



TOBACCO ISSUES IN BASIC MEDICAL PRACTICE AND PROFESSIONALISM

Copyright © Quit Tobacco International [2010]. All contents copyrighted. All rights reserved. The Arizona Board of Regents, University of Arizona, Tucson, Arizona, USA.

Funding for Quit Tobacco International is provided by the U.S. National Institutes of Health, Fogarty International Centre (R01 TW05969-01, RO1TW007944-01).

Quit Tobacco International, including development of the curriculum, is a team effort, in which individuals have different responsibilities as described below:

Lead institution(s) involved in module development

Gadjah Mada University, Indonesia

Dr. Nawi Ng, MD, MPH, PhD

Dr. Arika Dewi, MD, MPH

Dr. Wika Hartanti, MD

**Sree Chitra Tirunal Institute for
Medical Sciences and Technology, India**

Dr K R Thankappan, MD

Dr Meena Daivadanam, MBBS, MPH

Dr Thankachy Ramachandran Yamini, MBBS, MPH

University of Arizona, USA

Dr. Mimi Nichter, PhD

Dr. Mark Nichter PhD, MPH

Dr. Myra Muramoto, MD, MPH

Charla Dain, MM

Partner institutions participating in pilot testing

India:

Academy of Medical Sciences, Pariyaram, Kerala

Amrita School of Medicine, Kochi, Kerala

Bangalore Medical College, Bangalore, Karnataka

Kasturba Medical College, Mangalore, Karnataka

TD Government Medical College, Alappuzha, Kerala

Indonesia:

Gadjah Mada University, Yogyakarta

Hasanuddin University, Makasar, South Sulawesi

Muhammadiyah University of Yogyakarta

Islamic University of Indonesia, Yogyakarta

Acknowledgements:

The following individuals also made significant contributions to the preparation of the final module materials:

Dr. A. S. Pradeepkumar MBBS, MPH, PhD. Deputy Director, District Health Services, Trivandrum, Kerala. Formerly, Senior Research Fellow, Quit Tobacco India Project, AMCHSS, SCTIMST, Trivandrum.

TOBACCO ISSUES IN BASIC MEDICAL PRACTICE AND PROFESSIONALISM

I. GOAL OF MODULE: Provide students with knowledge and skills related to tobacco issues in basic medical practice

II. TARGET AUDIENCE

- a. Level of Student/Learner: *1st semester students*
- b. Suggested Course or Subject: *Community medicine*

III. LEARNING OBJECTIVES

- Understand the global and national burden of tobacco use
- Understand why tobacco use is a risky behavior for patients and their families
- List at least three roles of doctors in advancing tobacco control

IV. CURRICULUM STANDARDS ADDRESSED:

The Community Medicine Department has the broad goal of teaching students and preparing them to function as community and first level physicians in accordance with institutional goals.

- It provides knowledge of the demographic pattern of the country and appreciates the role of the individual, family, community and socio-cultural milieu in health and disease.
- It also helps in identifying environmental and occupational hazards and their control and understanding the principles of health economics, health administration, health education in relation to the community.

Skills:

- Students can use epidemiology as a scientific tool to make rational decisions relevant to community and individual patient intervention.
- Students develop capabilities of synthesis between cause of illness in the environment or community and individual health and respond with leadership qualities to institute remedial measures for this.

V. MINI-LECTURES

MINI LECTURE 1: BURDEN OF TOBACCO

CORE SLIDES

1. Death Toll of Tobacco: 2005
2. Deaths from Tobacco Compared to Deaths from Other Causes
3. Smoking Prevalence in India
4. Use of Smokeless Tobacco in India

5. Morbidity from Tobacco Use
6. What if We Could Reduce Rates of Smoking to 20%?

OPTIONAL SLIDES

1. Global Cigarette Consumption
2. Percentage of Adult Smokers in ASEAN (South East Asian) Countries
3. Percentage of Adolescent Smokers in ASEAN (South East Asian) Countries, 2007
4. Deaths Attributed to Smoking in Developed and Developing Countries, 2000
5. Smoking Attributable Deaths Are Dramatically Increasing Worldwide
6. Cigarette Consumption in India
7. Deaths Attributed to Tobacco Use in 1990 and 2020 by Region
8. Who Uses Tobacco in India?

