertension as healthy diet, weight control, and regular exercise. Besides, weight loss, smoking cessation, biofeedback, self-measured blood pressure monitoring and use of dietary supplements (e.g., garlic, omega-3 fatty acids and magnesium).[6]

Many systematic reviews overviewed the effect of lifestyle modification on lessening blood pressure. Physical activity and dietary intervention are considered the most effective and physiologically desirable approaches.[7]

The aim of this non- systematic review is to gather the available evidence of effectiveness of multiple lifestyle interventions in the control of hypertension and to increase the awareness of the family physicians on the clinical applicability of the role of the healthy lifestyle changes and increase the awareness of the hypertensive patients about the importance of the lifestyle intervention; encourage and motivate patients with hypertension to adopt and maintain multiple lifestyle changes in their daily home life so as to improve hypertension outcomes.

This non-systematic review provides an evidence of the effects of multiple lifestyle changes on blood pressure and also provides the family physicians with useful information to guide their patient care.

Strengths of the Study:

The results of this study can provide the family physicians with useful clinical information to guide them in their patient care and increase their awareness of the lifestyle modifications, as well as motivate patients with hypertension to adopt and maintain healthy lifestyle changes.

Study limitations

The limitation of this study is that it was difficult to gather all the recommended multiple lifestyle modifications for patients with hypertension.

4. CONCLUSION

Hypertension is considered a global challenge. Appropriate lifestyle changes are the cornerstone for management of hypertension; yet they should never delay the initiation of pharmacotherapy in high risk patients. Lifestyle changes include dietary interventions (reducing salt, increasing potassium, alcohol avoidance, and multifactorial diet control), weight reduction, tobacco cessation, physical exercise, and stress management. Family physicians have major role in this aspect, therefore, they should provide relevant information on the value of life style modification in the control of hypertension.

5. RECOMMENDATIONS

1. Patient awareness of the role of lifestyle modifications in control of hypertension have an important influence on patient adherence to treatment and clinical outcome,
2. Development of national campaigns to increase the public awareness and should alert the family physician to start prevention programs and improve family physician's education and training for control of hypertension.
3. Providing educational sessions about importance of the role of lifestyle modifications in control of hypertension in the family medicine by members of the primary health-care setting and hence conducting programs in the national level will be feasible.
4. Implementing short-term training programs makes it possible for the family physicians to attend all sessions.
5. Provide a scientific rationale for implementing multicomponent intervention programs designed to define the role of lifestyle modifications in control of hypertension in the primary health-care setting.
6. Further studies are needed to accurately define the role of lifestyle changes as a potential modifier for controlling hypertension.
7. Future studies should comprehensively examine the role of unhealthy lifestyles in uncontrolled hypertension and as a potential effect modifier of physician adherence to protocols.

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