

# Effectiveness of Eduche Method (Education Card Healthy) Reducing the Event of Osteopenia in Adolescent Private Vocational School, Martapura River Region

Atikah Rahayu<sup>1</sup>, Fauzie Rahman<sup>2</sup>, Fahrini Yulidasari<sup>3</sup>,  
Meitria Syahadatina N<sup>4</sup>, Dian Rosadi<sup>5</sup>, Nur Laily<sup>6</sup>, Hadianor<sup>6</sup>

<sup>1</sup>Departement of Nutrition Study Program Public Health, <sup>2</sup>Departement of Health Policy Administrasion Study Program Public Health, <sup>3</sup>Departement of Nutrition Study Program Public Health, <sup>4</sup>Departement of MCH and Reproductive Health Study Program Public Health, <sup>5</sup>Departement of Epedimology Health Study Program Public Health, <sup>6</sup>Departement of Health Policy Administrasion Study Program Public Health, Medical Faculty, Lambung Mangkurat University, Indonesia

## Abstract

Martapura River has the greatest potential for fish farming compared to other regencies in South Kalimantan. With the condition of the region and the results of the cultivation, this area should have the potential as a fishery source that plays a role in the supply of animal protein such as fish that can be used by the community to improve community nutrition, such as osteopenia in girls. Osteoporosis/osteopenia is more common in women about 80% of men 20%. The study design used Pre and Post test One Group Design. The research subjects were all teenage girls in Islamic boarding schools in the Martapura River area, Banjar Regency. Sampling was done by measuring the nutritional status of female teenagers using the WHO anthropometry 2007 reference standard with the following criteria: female teenagers said to be overweight with z scores  $> +1$  SD, Obesity with z scores  $> +2$  SD, normal with z scores  $-2$  SD to  $+1$  SD, Thin (Thinness) with z scores  $-3$  SD to  $-2$  SD, and Very thin (Severe Thinness) with z score  $< -3$  SD. Research instruments are mikrotoice and stepping scales. Measuring the degree of bone density using a quantitative ultrasound bone densitometry. Protein and calcium intake using 24-hour food recall form. Eduche Method (Healthy Education Card) with CTL (Contextual Teaching Learning) approach to TGT (Team Games Tournament) settings. The results showed osteopenia respondents were 65 people (79.3%), the most dominant factors related were low protein intake (p value = 0.001. Eduche Method (Education Card Healthy) with CTL (Contextual Teaching Learning) TGT settings (Team Games Tournament) effectively increase respondents' knowledge about osteopenia (p value 0.0001).

**Keywords:** Teenage girls, eduche, osteopenia, CTL, TGT.