MINI LECTURE 2: TOBACCO USE IS A RISKY BEHAVIOR

CORE SLIDES

1. Diversity in Tobacco Use: India (1)
2. Diversity in Tobacco Use: India (2)
3. Diversity in Tobacco Use: India (3)
4. Chew Products: India
5. Smoking Harms Nearly Every Organ of the Body
6. Every Cigarette Is Harmful
7. Are Beedies More Dangerous than Cigarettes?
8. Major Health Effects from Oral Tobacco Use
9. Secondhand Smoke (SHS)
10. Economic Impact of Tobacco on Family and Nation

OPTIONAL SLIDES

1. Harm of Tobacco
2. Major Health Effects from Oral Tobacco Use
3. Even Light Smoking Is Harmful
4. Tobacco Expenditure in India

MINI LECTURE 3: ROLE OF THE DOCTOR IN TOBACCO CONTROL

CORE SLIDES

1. Doctors and Cessation Efforts
2. Role of Physicians in Tobacco Cessation
3. Benefits of Health Professional's Offering Cessation Advice
4. Knowledge and Practice of Tobacco cessation among Indian physicians

OPTIONAL SLIDES

1. Prevalence of Smoking among Doctors in the US

2. Current Smoking among Doctors and Medical Students in India

VI. CASE DISCUSSION / CLINICAL SCENARIO AND SKILLS CHECKLIST

a. Case Scenario

Overview

Here students are asked to practice integrated communication with patients during case discussions under supervision of instructors, in order to develop their smoking cessation skills. Students will be trained to routinely ask about patients' smoking status in every case. After obtaining patients' current smoking status, students will then practice how to assess patients' readiness to quit, advise and assist patients to quit smoking, and also arrange follow ups to monitor patients' smoking cessation progress. Therefore students will also learn how to deliver efficient encouragement and provide proper explanation about the harm of tobacco on health to help patients on their smoking cessation attempts.

Introduction

To control the tobacco epidemic, all parties should work together in a strategic and sustainable way, including the health professionals. Simple advice from a physician has been shown to increase abstinence rates significantly (by 30%) compared to no advice. Likewise, nursing-led interventions for smoking cessation increase by 50% the chances of successfully quitting. To be able to give advice, doctors must ask patients about tobacco use. This should be integrated into assessments of every patient.

Learning Objective

Upon the completion of this skills laboratory practice, students are expected to be able to:

- Routinely ask all the patients about their smoking status
- Assess patients' readiness to quit
- Advise patients to quit smoking
- Assist the patients to quit
- Arrange follow ups on patients' smoking cessation progress

Asking the patients' smoking history

Doctors need patients' information to determine diagnosis and decide treatment, and the patient is obligated to give the information to their doctor. Although a major risk factor for many acute and chronic diseases, smoking is rarely asked about by doctor to their patients.

In a survey done by QTI, 77% of Indonesian doctors did not routinely ask patients about smoking. This situation has made doctors lose the opportunity to advise patients to quit and for patients to receive help from doctors to quit. Research studies show that if doctors have a reminder to ask about smoking, e.g. smoking status is part of the vital signs, doctors are three times more likely to advise patients to quit. (Fiore et al. 2000)

There are several important factors that should be considered when we are asking the patients' smoking history, i.e.: 1) asking the smoking status of all patients (including women and teenagers); 2) if a patient does not smoke, they should be asked if they have ever smoked (because even after quitting, a smoker can start again); 3) questions should be delivered in a non-critical manner; 4) evaluate the patients' smoking history (how many cigarettes they smoke daily, do they use any other forms of tobacco); and 5) make a note on the patients' smoking status in the medical record (maybe you can place patients' smoking status on your patients' card).

Case Scenario:

Vital Signs

Blood Pressure:

Pulse:

Body Weight:

Temperature:

Smoking Status: Smoker Ex-Smokers Never Smoke (*Circle one*)

Case # 1

Taxation is one of the most effective measures for tobacco control, forcing consumption levels down over time especially among price-sensitive sections of the population. But although India has progressively increased taxes on cigarettes, it's been difficult taxing beedies. While cigarettes are priced at Rs 50–80 for a pack of 20, a similar pack of beedies costs Rs 4–5, and chewing tobacco Rs 1. Yet smoking prevalence in India has increased according to the NFHS 2005–2006. What are the arguments for and against this? How can we overcome these obstacles?

