

### OT11-9

#### **Risk Factors of Measles Outbreak on Under Five Children in Tuladenggi Public Health Center, Gorontalo City, Indonesia**

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The outbreak of measles was happened in Gorontalo province at 2007 where the increasing of new case was 5 times, attack rate 45,9% and CFR 2,4% from 542 case. Three hundred and thirty two cases were found in District of Gorontalo, distributed in 18 villages with the highest outbreak (155) were meet in the working area of Tuladenggi Public Health Center. Most of them were child under five years old which was 92. The aim of this study was to determine risk factors of measles outbreak to under five children in working area of Tuladenggi Public Health Center. This study was a case control design. One hundred and fifty eight samples were taken by purposive sampling where age and residence of samples were matched. Data were analysed with Odds Ratio (OR) and linier logistic regression. Results of study indicated that risk factors outbreak of measles in child under five years were immunization state (OR= 33.53), under nutrition (OR= 4.49), parent's education (OR= 2.44) and family income (OR = 2.51). Based on this study, we concluded that the main factor of measles outbreak was due to incompleteness of measles vaccination. It is suggested that the full coverage of measles vaccination was needed in order to prevent such outbreak.

### OT11-10

#### **Child Growth Acceleration Issues**

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It has been found that the course of Mongolian child growth trends to stabilize and slow down in last 10 years. The research was done to study child growth and the course of acceleration of school children. Cross-sectional study design was used to evaluate the acceleration of the child growth in comparison with data of last 40 years. Anthropometric data were collected from a total of 2075 male and female school children and adolescents from 1st to 11th grades from Ulaanbaatar city during the 2007/8 academic year using anthropometric instruments. Body growth and development was processed by School of Medicine and evaluated according to the Ministry of Health approved United Evaluation and Standard of Child Growth and Development. Starting from the age 8, girls were caught up with boys. First cross section was at age 8; while the second cross section on the growth curve was at age 14.5 which was related to the transition to the puberty. At age 17, boys caught up with girls and became taller by 10-15 cm. Picture of weight was similar as height. There were a tendency of transition of rapid growth process from age 11 to age 10 ten in girls and

from age 13 to age 12 in boys in relevance to the age of puberty onset. In conclusion, Child growth acceleration in Mongolia was the highest between 1960 and 1990, but it declined in recent years.

## Oral Track 12- Non-Communicable Diseases (GIS)

### OT12-1

#### **Obesity in Mongolian Adults: Mon Heart Cohort Study**

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Introduction: Obesity and overweight have become common health problems globally including Mongolia. The objective of this survey was to examine the epidemiology of obesity in the urban population of Mongolia.

Design: Population-based cross-sectional surveys. A random sample of adults 31-90 years underwent comprehensive interviews and measurement of their weight, height, and waist circumference (WC).

Participants: A probability sample of 1214 men and women aged 31 to 90 years was selected from the each district. Anthropometry was performed on 1214 subjects. Outcomes of interest were obesity (body mass index [BMI] > 30 kg/m<sup>2</sup>), high-risk WC (men 90 cm; women 80 cm), and high risk of disease co morbidity (from BMI and WC criteria).

Results: Total, 1,214 people participated (80% response). Women had higher rates of obesity (32.6% vs. 26.2%), high-risk WC (61.9% vs. 13.9%). Abdominal obesity was likewise higher in women and increased with both age and BMI. Although total plasma cholesterol levels increased only modestly with BMI, levels of low density lipoprotein (LDL) cholesterol and triglycerides and the ratio of total cholesterol to high density lipoprotein (HDL) cholesterol increased steadily, while HDL-cholesterol decreased consistently with increasing BMI. High total cholesterol levels (greater than or equal to 5.2 mmol/L) were more prevalent among people with high BMI, especially those with a high WHR. Conclusion: Obesity is highly prevalent among adult Mongolians. Public health interventions must target this group, particularly women.

### OT12-2

#### **Binge Drinking and Digestive Cancer Mortality in Korean Men: A Kangwha Cohort Study**

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Background: Alcohol consumption has been known to be related with risks of oral cancer, esophageal cancer, liver