


LETTER TO EDITOR



Impact of a standard regimen of *Churu 25, Kobjee 13, and Agar 15* on blood pressure recordings in patients with *Thrak-loong*



Jigme Singye¹ , Ngawang Gyeltshen², Kuenzang Chopel², Kinzang Dechen³

Dear Editor,

High blood pressure is a risk factor for many heart and blood vessel diseases, such as stroke, heart attacks, irregular heartbeats, and poor blood flow in the limbs and a leading cause of premature deaths [1]. Globally 7.6 million premature deaths and 92 million Disability-Adjusted Life Years were attributed to hypertension [2]. Nearly 54% of strokes and 47% of ischemic heart disease worldwide are attributable to hypertension [2, 3]. The number of people with hypertension in Bhutan has increased from 19,170 cases in 2019 to 25,770 cases in 2023 [4]. It is estimated that 35.7% of the population in the country in 2023 had hypertension [4].

Thrak-loong is the *Sowa Rigpa* term used for high blood pressure commonly known as hypertension in allopathic medicine [5]. In the past, Traditional Medicine professionals palpated the pulses of patients to diagnose blood pressure. The diagnosis is based on the clinical judgment of the professionals. However, these days whenever high blood pressure is suspected through a pulse reading, the patients are referred to an allopathic health professional for the confirmation. In Traditional Medicine practice, drugs are manufactured from herbal plants using

herbal formula as recorded in the Subsequent Tantra [5]. *Churu 25, Kobjee 13* and *Agar 15* are routinely prescribed in the treatment of patients with *Thrak-loong*.

Table 1. Baseline social and demographic characteristics of participants with *Thrak-loong* treated with *Churu 25, Kobjee 13* and *Agar 15* in Lhuentse District, Bhutan 2016 – 2017 (n = 66)

Characteristics	BP ≥140/90 mmHg		BP ≥160/100 mmHg		Total	
	n	%	n	%	n	%
Age						
Young adult	8	12.12	6	9.09	14	21.21
Adult	7	10.60	21	31.81	28	42.42
Older adult	7	10.60	17	25.75	24	36.36
Sex						
Male	17	25.75	31	46.96	48	72.72
Female	5	7.57	13	19.69	18	27.27
Occupation						
Civil Servant	4	6.06	2	3.03	6	9.09
Religious Practitioner	7	10.60	12	18.18	19	28.78
Armed Forces	4	6.06	8	12.12	12	18.18
Farmer	5	7.57	16	24.24	21	31.81
Business	1	1.51	2	3.03	3	4.54
Others	1	1.51	4		5	7.57
Marital Status						
Married	16	24.24	40	60.06	56	84.84
Single	6	9.09	4	6.06	10	15.15
History of previously treated with allopathic medicine	8	12.12	15	22.72	23	34.84

Corresponding author ✉ : Jigme Singye, Centre for Bhutan and GNH Studies, Thimphu, Bhutan. Email: jigmedrukyl@yahoo.com

¹Centre for Bhutan and GNH Studies, Thimphu, Bhutan

²Traditional Medicine Unit, Central Regional Referral Hospital, Gelephu, Bhutan

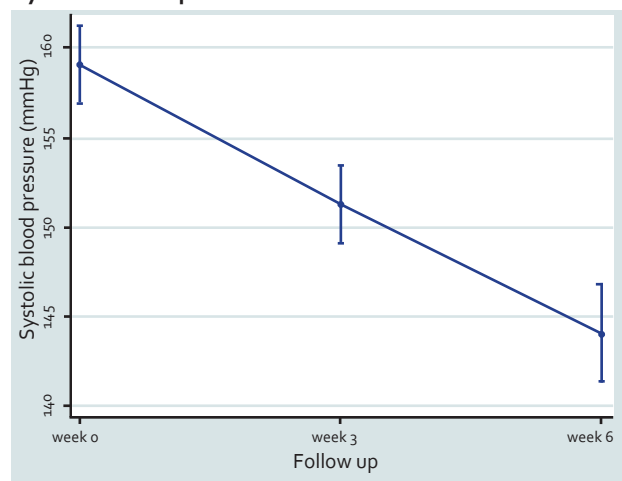
³Department of Paediatrics, Eastern Regional Referral Hospital, Mongar, Bhutan