Checklist of Encounter Simulated Patient

No.	Aspects	Tick if student has asked during history taking
	Ask	
1.	• Ask patient whether he/she smokes or not	

2.	• If the patient doesn't smoke, ask whether he/she ever smoked before	
3.	• If the patient smokes, ask how many cigarettes he/she takes per day	
	Assess	
4.	• Assess patient's readiness to quit.	
	Advise	
5.	• Advise patient to quit smoking	
6.	• Personalize advice by using the tobacco user's health status/disease	
	Assist	
7.	• Assist the patient to quit by giving him/her pamphlets, brochures	
	Arrange for Follow-up	
8.	• Arrange to follow up on tobacco use	

Points of discussion:

- 1. Livelihood argument:** That fighting tobacco consumption negatively impacts tobacco farmers. Tobacco farming is lucrative—the *Tobacco Institute of India*, a tobacco industry magazine, reports in its June 2008 issue that for that year production, auction prices, and exports of Flue Cured Virginia (FCV) tobacco touched one of its highest levels ever. The editorial notes that the average rate per kilo of FCV tobacco in the Andhra auction climbed to Rs 84 that year as against the previous year's Rs 47; farmers earned Rs 585 crore more than last year. A substitute crop for tobacco is yet to be found which can compensate for the loss that the farmers would incur if they stop tobacco cultivation.
- 2. Political clout of cash-rich tobacco companies:** It was decided that warning labels would be depicted on the packets of cigarettes and chewing tobacco for consumers to know their effects. The pictures initially decided on were those of a dead baby and a cancerous lung, they have been modified to those of a scorpion.
- 3. Legislation:** Starting October 2, 2008, smoking in offices and private establishments—covering shopping malls, cinema halls, public/private workplaces, hotels, banquet halls, discotheques, canteens, coffee houses, pubs, bars, airport lounges, and railway stations—would be banned in line with the revised rules of the Act pertaining to the prohibition of smoking in public places. The issue of tobacco consumption still receives minimal attention. Implementation with regard to prohibiting smoking in public places and selling tobacco products to minors is absent; many small shops sell tobacco products near schools and people smoke with alacrity in restaurants and on the streets. There is no implementation mechanism in place to enforce legislation.
- 4. National Tobacco Control Programme:** Discuss.

1. FACT SHEET

The fact sheets are to be used by the tutor to supplement the discussion about the scenario. This fact sheet will address background information on tobacco that could be relevant to the scenario.

Tobacco and Poverty

1. There is a vicious circle between tobacco and poverty.
2. Smoking habit is inversely correlated with socio-economic status. The prevalence of smokers in the population with lower socio-economic status is higher than the prevalence of smokers in the population with higher economic status.
3. Regardless of a country's income, poorer individuals were more likely to use tobacco, accounting for much of the mortality gap between rich and poor.
4. Smoking rates among the uneducated or less educated outstrip rates among the more educated in low- and middle-income countries, including Brazil, Cambodia, China, India, and Viet Nam.
5. Household expenditure surveys show that low income households spend 5–15% of their disposable income on tobacco.
6. By diverting limited household income to tobacco the family capacity to seek medical attention for a sick child or to send children to school is reduced besides cutting access to food.
7. Over 20 million people are engaged in tobacco agriculture. In addition, many people are involved in retail sales of tobacco products.
8. Households of sick smokers lose income due to (de Beyer et.al., 2001):
 - Lost wages when the ill cannot work.
 - Direct + indirect cost of medical care.
 - Opportunity cost: divert resources away from other purposes like child's education, support for elders.

