

Epidemiology of Nasopharyngeal Carcinoma (NPC) in Pahang, Malaysia

Wardah Mohd Yassin^{1,*}, Mohd Arifin Kaderi¹, Nor Azlina A. Rahman¹, Norafiza Zainuddin¹, Azmir Ahmad¹, Raja Ahmad Al'Konee Raja Lope Ahmad², Kahairi Abdullah², Wan Ishlah Leman², Siti Marponga Tolos³, Luqman Rosla⁴, Mark Paul⁴, Nik Soriani Yaacob⁵, Wan Mohd Nazri Wan Zainon⁶, Irfan Mohamad⁶ & Magdalena Wozniak⁷

¹Department of Biomedical Science, Kulliyah of Allied Health Sciences, International Islamic University Malaysia

²Department of Otolaryngology-Head and Neck Surgery, Kulliyah of Medicine, International Islamic University Malaysia

³Department of Computational and Theoretical Science, Kulliyah of Science, International Islamic University Malaysia

⁴Department of Otolaryngology, Hospital Sultan Haji Ahmad Shah, Temerloh, Pahang, Malaysia

⁵Department of Chemical Pathology, School of Medical Sciences, Universiti Sains Malaysia, Health Campus

⁶Department of Otolaryngology-Head and Neck Surgery, School of Medical Sciences, Universiti Sains Malaysia, Health Campus

⁷ International Agency for Research on Cancer, Lyon, France

ABSTRACT

Objectives/Research Problem: Nasopharyngeal carcinoma (NPC) is among the most frequently reported cancer in Malaysia. The National Cancer Registry (NCR) in 2007 stated that NPC was the fourth most common cancer among Malaysian and the third most common cancer among Malaysian men. While there have been several studies on NPC from a few states in Malaysia, a comprehensive study in Pahang had never been reported. The current epidemiological study is designed to feature the number of cases and distribution of NPC in Pahang, as well as risk factors of the development of the disease.

Materials and Method: This study involved two major referral centres in Pahang, namely Hospital Tengku Ampuan Afzan (HTAA) in Kuantan and Hospital Sultan Haji Ahmad Shah (HOSHAS) in Temerloh. A total of 87 confirmed NPC cases were reported from these centres between 2012 and 2015.

Results and Discussion: The age at diagnosis of patients ranged from 14 to 82 years old with mean age of 49.4 years old (SD \pm 14.3). Majority of them were male (77%) with the ratio of male to female was 3:1. Regarding ethnicity, Malay predominates with 56%, followed by Chinese (35%) and others (9%). The total number of cases increased from 2012 to 2014 and declined slightly in 2015. The age-standardized rate (ASR) were calculated every year and showed an increasing trend among male from 1.6 per 100,000 in 2012 to 3.3 per 100,000 in 2015. Generally, the peak of age-specific incidence rate was at the 50-54 age groups.

Conclusion: Ongoing analysis on available data is currently being carried out to unravel the lifestyle risk factor in this population of NPC patients. This study will hopefully provide the first ever four-year comprehensive data on the epidemiology of NPC in the state of Pahang, Malaysia.

KEYWORDS: Nasopharyngeal Carcinoma (NPC), Malaysia, Incidence, Ethnicity, Age-Standardized Rate (ASR)

*CORRESPONDENCE: wardahmy@gmail.com