

prevalence was 41% whereas mostly in mild and moderate levels (44% and 55% respectively). The most common pattern of food consumption was rice, fish, and some vegetables. However, vegetables and fruit mostly consumed only 3-6 time a week. Energy and protein intakes were only 59% to 72% RDA or 1300kcal and 48gr respectively. Most vitamin was consumed only around 40% except for vitamin A (76%, 605RE), folic acid (195%, 1170ug), and Vitamin B12 (142%, 3,7ug). However, iron and zinc intakes were only 6.1gr (17.5%RDA) and 5.9gr (44%RDA), respectively. Multivariate analyses showed that education duration of mothers, nutritional status, iron tablet intakes, vitamin C, and B6 consumption were significantly related to anemia of pregnant mothers in the study and accounted for 24% (p

FP-091

The Risk Factors of Gestational Diabetes (GDM) and Development of Subsequent Type 2 Diabetes Mellitus at Early Postpartum

Hsueh-Hua Ho, Chih-Chien Cheng
Cathay General Hospital, Taiwan

Background & Purpose: Women with gestational diabetes mellitus (GDM) will develop diabetes potentially, aim of the study will determine the incidence and the risk factors for predicting the development of type 2 diabetes.

Methods: A prospective study of GDM women were adopted in a medical center and it's branches during Apr. 2006 to Dec. 2007. The following data were collected before delivery: age; pre-pregnancy BMI; family history of diabetes mellitus; glycemic parameters of 50-g 1-h glucose challenge test(GCT) and 100-g 3-h oral glucose tolerance test(OGTT); ac and pc glycemic level at 32 weeks gestation. The following data were collected at 8 weeks postpartum: new born body weight; waist circumstance; BMI; blood pressure; ac and pc glycemic level after 75g OGTT; HbA1c.

Results: 94 participants with GDM were analyzed. 6.4% were developed diabetes. The following data were significant between diabetes and non diabetes group: 50g GCT; 1, 2, 3 hour after 100g OGTT; fasting glucose level at 32 weeks gestation; postpartum BMI; HbA1c. Pregnancy factors predictive for the development of diabetes included elevated 50g GCT and glucose level on 2 and 3 hour after 100g OGTT.

Conclusion: The early postpartum diabetes in GDM women was 6.4 %, and 50g GCT; glucose level on 2 and 3 hour after 100g OGTT were risk factors for detecting early postpartum diabetes. Those findings will useful for mentioned GDM women to maintain a healthy life style.

FP-092

Food Pattern and Dietary Intake of Pregnant Women in Maros District, South Sulawesi, Indonesia Veni Hadju^{1,2}, Sitti Fatimah², Werna Nontji², Yanti Yanti²

1. Hasanuddin University, Indonesia

2. Faculty of Public Health, Indonesia

This study was intended to assess food pattern and nutrition asupan of pregnant women. This was an abservational study in pregnant women (n=200) who selected using proportional stratified random sampling in two Puskesmas areas (urban and rural). Data was collected by trained field workers using 24-hours food recall and food frequency questionnaire methods. Data was analyzed using bivariate analyses and comparison between two areas was performed usign independent t-test. Results showed that rice was consumed every day by almost all subjects (95%) while fish consumed every day by 51% of subjects. In addition, meat, liver, and milk were never consumed by 36%, 64%, and 36% of subjects. Pregnant mothers consumed vegetable and fruits mostly 3-6 times a week such as green leave vegetables (73%), pepaya (46%), orange (49%), banana (65%) tomato (67%) and nuts (64%). Except for folic acid, vitamin B12, vitamin D and phosfor, most nutrients was consumed less than recommended (> 80% AKG). In addition, there were no significat difference of nutrion asupans between rural and urban areas except for vitamin E. We conclude that pregnant mother consumed lower than recommneded and in general no difference between rural and urban for dietary intake.

FP-094

A Comparison of Two Surveys (2004 and 2005) That Investigate the Situations and Related Factors of Families with Nurturing Problems, Including Child Abuse, That Require Ongoing Support Yamada Kazuko, Ikuharu Morioka, Toshihiko Yanagawa

Wakayama Medical University, Japan

Using the health questionnaire and results of the regular municipal health checkup for infants at 4 months, seven factors were extracted from data of A City's year-long survey (the 2004 Survey) of infants of that age group (n=2,104). In this study, similar research was carried out in order to confirm the accuracy of screening that had been done by A City for 4-month-old infants from October 2005(n=2,136). 1. In this survey of 2005, there was a group of 137 (6.4%) "families with nurturing problems." 26 families(1.2%) "abused child" were included. There was a significant in the percentage of these two groups, "families with nurturing problems" and "abused child," from those of the previous year's survey. 2. Of the seven factors in the 2004 survey that were related to the 2005 survey, four of the factors: "nurturing anxiety and feelings of burden;" "required monitoring following medical examination results;" "not playing

with or taking the child outside;" and "lack of spousal consultation and cooperation" exhibited a significant relationship. 3. In the 2005 survey, the average number of factors related to the group with "nurturing problems" was 2.2 for the "abuse" group, 1.8 for the "nurturing problems but no abuse" group and 1.3 for the "No problem" group, which was a significant difference. 4 It is believed that use of the regular heal