Tobacco and Tuberculosis

1. TB and tobacco are two massive related health problems in Indonesia.
2. Indonesia is a country with the third largest number of TB sufferers in the world after India and China.
3. TB is the number one killer among infectious diseases and number three on the list of ten leading killer diseases in Indonesia (after cardiovascular and acute respiratory disease).
4. In Indonesia, nearly 300 people die of TB every day, and more than 100,000 people die per year.
5. Most TB patients are still in the productive ages of 15 to 55 years old.
6. The risk of getting TB is 1.8 times higher for light smokers compared to non-smokers, and 3.7 times higher for heavy smokers compared to non smokers.
7. The risk of dying from TB is 4.5 times higher for smokers compared to non-smokers.
8. The risk of TB relapse is 3 times higher for those who smoked following a short course of TB treatment.

3. INSTRUCTOR KEY RESOURCES/REFERENCES

1. de Beyer J, Lovelace C, Yurekli A. Poverty and tobacco. *Tob Control*. 2001; 10(3):210–11.
2. Lopez AD, Collishaw NE, Piha T. A descriptive model of the cigarette epidemic in developed countries. *Tob Control*. 1994; 3(3):242–7.
3. World Health Organization. WHO Framework Convention on Tobacco Control. Geneva: World Health Organization; 2003.
4. World Health Organization. WHO Report on the Global Tobacco Epidemic. Geneva: World Health Organization; 2008.
5. US Department of Health and Health Services and Centers for Disease Control. Health consequences of tobacco use: a report of the Surgeon General. Washington, D.C.: United States Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health; 2004.
6. Shadel WG, Shiffman S, Niaura R, Nichter M, Abrams DB. Current models of nicotine dependence: what is known and what is needed to advance understanding of tobacco etiology among youth. *Drug Alcohol Depend*. 2000; 59(Suppl 1):S9–22.

4. SUPPORT KEY REFERENCES

1. Report on Tobacco Control in India. Reddy KS, Gupta PC, editors. Ministry of Health & Family Welfare, Government of India, Centers for Disease Control and Prevention, USA & World Health Organization; 2004.
2. Mohan S, Pradeepkumar AS, Thresia CU, Thankappan KR, Poston WSC, Haddock CK, et al. Tobacco use among medical professionals in Kerala, India: the need for enhanced tobacco cessation and control efforts. *Addict Behav*. 2006; 31(12):2313–18.
3. Thankappan KR, Pradeepkumar AS, Nichter Mark. Doctors' behaviour and skills for tobacco cessation in Kerala. *Indian J Med Res*. 2009; 129:249–55.
4. John RM. Crowding out effect of tobacco expenditure and its implications on household resource allocation in India. *Soc Sci Med*. 2008; 66(6):1356–67.
5. Government of India, IIPS, National Family Health Survey III (2005–06), Mumbai; 2007.

5. REFERENCE LIST FOR MODULE

MINI LECTURE 1 [*Burden of Tobacco*]

1. de Beyer J, Lovelace C, Yurekli A. Poverty and tobacco. *Tob Control*. 2001; 10(3):210–11.
2. Lopez AD, Collishaw NE, Piha T. A descriptive model of the cigarette epidemic in developed countries. *Tob Control*. 1994; 3(3):242–47.

