



## REVIEW ARTICLE

## The Increasing Burden of Hypertension in Cameroon: Considerations for Prevention and Non-Pharmacological Interventions

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### Abstract

Hypertension is an emerging health concern in Cameroon that is expected to cause a heavy health burden in the future. Prevention and management with non-pharmacological interventions are feasible and effective. This article highlights the benefits, and challenges of implementing non-pharmacological interventions in Cameroon and proposes strategies to improve the situation.

### Commentary

Globally, millions of people suffer from hypertension. In Cameroon, hypertension is a significant public health concern, with the prevalence ranging from 19.8% in rural areas to 47.5% in an urban milieu with a national average of 31.0% [1]. Hypertension accounts for 41.3-54.49% of heart diseases [2,3]. Strikingly an estimated 76% of hypertensives are unaware of their hypertension status [4]. Management of hypertension remains complex and costly. Non-pharmacological interventions, such as lifestyle changes and dietary modifications, are effective in reducing hypertension and preventing its complications [1]. However, these interventions are underutilized in Cameroon. This correspondence aims to highlight the importance and the use of non-pharmacological interventions to improve the health of the population.

### Benefits of Non-Pharmacological Interventions

Non-pharmacological interventions include changes in lifestyle such as weight loss, regular physical activity, smoking cessation, improving sleep patterns, stress management, and other aspects of daily living [5]. Effective lifestyle changes can lower blood pressure at least as much as a single antihypertensive drug. A 2 mmHg drop in diastolic blood pressure achieved with lifestyle changes can reduce hypertension prevalence by 17%, coronary heart disease risk by 6%, and stroke risk by 15% [5]. Furthermore, lifestyle interventions are often used as the first line of management when treating hypertension, and they are effective when combined with medication [5]. Effective lifestyle modifications have been demonstrated to be beneficial across all stages of hypertension including pre-hypertension or uncomplicated stage-1 hypertension to very high-risk patients [5]. In addition to reducing the need for drug therapy, these interventions can increase the effectiveness of antihypertensive medications, reduce the need for multiple medications, and decrease overall cardiovascular risk [5,6].

### Major issues limiting effective non-pharmacological interventions for hypertension in Cameroon

The factors limiting the effective uptake and

implementation of non-pharmacological interventions in Cameroon are diverse and interrelated.

**Orientation of clinicians in practice:** Most Cameroonian practicing clinicians tend to prioritize medications over lifestyle modifications; hence less attention and effort are made towards evaluating and supporting hypertensives to a healthier lifestyle. Attempts are often made to improve borderline or pre-hypertensives but once on medications, lifestyle modification is either halted or ignored. This may be associated with the lack of clinical practice guidelines on hypertension and the lack of knowledge on the importance and effectiveness of lifestyle management to clinicians.

**Poor and vague clinical advice:** The majority of clinicians say, "consume a low-calorie diet rich in fruit and vegetables and reduced total and saturated fat". What this means to a client and his ability to implement is hardly evaluated and supported. Personalizing lifestyle advice is key to effective person-centered care.

**Poor collaboration and referrals:** Healthcare attention for hypertensives is often seen as the sole responsibility of the physician for medical prescription. This orientation and mindset have hindered effective collaboration and referrals as physicians often do not see the need to enhance management with an appropriate collaboration based on driving risk factors. For instance, diet, exercise, and or physical activity and stress management can be improved by a dietitian, physiotherapist, and counselor or psychologist, respectively. These professionals have more skills and competence compared to a physician in these areas.

**Low to little and poor clinical research:** There is a significant lack of contextual relevant research on the effects of lifestyle modification for hypertensives emanating from Cameroon. This lack of data contributes to the poor drive of lifestyle education and modification in context. For instance, dietary approaches to stop hypertension (DASH) and the Mediterranean diet have long been advocated for NCDs management but contextually relevant dietary patterns have never been identified to assist hypertensives to make better choices [7].

**Lack of clinical practice guidelines:** There are no existing national guidelines for the management of hypertension in Cameroon. This contributes greatly to the lack of consistency and heterogeneity in practice with no relevant contextual reference document [6].

**Relevant structures and institutions:** The absence of an institution or structure with established outputs at the national level with a primary aim on prevention and rehabilitation of people with cardiovascular and NCDs related concerns. Potentially, this lack of resources will lead to poor and inconsistent sensitization and interventions that will be useful on a national scale.

**Lack of relevant training for clinicians:** There is a great need for effective relevant training around understanding individual risk factors and behavioral change strategies. This will strengthen clinicians' abilities to effectively implement and support individuals with hypertension and NCDs in general. This can be organized as workshops and seminars for professional continuous development at the hospital/institutional level, regional and national levels.

## Way forward

To increase the use of non-pharmacological interventions for hypertension in Cameroon, it is important to raise awareness of the condition and its risk factors among both patients and clinicians. This can be done through public health campaigns, health education programs, the development and implementation of clinical practice guidelines on hypertension, and community outreach programs [8]. Healthcare professionals including rehabilitation professionals should be educated on the importance of non-pharmacological interventions for hypertension and trained on how to implement them in their practice. As a rule, diet and behavioral modification are most effective when clear written and verbal explanations are given to patients, or their caregivers and they are encouraged to ask questions. Such interactions help to identify possible problems and provide monitoring and follow-up to increase compliance. A referral to a dietician, nutritionist, or nurse with experience would be beneficial [9].

In addition, community-based programs should be implemented by the ministry of public health to support individuals with hypertension in making lifestyle and dietary changes. These programs can include weight loss support groups, physical activity programs, and smoking cessation programs. They can also include educational sessions on stress management and the importance of a healthy diet supported by a multidisciplinary team of clinicians [8].

Furthermore, policy changes are needed to address hypertension in Cameroon. For instance, policies that promote healthy eating and physical activity, such as the promotion of fruit and vegetable consumption and the creation of bike lanes and walking paths, can be implemented. Policies that limit the amount of salt in processed foods can also be put in place. Such policies can help create a supportive environment that makes it easier for people to make healthier choices [10].

## Conclusion

Among the advantages, non-pharmacological interventions offer a substantial reduction in drug costs, a beneficial effect on other conditions, such as diabetes and hypercholesterolemia, and the avoidance or delay of potentially harmful drug treatments [5,6,9].

Cameroon's underutilization of non-pharmacological interventions warrants increased sensitization and uptake to improve the health of the population. The goal can be achieved by raising awareness of hypertension and its risk factors, educating health professionals, and implementing community-based programs.

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