FP-095

A Pilot Study of the Influence of Growth Reference Charts on Breastfeeding Rates

Colin Binns¹, Bingquan Zhu², Jie Shao², Zhengyan Zhao², Liqian Qiu³

1. Curtin University, Australia

2. Children's Hospital of Zhejiang University, China

3. Women's Hospital of Zhejiang University, China

Objective: A pilot study of the influence of growth reference charts on breastfeeding rates.

Methodology: Breastfeeding is the foundation of infant nutrition and lifetime health. Exclusive breastfeeding for the first six months of life for optimum growth and health. In Hangzhou, China 500 mothers were recruited at birth for a randomised control of the influence of the type of growth chart on breastfeeding rates. The two growth charts used represented the CDC 2000 and the WHO 2006 references. A total of 537 mothers were included in the pilot study, 273 in the first group (heavier growth chart) and 264 in the second (lighter) group. Mothers were interviewed at 1, 6 weeks and 3, 4, 5 and 6 months. During these the visits the infants' weights were plotted on growth charts which the mothers kept.

Results: The mothers who had the heavier growth chart had lower rates of full breastfeeding than the mothers using the lighter (CDC2000) growth chart. At three months the full breastfeeding rates were 26% in the heavier chart group and 30% in the lighter group. This suggests that mothers who perceive that their infants are not growing adequately may introduce other foods to their infants earlier than other mothers.

Conclusion: It is important to understand if the type of growth chart used influences whether mothers fully breastfeed their infants. This pilot study suggests that breastfeeding rates are influenced by the type of growth chart used and a larger trial is required to confirm the results.

FP-096

Psychological Well Being and the Associated Factors of Primary Infertile Women in Sri Lanka

Nirosha L Lansakara¹, Rajitha Wickramasinghe², Harsha Senevirathne³

1. Murdoch Children Research Institute, Australia

2. University of Kelaniya, Sri Lanka

3. University of Colombo, Sri Lanka

Introduction: Primary infertility has a considerable impact on the psychological well-being of the female partner of a couple and studying of which would assist in providing better care for them. This study compared the psychological well being of primary infertile women with a group of fertile women and identified some demographic, treatment as well as infertility related marital and social factors associated with it.

Method: Psychological well-being of 177 primary infertile women identified in a community prevalence survey in the Colombo district, Western Province, Sri Lanka and 177 controls matched for age and duration of marriage was evaluated using the GHQ-30. A pre-tested questionnaire was used to obtain other related information. Odds ratios and logistic regression analysis was used to identify relationships among infertile women.

Results: A significantly higher proportion of primary infertile women (66.1 %; 95%CI 59.14-73.06) had psychological distress as compared to fertile women (15%; 95%CI 9.75-20.25) ($p < 0.001$). After controlling for other variables, primary infertile women with a lower educational status (OR=55.34; 95%CI 15.23-201.06), poor marital communication (OR=3.45; 95%CI 1.22-9.75), higher priority for having children (OR=4.18; 95%CI 1.25-13.82), previously investigated/treated for infertility (OR=39.11; 95%CI 8.25-185.41) or currently investigated/treated for infertility (OR=10.99; 95%CI 2.98-40.61) had a higher risk for being psychologically distressed.

Conclusions: Primary infertile women were at a higher risk of developing psychological distress as compared to fertile women. Lower education status, being previously or currently investigated/treated, placing a high importance of having children and poor marital communication were predictors of psychological distress among primary infertile women.

FP-097

Analysis of Association between Macroeconomic Indicators and Fertility Trends in Korea Using APC Model

Jung-Hyun Kim, Youngtae Cho

Seoul National University, South Korea

Background: The total fertility rate (TFR) of Korea has rapidly fallen since 2002, hitting the lowest 1.08 in 2005. Recently, a few Korean studies have discussed that considerable changes in economic conditions since the economic crisis and the inception of International Monetary Fund (IMF) from 1997 are mainly attributable to the delayed childbearing which has resulted in the sudden drop of TFR. This study aims to analyze the association between macroeconomic indicators and fertility trends in Korea from 1995 to 2005.

Methods: We utilize national birth record files from 1995 to 2005 obtained from Korean Statistical Information Service (KOSIS). By enumerating event by quarters in a year, we calculate quarterly birth rate for 11 years. Rates