

# SCIENTIFIC REPORT

## Tobacco Use Prevalence study among Physicians and Nurses and Their Attitudes towards Tobacco Control in the Kyrgyz Republic

On small grant #103330-0164 of the Canadian Tobacco Control Research Initiative, the American Cancer Society, Cancer Research –UK and Research for International Tobacco Control



Public Centre for Tobacco Control, Kyrgyzstan

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## I. Abstract

**Objective:** The overall objectives are to estimate the prevalence of tobacco use among Physicians and female Nurses and their attitudes towards tobacco control in Kyrgyz Republic

**Sample size and response rate:** The total sample size includes 1700 Physicians and 2300 Nurses from 24 medical organisations. 85 % of Physicians (41% men and 59% women) and 80% of Nurses (95% women and approximately 5% of men) participated in the survey. Analyses of data was made only among female Nurses because they included 95,4% of the participants.

1450 Physicians (593 men and 857 women) of the Kyrgyz Republic participated in this survey. 37% of participants were from Bishkek, the capital of our country, approximately 30% from north and 33% from south regions. 504 physicians (35%) participated from other cities of Kyrgyzstan and 406 (28%) physicians from rural regions.

18,2% of respondents (hereinafter referred to as Nurses) were from Bishkek-capital of Kyrgyzstan. Other Nurses were from North (33,4%) and South (48,6%) regions.

**Results:** Current Prevalence of smoking of manufactured cigarettes among male Physicians aged 23-69 years is slightly higher than that data of general male population with same age group and similar educational level (49% compared to 42%).

Smoking Prevalence among female physicians of Kyrgyzstan is much higher, than among women of national representative sample (6% against 2%) with a similar educational level. Smoking rate is 10 times higher than among young female Physicians in age group 25-34 years with a similar age group and educational level (11, 1% against 1%).

Current smoking prevalence among Physicians lowers with the increase of the age group, the same picture is found among female Nurses.

One third of Health Professionals exposed to smoking at home, 5% of physicians (65% women, and 35% men) and 50% of Nurses - in public transport, 37% and 23% of Female Nurses were exposed to smoking by their colleagues at the workplace in medical organizations.

The high level of agreement of the Respondents (from 84% to 94%) was received to the question «Smoking is harmful to your Health”, nevertheless, the awareness of the harm of smoking in Kyrgyzstan was found enough low. Only, 6% of Physicians and 4% of nurses in Kyrgyzstan believe they have enough education in order to help patients give up smoking.

**Conclusion:** The results showed that the current smoking prevalence among male physicians in the Kyrgyz Republic aged 23-69 is slightly higher than that data of general male population with same age group and similar educational level. Prevalence of smoking was significantly higher among female Physicians and Nurses than in general population with a similar educational level and age group.

Only few of Health Professionals felt well prepared to assist patients to quit smoking. These results indicate a need to educate Physicians and Nurses of Kyrgyz Republic to not start or quit smoking.

These data support the need for developing program for implementation FCTC, the national strategy for tobacco control and participation of Health Professionals of Kyrgyzstan in reducing smoking among the general population.

**Keywords:** Physicians, Nurses, Tobacco use, Smoking prevalence, Knowledge and attitude, Kyrgyz Republic

## II. Foreword

**Kyrgyz Republic** is a little Central Asian country whose population is around 5,1 million inhabitants. In 1991 Kyrgyzstan gained independence in the result of collapse of Soviet Union and started developing its own political, economic, and administrative platform for building a democratic state with market economy. According to the territorial and administrative setting the Republic is divided into 3 regions (8 oblasts), including the capital, which has the status of the oblast. The major economic activity of the country includes agrarian sector, thus, around 65% of the entire population live in a rural setting and agriculture is the primary type of country activity. The political situation is unstable during last 3 years, after revolution in March 2005.

### **Tobacco use in Kyrgyz Republic**

The Tobacco Control problem is extremely crucial in the Kyrgyz Republic (KR). According to the national epidemiological study of tobacco use in 2005, 25% of population (52% of men and 2 % women) aged 15 years and older were current users of the tobacco; 20% of population (42% of men and 1, 5% women) were current smokers of the manufactured cigarettes. The majority of smokers men (61 %) were in the age group 35-44 years, and 2,5% smokers women were in the age group 25-34 years.

If In 2002, around 23% of the population aged 18 years and older used tobacco products but in 2005 this figure increased to 26%. This increase was particularly marked in men: 47,5% in 2002, increasing to 54% in 2005. The prevalence in rural areas (31%) was higher than that in the cities (25%): especially in the rural men (63% as compared with men in cities at 51%). For women the reverse was true: 74% of the women smokers lived in cities and the majority of these women were aged 25-34 years old.