3. World Health Organization. WHO Framework Convention on Tobacco Control. Geneva: World Health Organization; 2003.
4. Mathers CD, Loncar D. Projections of global mortality and burden of disease from 2002 to 2030. *PLoS Med.* 2006; 3(11): e442. doi:10.1371/journal.pmed.0030442.
5. Peto R, Lopez A. Future worldwide health effects of current smoking patterns. In: Koop C et al., editors. *Critical Issues in Global Health*. San Francisco: Jossey-Bass; 2002. P. 154–61.
6. Davies PD, Yew WW, Ganguly D, Davidow AL, Reichman LB, Dheda K, Rook GA. Smoking and tuberculosis: the epidemiological association and immunopathogenesis. *Trans R Soc Trop Med Hyg.* 2006; 100:291–8.
7. TFI (Tobacco Free Initiative) (2004) Why is tobacco a public health priority? World Health Organization; December 12, 2004.
8. Murray CJ, Lopez AD, editors. *The global burden of disease: a comprehensive assessment of mortality and disability from diseases, injuries and risk factors in 1990 and projected to 2020*. Cambridge, MA: Harvard School of Public Health; 1996.
9. Stillman FA, Wipfli H. New century: same challenges. *Br J Cancer.* 2005; 92:1179–81.
10. Jamison DT, Breman JG, Measham AR, Alleyne G, Claeson M, Evans DB, et al., editors. *Priorities in health*. Washington, DC: World Bank; 2006.
11. Ezzati M, Lopez AD. Regional, disease-specific patterns of smoking-attributable mortality in 2000. *Tob Control.* 2004; 13(4):388–94.
12. Twombly R. World Health Organization takes on “tobacco epidemic.” *JNCI.* 2002; 94(9):644–6.
13. Murray CJL, Lopez AD. Alternative projections of mortality and disability by cause 1990–2020: Global Burden of Disease Study. *Lancet.* 1997; 349(9064):1498–504.
14. Thankappan KR, Mini GK. Case-control study of smoking and death in India. *New Engl J Med.* 2008; 358:2842–3.
15. Government of India, IIPS, National Family Health Survey II (1998–99), Mumbai; 2000.
16. Government of India, IIPS, National Family Health Survey III (2005-06), Mumbai; 2007.
17. Ministry of Health, Basic Health Research 2007. Republic of Indonesia, 2008.
18. Ministry of Health, Basic Health Research 2010. Republic of Indonesia, 2010.
19. Nichter, Mark, for the Project Quit Tobacco International Group. Introducing tobacco cessation in developing countries: an overview of Project Quit Tobacco International. *Tob Control.* 2006; 15(Suppl I):i12–i17.
20. Nichter, Mark, Nichter, Mimi, Padmawati S, Thresia CU, and Project Quit Tobacco International Group. Anthropological contributions to the development of culturally appropriate tobacco cessation programs: a global health priority. In: Hahn R, Inhorn M, editors. *Anthropology and public health*. Oxford University Press; 2009. P. 298–331.
21. Frieden TR, Bloomberg MR. How to prevent 100 million deaths from tobacco. *Lancet.* 2007; 369(9574):1758–61.
22. SEATCA (South East Asian Tobacco Control Alliance), The ASEAN Tobacco Control Report Card, 2008.

23. Proctor RN. The global smoking epidemic: a history and status report. *Clin Lung Cancer*. 2004; 5(6):371–6.
24. World Health Organization. WHO Report on the Global Tobacco Epidemic. Geneva: World Health Organization; 2008.
25. Shimkhada R, Peabody JW. Tobacco control in India. *Bull WHO* 2003; 81:48–52.
26. Goldstein H. Multilevel statistical models. 3rd ed. London: Arnold; 2003.
27. Subramanian SV, Nandy S, Kelly M, Gordon D, Davey-Smith G. Patterns and distribution of tobacco consumption in India: cross sectional multilevel evidence from the 1998–9 national family health survey. *BMJ*. 2004; 328:801–6.

MINI LECTURE 2 [*Tobacco is a Risky Behaviour for Patients and Families*]

1. World Health Organization. WHO Report on the Global Tobacco Epidemic. Geneva: World Health Organization; 2008.
2. Shadel WG, Shiffman S, Niaura R, Nichter M, Abrams DB. Current models of nicotine dependence: what is known and what is needed to advance understanding of tobacco etiology among youth. *Drug Alcohol Depend*. 2000; 59(Suppl 1):S9-22.
3. Benowitz NL. Neurobiology of nicotine addiction: implications for smoking cessation treatment. *Am J Med*. 2008; 121:S3-10.
4. Report on Tobacco Control in India. Reddy KS, Gupta PC, editors. Ministry of Health & Family Welfare, Government of India, Centers for Disease Control and Prevention, USA & World Health Organization; 2004.
5. US Department of Health and Health Services and Centers for Disease Control. Health consequences of tobacco use: a report of the Surgeon General. Washington, D.C.: United States Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health; 2004.
6. Jayant K, Pakhale S. Toxic constituents in bidi smoke. In L.V. Sanghi LV, Notani P (Eds). *Tobacco and health: the Indian scene*. Bombay: Tata Memorial Centre; 1989. Pp 101–10.
7. Gupta PC, Ball K. India: tobacco tragedy. *Lancet*. 1990; 335:594–5.
8. Halarnkar, S. Paan Masala: A New Way to Die? *India Today*. 1997; August 11:72–3.
9. Wynder EL, Hoffmann D. Some practical aspects of the smoking and cancer problem. *N Engl J Med*. 1960; 262:540–5.
10. McNeill A. ABC of smoking cessation harm reduction. *BMJ*. 2004; 328:885–7; doi:10.1136/bmj.328.7444.885.
11. Mohan S, Pradeepkumar AS, Thresia CU, Thankappan KR, Poston WSC, Haddock CK, et al. Tobacco use among medical professionals in Kerala, India: the need for enhanced tobacco cessation and control efforts. *Addict Behav*. 2006; 31(12):2313–18.
12. Nichter, Mimi, Nichter, Mark, Van Sickle D. Popular perceptions of tobacco products and patterns of use among male college students in India. *Soc Sci Med*. 2004; 59:415–31.

