

**SOUTH ASIAN REGIONAL CONFERENCE OF  
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between DM and PD among DM patients in a private medical clinic

**METHODS:** A case series study carried out among 11 diabetics, actively taking treatment at a private medical practice clinic in Kuala Lumpur in August 2015. Demographic background, DM clinical background, oral hygiene practices, dental check-up and awareness on DM-PD relationship including effect of PD on glycemic control and general health were assessed by a pre-tested semi-structured questionnaires. Descriptive analysis on awareness of DM and PD relationship was done in accordance with age, gender and race.

**RESULTS:** 8 females and 3 males DM patients between 33 and 70 years, with diabetes duration of 1 to 43 years participated. Majority (9/11) were Indian and the rest were Chinese. Regarding oral hygiene practice, 54.5% (6/11) brushed twice a day, 27.3%(3/11) used mouth wash together with both times of brushing while 9.1%(1/11) brushed once a day and 9.1%(1/11) used tooth brushing with flossing once. Regarding knowledge on relationship between DM and PD, 36.4% (4/11) knew about it and they were all Indian; two male and two female; two aged 61 and 65 years old and two were 33 and 44 years. 45.5% (5/11) agreed that PD effect on DM and one Chinese aged more than 60 year disagreed. Only 45.5% (5/11) did dental check-up last year.

**CONCLUSION:** There was limited awareness on relationship between DM and PD and proper oral hygiene practices among DM patients from private medical clinics. Thus, oral health education should be promoted among the DM patients from medical clinics. A larger scale study should be conducted to improve validity of the results.

**KEY WORDS:** Oral Hygiene Practices, awareness on DM and Periodontal relationship, DM patients, Private medical clinic

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Title **Does fasting serum insulin, insulin resistance and fasting serum c-peptide levels vary with gender?**

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Introduction and objectives: Insulin is the most important regulator of glucose. Insulin is co-secreted with C-peptide from the pancreatic  $\beta$  cells. It has been found that men and women differ substantially in insulin resistance (IR) and metabolism of glucose. The objective was to determine gender differences in fasting serum insulin, insulin resistance and fasting serum C-peptide.

Method: The study population included males (n = 50) and females (n = 50) aged 20-40 years. Study was conducted at Faculty of Medical Sciences (FMS), University of Sri Jayewardenepura (USJP). Written consent was obtained from participants. An interviewer administered questionnaire was used to collect information. Fasting venous blood samples were obtained to analyse fasting serum glucose (FSG), fasting serum insulin (FSI) and C-peptide (C-pep). Glucose oxidase method was used to measure plasma glucose level and ELISA method was used for serum insulin assay and serum C-peptide assay. Data were analysed using SPSS version 16 and Microsoft Excel 2010. Significant differences were determined ( $p < 0.05$ ).

Results: The whole study population had FSG levels below 100 mg/dL. The mean FSI levels in males and females were  $12.31 \pm 7.17$   $\mu$ U/mL and  $12.39 \pm 8.04$   $\mu$ U/mL, mean C-pep levels were  $4.57 \pm 1.39$  ng/mL and  $4.24 \pm 1.44$  ng/mL and Insulin resistance values were  $2.41 \pm 1.44$  and  $2.27 \pm 1.66$  respectively. The differences of FSI, C-pep and IR between males and females were not significant ( $p > 0.05$ ).

Conclusion: This study did not observe a difference in insulin resistance, fasting serum insulin or C-peptide between males and females.

Key words: Insulin resistance, C-peptide, Insulin  
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