

# 3<sup>rd</sup> International Meeting on NURSING RESEARCH AND EVIDENCE BASED PRACTICE

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## International Conference On DIGESTIVE DISEASE

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### **Type 1 (T1D), type 2 (T2D), and latent autoimmune diabetes in adults (LADA) as a single fecal-oral transmitted polymicrobial infection in genetically susceptible individuals**

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**Statement of the Problem:** Nowadays, it is admitted that the transmission of a donor disease through transplantation/transfer of an unhealthy gut microbiota (dysbiosis) fulfills Koch's postulates on polymicrobial infections. This is the case of disorders such as inflammatory bowel disease, colorectal cancer, obesity, kwashiorkor and environmental enteropathy. This paper provides the literature evidence supporting the idea that T1D, T2D and LADA are a single transmissible polymicrobial infection that can spread both intra- and intergenerationally.

**Methodology & Theoretical Orientation:** Network research focusing on diabetogenic gut microbiota as a crucial environmental factor for the development of all clinical forms

of diabetes mellitus. **Conclusion & Significance:** The transfer of a diabetogenic gut microbiota to genetically susceptible individuals carrying an immature intestinal immune system causes T1D and LADA. In contrast, those with intestinal immune maturation will develop T2D. Ultimately, long-term T2D can compromise gut immunity and progress to T1D. It is in accordance with other observational studies in animals and human beings showing that the gut microbiome of diabetic individuals spreads both horizontal- and vertically. Further studies are needed to clarify these preliminary findings. If these data are confirmed by well-designed studies, novel preventive and therapeutic strategies can be implemented for disease management.

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