

Certificate

THIS IS TO CERTIFY THAT

dr. Sukri Rahman, Sp.THT-KL

AS

POSTER PRESENTATION

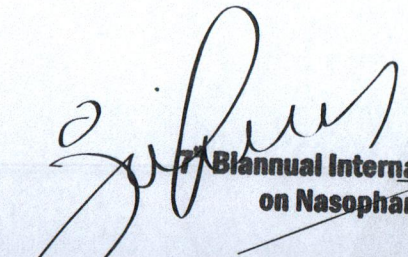
HAS SUCCESSFULLY COMPLETED THE

7th International Biannual Symposium on Nasopharyngeal Carcinoma

ROYAL AMBARUKMO HOTEL YOGYAKARTA INDONESIA, 4-6 JUNE 2015

**7th Biannual International Symposium
on Nasopharyngeal Carcinoma 2015
Yogyakarta**




dr. Johan Kurnianda, SpPD - KHOM
Chairperson

**7th Biannual International Symposium
on Nasopharyngeal Carcinoma
2015**



SKP IDI No.049/IDI/WIL.DIY/SKP/III/2015 tanggal 30 Maret 2015
Participant: 16 SKP Speaker: 12 SKP Moderator: 4 SKP Committee: 2 SKP



Non-Viral Risk Factors for Nasopharyngeal Carcinoma in West Sumatra, Indonesia

Sukri Rahman¹, Bestari Budiman¹, Novialdi¹, Rahmadona¹, Dewi Y Lestari¹

Dept. Otorhinolaryngology Head and Neck Surgery, Faculty of Medicine
Andalas University, Padang, Indonesia



Introduction

Nasopharyngeal carcinoma (NPC) is a unique cancer with incidence varies widely according to geographic location and ethnic background. Many studies have shown that the etiology of NPC is multifactorial, including genetic, viral infection and environmental factors. NPC is a frequent cancer in Indonesia, it is also the most common head and neck cancer in West Sumatra. Indonesia has diverse ethnic groups with a variety of lifestyle and cultural foods. The Minangkabau one ethnic in Indonesia which is the main population of west Sumatra province.

Purpose

The purpose of this study is to investigate non-viral factors which increase the risk of NPC in West Sumatra.

Methods

A case-control study was conducted among 33 newly diagnosed case of NPC in Dr. M. Djamil General Hospital from January 2013 to December 2014 and 33 controls matched to case on sex and age (± 5 years). Data were collected for demographic characteristics and exogenous factors using questionnaire through face to face interviews. Odds ratio (ORs) and corresponding 95% confidence intervals (CIs) were estimated.

Results

Observation indicates that burning of anti-mosquito coils was associated with an increased risk of NPC (OR= 3.54, 95% CI 1.28-9.80). Wood dust exposure (OR= 3.63 95% CI 1.02-12.93) and family history of NPC (OR= 2.06 95% CI 1.60-2.66) were also associated with a higher risk. Salted fish consumption was more frequent for case than control, but the difference was not significant. (OR= 2.51, 95% CI 0.90-7.00) Our result indicates that there were no association between NPC and preserved meat (OR= 3.20, 95% CI 0.31-32.47), tobacco smoking (OR= 2.37, 95% CI 0.88-6.35), alcohol consumption (OR= 1.24, 95% CI 0.34-4.56), wood fire (OR= 2.30 95% CI 0.80-6.60), herbal medicine (OR= 0.31 95% CI 0.31-3.17), past history of ear, nose and throat chronic disease and pesticides exposure (Table 1).

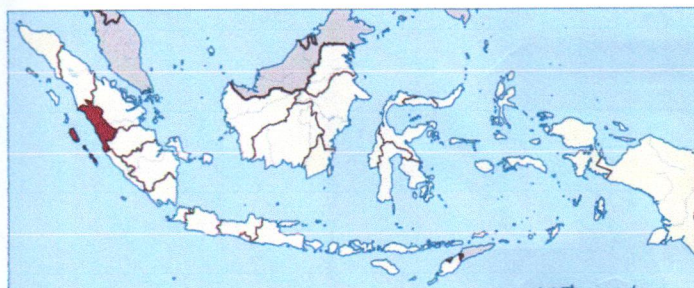


Figure 1. West Sumatra

Table 1. Odds Ratios

Risk Factors	Cases (%)	Controls (%)	OR	95% CI
Salted fish consumption				
> 3 times/month	16 (48.5)	9 (27.3)	2.51	0.90-7.00
< 3 times/month	17 (51.5)	24 (72.7)		
Tobacco smoking				
Yes	20 (60.6)	13 (39.4)	2.37	0.88-6.35
No	13 (39.4)	20 (60.6)		
Alcohol intake				
Yes	6 (18.2)	5 (15.2)	1.24	0.34-4.56
No	27 (81.8)	28 (84.8)		
Wood dust exposure				
Yes	11 (33.3)	4 (12.1)	3.63	1.02-12.93
No	22 (66.7)	29 (87.9)		
Preserved meat				
> 3 times/month	3 (9.1)	1 (3.0)	3.20	0.31-32.47
< 3 times/month	30 (90.9)	32 (97.0)		
Wood fire				
> 10 years	14 (42.4)	8 (24.2)	2.30	0.80-6.60
< 10 years	19 (57.6)	25 (75.8)		
Anti-mosquito coils burning				
> 3 times/month	20 (60.6)	10 (30.3)	3.54	1.28-9.80
< 3 times/month	13 (39.4)	23 (69.7)		
Pesticide exposure				
Yes	15 (45.5)	8 (24.2)	2.60	0.91-7.44
No	18 (54.5)	25 (75.8)		
Family history of NPC				
Yes	2 (6.1)	0 (0.0)	2.06	1.60-2.66
No	31 (93.9)	33 (100)		
Herbal medicine/ jamu				
> 3 times/month	1 (3.0)	3 (9.1)	0.31	0.31-3.17
< 3 times/month	32 (97.0)	30 (90.9)		
Past history of ENT chronic disease				
Yes	9 (27.3)	6 (18.2)	1.69	0.52-5.44
No	24 (72.7)	27 (81.8)		
Randang				
> 3 times/month	5 (15.2)	3 (9.1)	1.78	0.39-8.17
< 3 times/month	28 (84.8)	30 (90.9)		

Conclusion

Our results suggest that use of anti-mosquito coils, exposure to wood dust and family with NPC associated with the development of NPC in the West Sumatra population.

References

1. Jia WH1, Qin HD. Non-viral environmental risk factors for nasopharyngeal carcinoma: a systematic review. *Semin Cancer Biol.* 2012 ;22(2):117-26.
2. Rahman S, Subroto H, Novianti D. Clinical Presentation of Nasopharyngeal Carcinoma in West Sumatra Indonesia. *Proceeding of the 20th International Federation of Otorhinolaryngological Societies (IFOS) World Congress;2013 June 1-5; Seoul, Korea.* 2013.
3. Guo X, Johnson RC, Deng H, Liao J, Guan L, Nelson GW, et al. Evaluation of nonviral risk factors for nasopharyngeal carcinoma in a high-risk population of Southern China. *Int J Cancer.* 2009; 122(12): 2942-7.



7th NPC 2015