13. Gupta PC, Pednekar MS, Parkin DM, Sankaranarayanan R. Tobacco associated mortality in Mumbai (Bombay) India. Results of the Bombay Cohort Study, *Int J Epidemiol*. 2005; 34(6):1395–402. Epub 2005 Oct 25.
14. Vineis P, Alavanja M, Buffler P, Fontham E, Franceschi S, Gao YT, et al. Tobacco and cancer: recent epidemiological evidence. *J Natl Cancer Inst*. 2004; 96(2):99–106.
15. Rahman M, Chowdhury AS, Fukui T, Hira K, Shimbo T. Association of thromboangiitis obliterans with cigarette and bidi smoking in Bangladesh: a case-control study. *Int J Epidemiol*. 2000; 29:266–70.
16. Ray CS, Gupta PC. Bidis and smokeless tobacco, *Curr Sci*. 2009; 96(10):1324–34.
17. Lall KB, Singhi S, Gurnani M, Singhi P, Garg OP. Somatotype, physical growth, and sexual maturation in young male smokers. *J Epidemiol Community Health*. 1980; 34(4):295–8.
18. Suhardi. Smoking behavior in Indonesia. National Household Survey Series. Jakarta, Indonesia: Department of Health, 1997.
19. Achadi A, Soerojo W, Barber S. The relevance and prospects of advancing tobacco control in Indonesia. *Health Policy*. 2005; 72:333–49.
20. Knaresborough K. Health effects of interaction between tobacco use and exposure to other agents. Geneva, Switzerland: WHO, 1999.
21. Maison, JL, Lee EM, Murty R et al. Clove cigarette smoking: biochemical, physiological, and subjective effects. *Pharmacol Biochemical Behavior*. 2003; 74:739–45.
22. Critchley JA, Unal B. Health effects associated with smokeless tobacco: a systematic review. *Thorax*. 2003; 58:435–43.
23. Moore SR, Johnson NW, Pierce AM, Wilson D. The epidemiology of mouth cancer: a review of global incidence. *Oral Dis*. 2000; 6:65–74.
24. Ayo-Yusuf OA, Reddy PS, van den Borne BW. Association of snuff use with chronic bronchitis among South African women: implications for tobacco harm reduction. *Tob Control*. 2008; 17:99-104.
25. Gupta PC, Sreevidya S. Smokeless tobacco use, birth weight, and gestational age: population based, prospective cohort study of 1217 women in Mumbai, India. *BMJ*. 2004; 328:1538.
26. Boffetta P, Aagnes B, Weiderpass E, Andersen A. Smokeless tobacco use and risk of cancer of the pancreas and other organs. *Int J Cancer*. 2005; 114:992–5.
27. Teo KK, Ounpuu S, Hawken S, Pandey MR, Valentin V, Hunt D, et al. Tobacco use and risk of myocardial infarction in 52 countries in the INTERHEART study: a case-control study. *Lancet*. 2006; 368:647–58.
28. Winn DM, Blot WJ, Shy CM, Pickle LW, Toledo A, Fraumeni JF. Snuff dipping and oral cancer among women in the southern United States. *N Engl J Med*. 1981; 304:745–9.
29. US Department of Health and Health Services and Centers for Disease Control. The Health Consequences of Involuntary Exposure to Tobacco Smoke: a report of the Surgeon General. Washington, D.C.: United States Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health; 2006.