We report on the effects of a standard regimen of *Churu 25*, *Kobjee 13* and *Agar 15* on blood pressure readings among 66 adults (48 males, mean age 56 ± 17.48 years) in Lhuentse followed up between November 2016 and January 2017. Patients were administered a regimen of *Churu 25* (three tablets in the morning), *Kobjee 13* (three capsules in the afternoon), and *Agar 15* (three tablets in the evening), each containing 500 mg. Sixty-one patients were followed up at Week 3 and 43 patients at Week 6. Blood pressure was measured at each visit by trained health professionals using a sphygmomanometer, with two readings taken five minutes apart [1]. This study was approved by the Research Ethics Board of Health, Ministry of Health, Bhutan. Of the 66 participants, 23 (34.84%) had been treated with conventional medication for high blood pressure a few years earlier but had stopped (Table 1).

One-way repeated measures ANOVA showed decrease in mean systolic and diastolic blood pressure over its time course, $p < 0.0005$ with the Greenhouse-Geisser correction. There was a reduction of 15.0 mmHg (95% CI 18.6 – 11.4 mmHg) in mean systolic blood pressure and 8.4 mmHg (95% CI 10.6 – 6.1 mmHg) in mean diastolic blood pressure, $p < 0.001$ during the follow-up period. (Figure 1).

Churu 25, *Kobjee 13* and *Agar 15* constitutes multiple ingredients. One of the components, *Choerospondias axillaris*, is said to strengthen vital organs like the heart and kidneys, and plays a crucial role in regulating blood pressure by maintaining fluid balance [6]. Another component, *Terminalia bellerica*, helps lowering blood pressure by blocking calcium from entering cells and preventing its release from inside the cells [7].

Systolic blood pressure

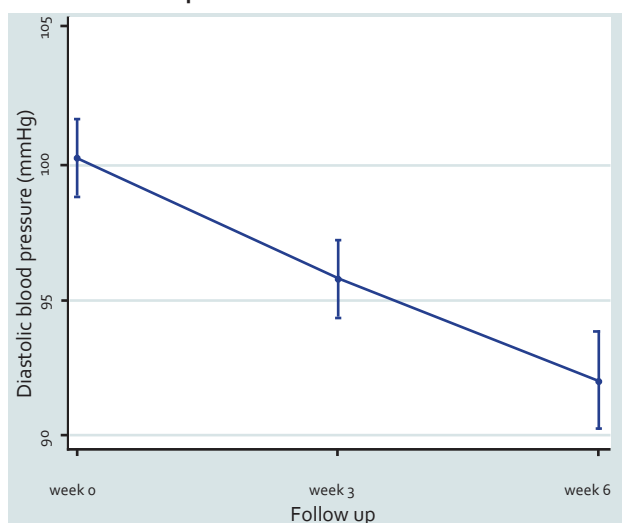


It is important to ascertain the observations presented here and the current findings are not adequate for making clinical recommendations. It is recommended to study the safety and efficacy of these medications through a well-designed randomized controlled trial. This is particularly important in exploring traditional medicines as a solution in combating the global burden of hypertension.

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Diastolic blood pressure



Declarations

Ethics approval and consent to participate.

Ethics approval was obtained from the Research Ethics Board for Health, Ministry of Health (REBH/Approval/2016/077). Administrative approval was obtained from the Policy and Planning Division, Ministry of Health and Lhuentse hospital administrators. Informed written consent was obtained from each participant.

Consent for publication

Not applicable

Competing interests

JS is an editor of this journal and was blinded from all processes of peer review and editorial decision making leading to the acceptance of this article.

Funding

There was no funding for this article.

Availability of data materials

The data set is available from the corresponding author upon request.

Figure 1. Trend of blood pressure recordings in patients with *Thrak-loong* who were prescribed standard regimen of *Churu 25*, *Kobjee 13* and *Agar 15* in Lhuentse District, Bhutan, 2016 – 2017

Author contributions

Conceptualization, data curation, methodology, resources, review and editing, analysis, writing original draft, validation: JS

Data collection, Data entry: NG, KC, KD

Validation: NG, KC

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