3,4% of population aged 15 yeas and older were current user of nasvay (7% of men and 1,3% women). Among current nasvay users, 60% resided in the tobacco growing region of Batken.

### **The government tax revenues**

The analysis revealed that in the period 2000-2005, the government tax revenues from profits of the tobacco industry accounted for 2.2% of the total tax from the industry, (0% in 1995-1999), while that from excise tax accounted for 64.3% in the period 2000-2005 (84.6% in 1995-1999). In 2004, the revenue from excise tax on tobacco products declined threefold as compared with the levels in 2000, despite a small increase in the output of tobacco products.

Using the survey results on price elasticity of demand, economic modeling showed that a 50% increase in excise tax would increase the government revenues from excise tax by the same amount, while this increase would lead to an increase of only 5% in prices of tobacco products.

### **Research for Tobacco Control**

The first Law on "Control and Prevention of Smoking" was drafted at the end of 1999 by Public Centre for Tobacco Control and presented to the Ministry of Health. This Tobacco Control Law was adopted by the Kyrgyz Parliament only at December 28, 2001 by following significant efforts of the Ministry of Health. Powerful lobbying by SJSC Kyrgyztamekisi and OJSC Reemstma-Kyrgyzstan led to a Presidential Veto of the Law and rejection by the government, despite an earlier approval in 2000 of the 'Project of the Law' in a Government Resolution. A special commission of the Legislative Assembly was set up to revise the Law to overcome the Veto, which was not reversed until the end of 2004. The 'State Strategy and Action Plan on Tobacco Control' developed with support from WHO were twice rejected by the Government and has yet to be approved.

WHO's Framework Convention on Tobacco Control and new national Tobacco Control Law were adopted only in 2006.

The Ministry of Health has used the evidence from the research findings of the national Tobacco Use Prevalence and Economic Studies for successful ratification and adaptation that were conducted by support of the Research for International Tobacco Control, the

International Development Research Centre by support the Canadian Tobacco Control Research Initiative and the American Cancer Society and WHO/EURO in 2005-2006.

### **III. General information**

#### **Human capacity in the Health system of the Kyrgyz Republic**

The human capacity of the health sector, particularly its initial unit is one of key components in the promotion of ratification and implementation of the WHO Framework Convention on Tobacco Control. Qualitative composition of staff, level of staff training and professional competence significantly influence the effectiveness of implementation of the FCTC.

Starting in 1996, the health sector structure has been under reforming where much attention is paid to the issues of prior to thesis and after thesis preparation, professional development, on job training and retraining for physicians and nurses. Low salaries, however, the lack of motivation, mechanisms of settlement of health professionals in the regions, particularly in rural area the rotation of health professionals is very high.

Despite annual increase in the number of young specialists – doctors graduating from medical schools there is a shortage of doctors in rural areas and excess of narrow specialists in urban areas. Reverse situation is observed with nurses. In rural areas there is an excess of nurses and the ratio doctor-nurse is 1:5 in Batken oblast, 1:4 in Naryn oblast and 1:1 in Bishkek city, whereas international practice shows that the optimal ratio should be 1:3.

Thus, in early 2005 the number of physicians in health organizations comprised 13,685 persons and supply was 25.6 to 10,000 persons, while at the end of 2005 these indicators comprised 12,920 and 25,1 accordingly, nurses comprised 30,339 persons (29,818 persons at the end of 2005), supply was 59.3 to 10,000 people (58.0 at the end of 2005).

The level of supply of doctors is high in Bishkek (29.8) and in Osh (24.4), and is low in Jalalabad (15.6), Osh (15.2) and Batken (14.5) regions. The level of supply of doctors is critically low in Susak, Aksu, Jetyoguz, Alai, and Karakuldja, Karasu, Chonalay raions (on average 8 to 9,6 to 10,000 people).

In 2005, the inflow of physicians to the Kyrgyz Republic comprised 1,563 physicians, while 1,664 physicians left the country, including 108 physicians due to low salaries, 77, because they were not provided living accommodations, and 12 doctors due to reduction of the staff. The total number of those who move out of the country included 130 doctors.

In 2004, 1,592 physicians arrived and 1,661 physicians left, including 403 physicians due to low salaries, were not provided housing, 15 physicians were not provided housing, 70 physicians due to reduction of the staff. 54 physicians of the total number of those who left moved outside the country.

The number of physicians in medical institutions by the end of 2006 comprised 12,790 persons, 29,237 persons with medical collage education, the supply was 56.0, and i.e. there is a clear drop in supply of health professionals.

