



## Short Communication

## Medication non-compliance: A challenge in treating hypertension in Nepal

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With the epidemiological transition, the burden of non-communicable diseases especially cardiovascular diseases is increasing in low- and middle-income countries (LMICs) like Nepal [1]. National level studies have reported the prevalence of hypertension between 20% and 32% in Nepal [2–4]. It is one of the most frequently encountered condition either in isolation or as a comorbidity in patients visiting the healthcare facilities. In Nepal, studies have shown that nearly half of the patients are aware of their condition, less than a half of them receive appropriate medications and among these treated patients also, only about half have optimal control of hypertension [4,5].

Noncompliance of medicine results in poorly controlled blood pressure even among the treated patients for hypertension [6]. Nearly 52% patients under treatment were found to have poor compliance with antihypertensive medicine in a study from Nepal [7]. This leads to increased risk of end-organ damage and complications like coronary artery diseases, cerebrovascular accidents, hypertensive retinopathy, nephropathy and peripheral vascular diseases [8]. Several patients suffer from functional decline and premature mortality contributing to increased disability adjusted life years (DALYs) and disease burden. Difficulties are encountered both during initiation as well as continuation of antihypertensive medicines in patients. Several factors like asymptomatic state on presentation (which patients misperceive as non-urgent), lack of awareness of long-term complications, fear of life-long use of medicine when started, use of herbal remedies, etc. may hinder on initiation of drug therapy while other factors like increased cost on regular use, forgetfulness, feeling of wellness after some days of therapy and loss to follow-up can contribute to discontinuation of treatment [9,10]. The socioeconomic impact caused by COVID-19 pandemic [11] has also contributed to treatment noncompliance recently.

The need for proper counseling by healthcare providers on hypertension, its possible complications, management options including antihypertensive medicines and their effectiveness to decrease long term complications cannot be stressed more. Public awareness is a vital

factor. Supportive family members and caregivers can also play an important role. Newer approaches including community-based interventions, use of appropriate technology like mobile phone alerts can be adopted to improve patient compliance [12]. Health insurance policy can be one way of reducing financial burden due to regular long-term medications. This will not only benefit a large number of patients to maintain their health status and quality of life but also decreases the burden from possible complications on their family and society. Timely intervention with a holistic approach should be adopted to combat this issue from stakeholders at all levels.

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**Consent**

Not applicable.

**Declaration of competing interest**

None.

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