## Awareness and Perception of Potential Stem Cells Therapy for Diabetes Among Malaysians: A Pilot Study

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## ABSTRACT

**INTRODUCTION:** Diabetes is a major global public health problem. According to International Diabetes Federation in 2017, nearly 3.5 million cases of diabetes reported in Malaysia. This metabolic disorder decreases insulin secretion due to impairment of β-Langerhans cells of pancreas or insulin resistance causing raise in blood glucose level leading to other health complications. Many stem cells (SC) researches being pursued as a potential treatment for diabetes by finding an adequate supply of β-Langerhans cells and protecting them from autoimmunity. The study aims to assess the awareness of SC and potential SC therapy for treating diabetes as well to assess the willingness to accept potential SC therapy among Putrajaya residents. METHODS: A cross-sectional study was conducted among 100 participants in Putrajaya aged 18 above through convenient sampling. **RESULTS:** Level of awareness on SC among Putrajaya residents, showed very significant association (p<0.001) with level of education, their willingness to store their SC and their perceptions of the ability of SC therapy to improve quality of life. Although majority of 70% respondents were supportive towards potential SC treatment, 77% of the respondents were not aware or unsure of potential SC therapy for diabetes while 50% of them unwilling to undergo diabetic treatment using SC. CONCLUSION: Currently FDA approved hematopoietic SC for the treatment of blood and immunological diseases, while many including SC treatment for diabetic still in research and clinical trials. Persistent efforts need to be taken systematically to create awareness on approved and clinical trial of SC therapy among Malaysian via various educational programmes

**KEYWORDS:** Awareness, stem cell, diabetes

## Bad Things Come in Threes: Food Poisoning Outbreak in Maahad Tahfiz Quran Darul Saadah

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## ABSTRACT

**INTRODUCTION:** Food poisoning outbreaks in institutions are still common. Despite various policy and control measures implemented, recurrent outbreaks involving similar food handlers are still observed. Three different episodes of food poisoning outbreaks in Maahad Tahfiz Quran Darul Saadah and the lesson learnt are described. METHODS: In all three episodes, a retrospective cohort study was used. Epidemiological investigation was conducted. Students were interviewed and stool samples from patients were collected. Environmental investigation included premise rating, surface sampling of used utensil and handlers swab sample taken. Hazard analysis of food preparation, sanitation inspection and analysis were done to identify the food implicated. RESULT: Outbreak involving same food handlers occurred in first and third episodes. Alternative food handlers were used during the second episode. Hazard analysis of critical control point (HACCP) showed inadequate defrosting of chicken, insufficient cooking time and inadequate temperature during cooking. Cross contamination occurred due to unsanitary food handling. In all three outbreaks, the source of exposure was undercooked chicken. Food handlers in first and third episode were overburdened, while the alternative food handlers in second episode were inexperienced. DISCUSSION: The recurring food poisoning outbreak was most likely due to inexperienced handlers and organizational deficiency. Control measures were implemented, and suggestion were given to the organization. They were asked to ensure adequate number of handlers and organizational compliance to have an alternative handler to prevent recurrence in future. **KEYWORDS:** food poisoning, outbreak, institutional