**Effects of Program Promoting Sodium Intake Reduction on Knowledge and Urinary Sodium in Nursing Students**

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**Purpose:**

Thailand is one of the countries with high sodium intake, associated with inappropriate food consumption behaviors and lacks of knowledge of sodium intake particularly in adolescents. This research aimed to examine effects of program promoting sodium intake reduction on knowledge and urinary sodium in nursing students. Specific aims were to: 1) describe knowledge of sodium intake and urinary sodium, 2) compare knowledge of sodium consumption at baseline, before, and after the program, and 3) compare urinary sodium at baseline, before, and after the program in nursing students.

**Methods:**

Quasi-experimental design with one-group self-control was used. The participants were 173 second-year nursing students of three higher education institutions in Thailand. They participated in a 3-week program promoting sodium intake reduction that employed four major processes of behavioral modification including 1) raising awareness, 2) aiming at target outcome, 3) mobilizing change and innovation, and 4) assuring synergy. Data were collected through 1) a demographic questionnaire, 2) a questionnaire on knowledge of sodium intake, and 3) 12-hour urine. The data were analyzed using descriptive statistics, One-way ANOVA with repeated measures and multiple comparison.

**Results:**

Majority of the participants were female (92.5%) with normal body mass index (55.5%). Their mean systolic and diastolic blood pressures were 104.1 ± 10.8 and 67.4 ± 7.9 mmHg, respectively. At baseline, the participants had a moderate degree of knowledge of consumption of sodium intake, with an average score of 10.2 ± 2.2. The participants’ urinary sodium was 1,685.3 ± 80.4 mg/day.

After the program, the participants’ average score on knowledge of sodium intake was 13.9 ± 1.2, significantly higher than before the program (10.7 ± 2.1) and baseline (p < .001). The participants’ average urinary sodium was 786.3 ± 27.7 mg/day, significantly lower than before the program (1,850.4 ± 78.4 milligrams per day) and baseline (p < .001).

**Conclusion:**

The program promoting sodium intake reduction was effective. Based on the results of this study, it was suggested that community nurse practitioners and health-care team apply this program to promote sodium intake reduction in nursing students and extend to other populations to reduce their sodium intake.
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Keywords:
knowledge of sodium intake, program promoting sodium intake reduction and urinary sodium

References:


Abstract Summary:
This quasi-experimental research with one-group self-control aimed to examine effects of the program promoting sodium intake reduction on knowledge of sodium intake and urinary sodium in 173 nursing students. After the program, the participants’ knowledge was significantly higher while urinary sodium was lower than before the program and baseline.

Content Outline:
Thailand is one of the countries with high sodium intake, associated with inappropriate food consumption behaviors and lacks of knowledge of sodium intake in adolescents. This research aimed to examine effects of program promoting sodium intake reduction on knowledge and urinary sodium in nursing students. Specific aims were to: 1) describe knowledge of sodium intake and urinary sodium, 2) compare knowledge of sodium consumption at baseline, before, and after the program, and 3) compare urinary sodium at baseline, before, and after the program in nursing students.

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