

# ASSOCIATIONS BETWEEN DIABETES KNOWLEDGE AND PERCEPTIONS AMONG NURSING STUDENTS IN JAPAN AND AUSTRALIA

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## Abstract

**Aim:** To investigate knowledge levels and perceptions of diabetes mellitus (DM) among a group of final year nursing students from Japan and Australia.

**Research Design and Methods:** This study was a cross-sectional study. A convenience sample of nursing students in their final year of the course from Japan (n= 78) and Australia (n= 80) were surveyed. The survey collected demographic data and perceptions among students towards caring for patients with diabetes mellitus (DM). General knowledge was assessed using the 23-item Michigan Diabetes Knowledge Test (MDKT) and seven additional questions assessed DM-related clinical knowledge. Linear regression models were used to determine the associations between knowledge and perceptions. Curricula differences between the two universities were briefly reviewed.

**Results:** Australian students identified caring for more patients with DM on clinical placement during their course and were more likely to be aware of DM. These students performed slightly better on the clinical nursing questions than Japanese students (71.43% versus 65%). Teaching models were compared and the Japanese curriculum dedicated more hours to didactic classroom teaching on DM and had a smaller teacher to student ratio. The Japanese students self-reported lower confidence, competency and felt less prepared to care for DM patients but performed slightly better on the MDKT than Australian students (85.17% versus 77.48%). In the fully adjusted regression models, DM perception was significantly and positively associated with DM knowledge based on both the 23 items (Beta=0.105, SE=0.040) and all 30 items (Beta=0.081, SE=0.034).

**Conclusions:** Statistically significant differences in DM knowledge between students were found.

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Dr Lucie Ramjan is a Senior Lecturer and Academic Course Advisor for two Masters programs in the School of Nursing and Midwifery at Western Sydney University, in Australia. Lucie graduated with a Bachelor of Nursing (Honours-1<sup>st</sup> Class) in 2003 and received her PhD in 2007. Lucie is an experienced qualitative researcher and supervises/co-supervises research students. Her research interests include mental health (particularly eating disorders) and educational research. In 2012 Lucie received a National Teaching Award (OLT) for outstanding contribution to students' learning. Lucie is a peer reviewer for numerous journals and has published over 30 peer reviewed papers.

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Dr. Watanabe received her PhD from the University of Tokyo. Her research interests are mainly investigating the health promotion for reproductive-aged women, and associations between gestational diabetes and perinatal outcomes including nursing education. She has been an investigator of several international studies including the Asian Adolescent Risk Behavior Survey, and has published academic journal articles in maternity and nursing areas.

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