

International Conference on

# DIABETES AND DIABETIC NURSING CARE

September 20-21, 2017 Charlotte, USA

## Effect of maternal age, parity and pre-pregnancy body mass index on glucose challenge test and gestational diabetes mellitus

**Adel T Abu-Heija**

Mutah University, Jordan

**Objective:** The objective of this work is to study the effect of age, parity and body mass index (BMI) on the incidences of positive 50 g glucose challenge test (OGCT) and gestational diabetes mellitus (GDM) in healthy pregnant Omani women.

**Method:** In this prospective study, a 50 g OGCT was performed to 307 healthy pregnant Omani women at 24-28 weeks of gestation. When venous plasma glucose concentration (VPG) after 1 hour was  $>7.8$  mmol/l, OGCT was considered positive. Women with a positive OGCT had a confirmatory diagnosis of GDM made by performing 2-h 75 g oral glucose tolerance test (OGTT). When either fasting or 2-h post 75 g OGTT values were  $>5.5$  mmol/l and  $>8$  mmol/l respectively, women were considered diabetic.

**Results:** We screened 307 women, total number of women with positive OGCT was 83 (27.03%) and GDM 23 (7.5%). The incidences of positive OGCT and GDM increased significantly with increasing maternal age, from 20.0% and 2.2%, respectively in women aged  $<25$  years to 37.8% and 14.7%, respectively in women aged  $>35$  years, ( $P=0.02$  and  $P=0.009$ , respectively). The incidences of positive OGCT and GDM increased markedly with increasing pre-pregnancy BMI, from 19.8% and 3.8%, respectively in women with BMI  $<25$  kg/m<sup>2</sup> to 37.8% and 9.9%, respectively in women with BMI  $>25$  kg/m<sup>2</sup>, ( $P=0.02$  and  $P=0.04$ , respectively). There is steady increase in the incidences of positive OGCT and GDM with increasing parity.

**Conclusions:** Maternal age and pre-pregnancy BMI have a profound impact on the incidences of positive of OGCT and GDM.

### Biography

Adel T Abu-Heija has joined Benghazi Medical School as a Medical student in 1974. He has obtained his MBBS degree in 1980 and MRCOG diploma in 1987, worked in the United Kingdom for 3 years. He has returned to Jordan and worked as Assistant Professor at Jordan University of Science and Technology. He was promoted to Associate and Full Professor. Between the years 2000-2005, he has worked as a Professor of Obstetrics and Gynecology at King Faisal University, Saudi Arabia. He has served as a Dean of Mutah University Medical College in Jordan between 2007-2011. He has been working in Oman as a Professor and the Head of department of Obstetrics and Gynecology at Sultan Qaboos University and Hospital between 15<sup>th</sup> September 2013 and 17<sup>th</sup> September 2016. He has joined back Mutah University, college of medicine as a Professor of Obstetrics and Gynecology since 18 September 2016. He has published more than 60 articles in various topics of Obstetrics and gynecology.

abuheija2008@hotmail.com

### Notes: