

An operational research to explore interventions for reducing sodium intake among patients with diabetes mellitus and hypertension in Muang District, Chiang Rai Province, Thailand.

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Abstracts of qualitative studies

Abstract 1

Motivation and actions for successful salt reduction in patients with high risk of cardiovascular diseases

Objective: To explore the motivations, practical steps and difficulties encountered in patients who successfully reduced their salt intake.

Method: A qualitative research collecting data by in-depth interviews and observations at patients' homes. Interpretive content analysis was used for data analysis.

Study setting and participants: Patients with diabetes mellitus and or hypertension with high risk scores for cardio-vascular diseases participating in an intervention trial study conducted in 2011-2013. In this trial, patients received visualized nutritional education. Of the 393 patients enrolled in this trial, we used a statistical software to select patients whose qualifications met the criteria, i.e. level of sodium in urine at the baseline was much higher than the normal value but could successfully reduce salt by the end of the trial. Ten patients who cooked by themselves and three household cooks were recruited for the study.

Results: Most participants had preferred eating salty food for decades. The baseline sodium levels in urine of every patient were higher than normal length (9.1 – 19.4 gm/L). In the past, they added unlimited amounts of salt, monosodium glutamate (MSG), together with several flavoring condiments. They understood the need to reduce salt after the intervention which included education sessions showing samples of high-sodium foods and monthly updates about their urine sodium levels. Motivation to reduce salt was associated with the fear of serious disease or disability. Seeing their high levels of urinary salt provoked them to reduce salt. They reduced salt by stopping using it altogether or significantly reducing the addition of salt, MSG and other condiments. When they started eating milder tasting food, they felt nauseous, loss appetite, difficulty swallowing and felt discouraged. Adjusting to less dietary salt took two weeks to several months. Reducing their salt intake made most of them reduced blood pressure, feel stronger, able to work longer hours and increased savings.

Conclusions: Reducing salt intake is possible even in patients who are accustomed to salty food for their whole life. Implementing the salt reduction intervention and sharing these patients' experiences with others may facilitate salt reduction. Future research should study barriers and obstacles of patients who could not reduce salt.

Keywords: salt reduction, qualitative research, visualized education, Thailand