30. Metsios GS, Flouris AD, Angioi M, Koutedakis Y. Passive smoking and the development of cardiovascular disease in children: a systematic review. *Cardiol Res Pract.* 2010 Aug 29;2011. pii: 587650.
31. de Beyer J, Lovelace C, Yurekli A. Poverty and tobacco. *Tob Control.* 2001; 10(3):210–11.
32. Efroymsen D, Ahmed S, Townsend J, Alam SM, Dey AR, Saha R, et al. Hungry for tobacco: an analysis of the economic impact of tobacco consumption on the poor in Bangladesh. *Tob Control.* 2001; 10:212-17.
33. Glantz S, Gonzalez M. Effective tobacco control is key to rapid progress in reduction on non-communicable diseases. *Lancet.* 2011; 378(Sept. 29): doi:10.1016/S0140-6736(11)60615-6. E-pub ahead of print.
34. <http://www.cancer.gov/cancertopics/factsheet/Tobacco/cessation>
35. Lee C-H, Ko Y-C, Huang H-L, Chao Y-Y, Tsai C-C, Shieh T-Y, et al. The precancer risk of betel quid chewing, tobacco use and alcohol consumption in oral leukoplakia and oral submucous fibrosis in southern Taiwan. *Br J Cancer.* 2003; 88:366–72.
36. Henley SJ, Connell CJ, Richter P, Husten C, Pechacek T, Calle EE, et al. Tobacco-related disease mortality among men who switched from cigarettes to spit tobacco. *Tob Control.* 2007; 16:22–8.
37. Avti PK, Kumar S, Pathak CM, Vaiphei K, Khanduja KL. Smokeless tobacco impairs the antioxidant defense in liver, lung, and kidney of rats. *Toxicol Sci.* 2006; 89(2):547–53.
38. Schroeder KL, Chen MS Jr. Smokeless tobacco and blood pressure. *New Engl J Med.* 1985; 312(14):919.
39. Prescott E, Scharling H, Osler M, Schnohr P. Importance of light smoking and inhalation habit on risk of myocardial infarction and all cause mortality. A 22 year follow-up of 12 149 men and women in The Copenhagen Heart Study. *J Epidemiol Community Health.* 2002; 56:702–6.
40. John RM. Crowding out effect of tobacco expenditure and its implications on household resource allocation in India. *Soc Sci Med.* 2008; 66(6):1356–67.
41. Bonu S, Rani M, Peters DH, Jha P, Nguyen SN. Does use of tobacco or alcohol contribute to impoverishment from hospitalization costs in India? *Health Policy Plan.* 2005; 20(1):41–9.

MINI LECTURE 3 [Role of the Doctor in Tobacco Control]

1. World Health Organization. *The Role of Health Professional in Tobacco Control.* Geneva: World Health Organization; 2005.
2. US Department of Health and Health Services and Centers for Disease Control. *Health consequences of tobacco use: a report of the Surgeon General.* Washington, D.C.: United States Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health; 2004.
3. Shadel WG, Shiffman S, Niaura R, Nichter M, Abrams DB. Current models of nicotine dependence: what is known and what is needed to advance understanding of tobacco etiology among youth. *Drug Alcohol Depend.* 2000; 59(Suppl 1):S9–22.

4. Benowitz NL. Neurobiology of nicotine addiction: implications for smoking cessation treatment. *Am J Med.* 2008; 121:S3–10.
5. Fiore MC, Jaén CR, Baker TB, Bailey WC, Benowitz NL, Curry SJ, et al. Treating tobacco use and dependence: 2008 update. Clinical practice guideline. Rockville, MD: U.S. Department of Health and Human Services. Public Health Service; 2008.
6. Ng N, Prabandari YS, Padmawati RS, Okah F, Haddock CK, Nichter M, et al. Physician assessment of patient smoking in Indonesia: a public health priority. *Tob Control.* 2007; 16(3):190–6.
7. Lancaster T, Stead L. Physician advice for smoking cessation. *Cochrane Database Syst Rev.* 2004; 4:CD000165.
8. Thankappan KR, Pradeepkumar AS, Nichter M. Doctors' behaviour and skills for tobacco cessation in Kerala. *Indian J Med Res.* 2009; 129:249–55.
9. Garfinkel L, Stellman SD. Cigarette smoking among physicians, dentists, and nurses. *CA Cancer J Clin.* 1986; 36:2–8.
10. Patkar AA, Hill K, Batra V, Vergare MJ, Leone FT. A comparison of smoking habits among medical and nursing students. *Chest.* 2003; 124:1415–20.
11. Nelson DE, Giovino GA, Emont SE, et al. Trends in cigarette smoking among US physicians and nurses. *JAMA.* 1994; 271:1273–5.
12. Mohan S, Pradeepkumar AS, Thresia CU, Thankappan KR, Poston WSC, Haddock CK, et al. Tobacco use among medical professionals in Kerala, India: the need for enhanced tobacco cessation and control efforts. *Addict Behav.* 2006; 31(12):2313–18.
13. Nichter, Mimi, Nichter, Mark, Van Sickle D. Popular perceptions of tobacco products and patterns of use among male college students in India. *Soc Sci Med.* 2004; 59:415–31.

