

A Causal Model of Postpartum Weight Retention among Thais

Piyanut Xuto, Nittaya Sinsuksai, Noppawan Piaseu, Dechavudh Nityasuddhi, Vorapong Phupong

Abstract : The aim of this descriptive, prospective research was to develop a causal model of postpartum weight retention among Thai women in Bangkok. The study hypotheses were developed based on an ecological model of obesity predictors. Simple random sampling was employed to obtain 223 postpartum women, from three settings, who brought their babies to well-baby clinics. Four self-administered questionnaires, two records and two anthropometric measures were used to collect data: a Personal Data Questionnaire; the Center for Epidemiologic Studies Depression Scale; the Postpartum Drive for Thinness Scale; the Inventory of Social Support Behaviors Questionnaire; a dietary record; a physical activity record; and, height and weight. Descriptive statistics were used to describe demographic characteristics of the key variables, while principle analysis, via the maximum likelihood method, was performed using LISREL.

The results revealed 36% of subjects had more than 5 kgs (11 lbs.) of weight retention six months postpartum. The modified model fit the data well, accounting for 33% of the variance in weight retention. The largest coefficient explaining weight retention was gestational weight gain by giving a positive direct effect on weight retention, and the second largest was physical activity by giving a negative direct effect on weight retention. The results suggest nurses should conduct interventions that encourage suitable gestational weight gain and moderate activity so as to prevent postpartum weight retention.

Pacific Rim Int J Nurs Res 2012 ; 16(1) 48-63

Key Words: Gestational weight gain; Physical activity; Postpartum weight retention; Postpartum women

Introduction

Overweight status and obesity are increasing among people throughout the world, including Thailand. Overweight status refers to having an increased body weight in relation to height, when compared with the standard range,¹ or having a body mass index (BMI) of 25 to 29.9 kg/m². Obesity, on the other hand, has been identified as occurring when an individual's BMI is equal to or greater than 30 kg/m.² The 4th National Health Examination Survey of Thailand (2008-2009) revealed 40.7%

Correspondence to : Piyanut Xuto, RN, PhD (Candidate), Faculty of Nursing, Mahidol University, Bangkok, Thailand.

E-mail: piyanut.x@cmu.ac.th

Nittaya Sinsuksai, RN, PhD. Assistant Professor, Faculty of Nursing, Mahidol University, Bangkok, Thailand.

Noppawan Piaseu, RN, PhD. Associate Professor, Ramathibodi School of Nursing, Faculty of Medicine Ramathibodi Hospital, Mahidol University, Bangkok, Thailand.

Dechavudh Nityasuddhi, PhD. Associate Professor, Department of Biostatistics, Faculty of Public Health, Mahidol University, Bangkok, Thailand.

Vorapong Phupong, MD. Associate Professor, Department of Obstetrics and Gynecology, Faculty of Medicine, Chulalongkorn University, Bangkok, Thailand.