

KEYNOTE SPEECH

Integration of Selected Herbal Medicine into the Mainstream Healthcare: the Role of Academician in the Translational Research

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Abstract. Diabetes mellitus (DM) is a metabolic disorder caused by the inability to produce insulin or insulin resistance that resulting an abnormal high blood glucose level (hyperglycemia). Diabetes mellitus often associated with health complications. At least 90% of diabetic males are having infertility and libido problems. Synthetic drugs are commonly used in the conventional medication to reduce the blood glucose level. However, these drugs are not able to treat male reproductive health complications due to DM. There are various toxicity effects of these drugs on the liver and the kidney. Therefore a new alternative medication is urgently needed that can treat not only diabetes, but also synergistically overcome male fertility and libido problems. Several medicinal herbs were identified and characterised as potential herbs as antidiabetic agent as well as male fertility enhancer. Studies on the selected herbs such as *Gynura procumbens* (GP), *Moringae oleifera* (MO) and *Ficus carica* (FC) extracts have shown the potential to treat fertility and libido problems among diabetes-induced male rats. Biological guided assays and the sperm proteomic analysis reveals the specific sperm factors deficiency and the role of herbal extract in ameliorating infertility due to diabetic complication.