Background There has been substantial debate about the contribution of religious practices to alleviating hypertension with some established evidence among African American. However, Buddhist settings, there has been limited studies of effect of religion on blood pressure reduction.

Aim To determine the effectiveness of a Buddhist temple-based education programme on blood pressure reduction and improving the behavioural changes of exercise, salt intake, intention to visit the physician as well as antihypertensive medications.

Methods A quasi-experimental design was adopted. The study comprised of; (1) the intervention group and (2) the control group. Both groups consisted of 73 persons aged 60 years and above. Data was obtained at baseline and 6 months after the intervention. Temple committee members were trained to be as programme educators. Posters of knowledge about high blood pressure or modifying behaviours on exercise, salt intake and visiting the physician/on antihypertensive medications were placed in strategic locations within the temple environment.

Results Significant reduction in systolic blood pressure was found among participants of the intervention group (p<0.001). Moreover, systolic blood pressure in the intervention group was found to be significantly lower than that of the control group (p<0.05). In addition, significant behavioural improvement in regards to exercise and salt intake were found among participants of the intervention group compared to the control group (exercise = p<0.001; salt intake=p<0.001). However, no significant difference between the intervention and control groups was detected on diastolic blood pressure (p=0.746) and behaviour on visiting the physician/on antihypertensive medications (p=0.340).

Discussion Specific aspect of temple-based education programme can be advocated to an effective way to reduce blood pressure and improve behavioural changes on exercise and salt intake.

Conclusion Nurses should consider including an advocacy for adapting regular Buddhist temple practice in the protocols for hypertensive Buddhist elderly.