Risk Factors Associated with Nasopharyngeal Carcinoma in Sabah: Study Protocol of a Case Control Study
Raja Muhammad Raja Omar

Otorhinolaryngology Department, Queen Elizabeth Hospital, Kota Kinabalu, Sabah, Malaysia

**Background:** In Malaysia nasopharyngeal carcinoma (NPC) is ranked as number fourth (5.2%) from all cancer and third (8.4%) most common cancer among male population. Nasopharyngeal carcinoma in Malaysia mostly occurs among Chinese (49%), followed by natives of Sabah and Sarawak (28%) and Malay (22%). There were multiple researches done to determine the risk factors for nasopharyngeal carcinoma and most of them from western pacific region. Prevalence of nasopharyngeal carcinoma in Sabah in 2013 is about 106 cases while in 2012 is 75 cases. It shows almost 30% increment from previous year. A total of 53 patients were diagnosed NPC in 2013 from Kota Kinabalu locality and it contributes more than 50% from total prevalence NPC in 2013. NPC is common in local Sabahan, especially in Kadazan and Dusun ethnicity. In 2013, the youngest are 11 years old and the eldest are 84 years old. The upward trend of NPC cases in younger age group is worrisome for us. Thus it is very important to determine the risk factors associated with NPC and this would help the health provider and other stakeholders to do planning in prevention of NPC such as awareness programme or cancer screening for the target high risk group especially for Sabah population. **Objective:** To determine risk factors associated with nasopharyngeal carcinoma for dietary, occupational and lifestyle for Sabah population. **Methods:** A case control study will be conducted in 1:2 ratio of 75 cases and 150 controls by using a questionnaire as a tool. **Results:** Not yet available. **Conclusion:** The study to understand and determine associates risk factors of NPC in Sabah population.

**Keywords:** nasopharyngeal carcinoma, lifestyle, occupation, diet