and an experience and angeing of

## Letter to the Editor

# Iranian J Publ Health, Vol. 43, No.3, Mar 2014, pp. 385-386

# Does Menthol-Brand Cigarette Initiate Early Smoking? Evidence from a Cross Sectional Study in Sarawak, Malaysia

\*Md Mizanur RAHMAN, Mohd Taha ARIF, Mohd Fadzillah Abd RAZAK, Mohd Raili bin SUHAILI, Zainab TAMBI, Clifton AKOI, Deburra Peak NGADAN

Faculty of Medicine and Health Sciences, Universiti Malaysia Sarawak

\*Corresponding Author: Email: rmizanur1958@gmail.com

(Received 10 Feb 2013; accepted 21 Feb 2014)

#### Dear Editor-in-Chief

Menthol cigarettes have been found to be more addictive and a higher difficulty of smoking cessation among smokers (1). The impact of menthol cigarette smoking, including nicotine dependence is worrying the public (2-4) and the younger generation (5) globally. Menthol cigarettes are associated with increasing trend of smoking initiation among young non-smoking women (6) and young male adults (7) as well. Several factors have been found to be associated with the initiation of menthol cigarette smoking, including those trying to start smoking (8), female (8, 9), those who smoked less frequently (8) and being of younger age (2). We conducted a cross-sectional study among the adult population in Sarawak. Data were collected from ten villages in Kota Samarahan and Kuching Division by face to face interview using modified Global Adult Tobacco Survey questionnaire. Non-probability sampling method was adopted to select the villages. After missing value imputation, 1000 data sets were analyzed using statistical software SPSS 19.0 version. We found that 28.8% of the respondents were current smokers. Among the current smokers, 56.3% were habituated with menthol brand cigarette. Binary logistic regression analysis revealed that age at initiation of smoking before 15 years of age (OR=11.68), smoking within five minutes of wake up from sleep (OR=3.20) which was considered as proxy variable of nicotine dependence, nature of job as business (OR=4.81) and service holders (OR=3.85) and family size 5 and above (OR=2.22) appeared to be important determinants of smoking any menthol brand cigarette (P<0.05).

We concluded that male respondents started smoking cigarette during younger age group. The age of initiation before 15 years was a determinant for menthol preference, indicating an early age of trial and initiation among mentholated cigarette smokers. The longer duration of smoking among menthol smokers suggested that menthol was a method to attract and retain the younger smokers, even though the number of cigarettes per day was lower.

### Acknowledgements

We acknowledge the financial help rendered by Universiti Malaysia Sarawak through a grant (FPI (F05) /70/2012 (30)). We declare that there is no conflict of interest.

### References

 Kreslake JM, Wayne GF, Alpert HR, Koh HK, Connolly GN (2008). Tobacco industry control of menthol in cigarettes and targeting of



adolescents and young adults. *Am J Public Health*, 98 (9):1685-92.

- Ahijevych K, Garrett BE (2010). The role of menthol in cigarettes as a reinforcer of smoking behaviour. Nicotine & Tobacco Research, 12(suppl 2), S110–S116.
- Hersey JC, Nonnemaker JM, Homsi G (2010). Menthol cigarettes contribute to the appeal and addiction potential of smoking for youth. *Nicotine & Tobacco Research*, 12 (Suppl 2), S136– S146.
- Hoffman AC, Simmons D (2011). Menthol cigarette smoking and nicotine dependence. *Tobacco Induced Diseases*, 9(Suppl 1), S5. doi:10.1186/1617-9625-9-S1-S5. Retrieved: http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3102904/pdf/1617-9625-9-S1-S5.pdf. [Accessed on 30 October 2013]

- Hoffman AC (2011). Introduction: Mentholated cigarettes and public health. *Tobacco Induced Dis*eases, 9, 1–1.
- Connolly GN, Behm I, Osaki Y, Wayne GF (2011). The impact of menthol cigarettes on smoking initiation among non-smoking young females in Japan. *Int. J. Emviron. Res. Public Health*, 8 (1), 1–14. doi:10.3390/ijerph8010001.
- Rising J, Wasson-Blader K (2011). Menthol and initiation of cigarette smoking. *Tobacco Induced Diseases*, 9(suppl 1), S4.
- Fernander A, Rayens MK, Zhang M, Adkins S (2010). Are the age of smoking initiation and purchasing patterns associated with menthol smoking? *Addiction*, 105 (s1), 39–45.
- Caraballo RS, Asman K (2011). Epidemiology of menthol cigarette use in the United States. *Tobacco Induced Diseases*, 9(suppl 1), S1.