6. INSTRUCTOR WEB-SITE RESOURCES

- [http://www.nfhsindia.org/NFHS-3%20Data/VOL-1/National%20Family%20Health%20Survey%202005-06%20India%20Report%20-%20Volume%20I%20\(6823K\).pdf](http://www.nfhsindia.org/NFHS-3%20Data/VOL-1/National%20Family%20Health%20Survey%202005-06%20India%20Report%20-%20Volume%20I%20(6823K).pdf)
- World Health Organization: <http://www.who.int/tobacco/en/index.html>
- www.searo.who.int/Linkfiles/NMH_OralTobacco_Use.pdf
- <http://www.who.int/tobacco/en/atlas40.pdf>

7. SAMPLE EXAMINATION QUESTIONS

Burden of Tobacco

Question 1—True/False: Smoking cessation is the only means to reduce the tobacco-deaths in near future

ANSWER = True

Question 2—Smoking causes more than _____ deaths in developing countries.

- A. 40% B. 50% C. 80% D. 60%

ANSWER = B

Question 3—By 2030 number of deaths per year due to tobacco use would be

- A. 3 million B. 5million C. 10million D. 7 million
B.

ANSWER = C

Tobacco is a Risky Behaviour

Question 1—True/False: Smoking less than 5 cigarettes per day is not harmful to health.

ANSWER = False

Question 2—Which of the following diseases have **NOT** been clearly shown to be caused by exposure to passive smoke?

- A. Otitis media in children
B. Cardiovascular diseases among adults
C. Sudden infant death syndrome
D. Breast cancer among females
E. Asthma

ANSWER = D

Question 3—If a person inhales as little as 6–9 g of tobacco per day, the risk of heart attack increases by

- A. 50% B.80% C.100% D. 160% E.210%

ANSWER = D

Role of Physicians

Question 1—True/False: A doctor should ask only patients with smoking-related diseases about their smoking behavior.

ANSWER = False

Question 2—True/False: A consistent message from a doctor/nurse will not increase the likelihood of patients to quit smoking.

ANSWER = False

Question 3—Which of the following is **NOT** a fact about Indian physicians and their role in tobacco control?

- A. 2/3 of doctors in Kerala did not routinely screen patients for tobacco use.
- B. 3/4 of the doctors advise all patients routinely to quit irrespective of the smoking status of patients.
- C. Doctors did not offer patients information on how to quit.
- D. 2/3 of doctors reported that they had sufficient training.

ANSWER = D

Question 4—Current smoking among male medical students is

- A. 13.1%
- B. 14.1%
- C. 15.1%
- D. 20.1%

ANSWER = B

Question 5—Why do doctors need to take the initiative in tobacco cessation?

Question 6—What factors hinder doctors advice on tobacco to patients?

- A. Lack of training on the topic
- B. Lack of time with the patients
- C. Tobacco use not given importance
- D. Smoking among doctors
- E. All of the above.

ANSWER = E

Different Health Effects from Different Forms of Tobacco

Question 1—Which among the following is a chewing form of tobacco?

- A. Dhumti
- B. Chutta
- C. Khaini
- D. Hookah

ANSWER = C

Question 2—What are the adverse health effects of tobacco use?

Question 3—Chewing tobacco is less harmful than smoking. True/false

ANSWER = FALSE