During 2006, according to preliminary data in the health system, 1,092 physicians arrived and 1,222 left, including 138 physicians who moved out of the country. In 2006 flow-out out of health professionals from the country was particularly high to Russian and Kazakhstan.

The above analysis shows that there is still a tendency of a negative balance according to the number of those who arrived or left on physicians, and a rise of those physicians who moved outside the country the main reason was low salary. It should be specially emphasized that this tendency was particularly strong in some regions of the country, for instance in Osh region in 2005, 443 physicians came, 733 physicians left, including 73 of

physicians who moved out of the country; in Jalalabad region, 555 physicians arrived and 859 physicians left, including 16 physicians who moved out of the country; even in the more well-to-do economically Chui region, the tendency was the same, thus, in 2005 physicians came and 446 doctors left, including 39 physicians who left outside the country, in the national institutions, 488 physicians arrived and 502 physicians left, including 19 physicians who moved out of the country.

On the new specialists who completed clinical residency on studies subsidized from the national budget in 2005, the total of 177 persons, 150 persons have been assigned to work, of whom only 63 specialists came to the places where they have been assigned to practice. Those specialists who have been assigned but did not reach the place for various reasons, including lack of housing, unwillingness to lose practical skills, and for other reasons, which can be resolved only on a cross-sectoral level with the involvement of local self-government.

On the middle medical staff in 2005, 3,270 persons came and 4,352 left. 242 nurses moved out of the country. In 2004, 3,904 persons came and 4,353 nurses left, including 126 nurses who moved outside the country (2,9% of total the number of those who left from country). Here, there is also a tendency to preserve the negative balance on the number of those who came in and left with an increase of those who moved outside the country.

As a general tendency has been observed of an increase of migration inside the country and outside, in the near future the forecast is that labor migration among health professionals will increase particularly to Kazakhstan and parts of Russia, particularly of skilled specialists of age 30 to 50 years. These specialists may find employment according to their specialty and easy adjustment to working conditions in those countries (absence of a language barrier, similar academic programs, etc). Outside migration occurs due to higher earnings and a possibility to find job with housing and social benefits.

It should be considered, however, that external migration of qualified specialists leads to economic losses for the country. An important fact is that there is no stream of skillful medical specialists from other countries to own country.

There are eight higher medical institutions in the country, which are responsible for training doctors; however, it should be noted that an output of medical specialists does not consider an account of demand in the health system.

A complex situation develops when most of graduates 107 persons (71.3%) find employment in Bishkek and Chui region where staffing is relatively satisfactory. While only few specialists get to those regions where there is a high demand for medical specialists, for instance, five specialists have been sent to Naryn region, and only 2 of them got there; 17 specialists have been sent to Issyk-kul oblast, and only 5 of them got to the place. Osh, Jalalabat, and Batken regions have been assigned 8, 6, and 5 specialists accordingly, and only 2 and 1 specialists got to Jalalabad and Batken region accordingly, no doctor came to Osh region.

A serious problem is aging of physicians, thus, physicians above the age of 40 years comprise 63,8%, while among nurses this indicator equals 44%. Most of health professionals of the primary health care are pensioners or are of close to the retirement age.

14 medical schools teach specialists with a collage medical education (nurses). In 2005, the number of graduates from medical colleges comprised 2,365 specialists.

From among practicing nurses, there is a high level of rotation; the number of dismissed was higher (22.5%) which proves that there is lack of interest among these specialists in the health system.

# Tobacco Use Prevalence study among Physicians and Nurses and Their Attitudes towards Tobacco Control in the Kyrgyz Republic

## 1. Background

Health professionals have a fundamental role to play in tobacco control. They reach a high percentage of the target population and they have the opportunity to help smokers change their behaviors. They have the trust of the population, the media and opinion leaders, and their voices are heard across a vast range of social, economic and political arenas. At the individual level, they can educate the population on the harms of tobacco use and exposure to second-hand smoke. At the community level, health professionals can be initiators or supporters of some of the policy measures described above, by engaging, for example, in efforts to promote smoke-free workplaces and extending the availability of tobacco cessation resources. At the society level, health professionals can add their voice and their weight to national and global tobacco control efforts like tax increase campaigns and become involved at the national level in promoting the WHO Framework Convention on Tobacco Control (WHO FCTC)<sup>1</sup>.

Surveys on smoking prevalence among Physicians in the WHO European Region revealed that countries with a long history of raising awareness for Tobacco control have a relatively low smoking prevalence among Health Professionals (e.g. 14% in Sweden, 6,8% in the UK). In other countries, the smoking prevalence among Health Professionals more or less reflects that of the general population, especially in males (e.g. Georgia, Romania)<sup>2</sup>

Prevalence of smoking among men-physicians of Moscow practically does not differ from that Russian population of men with higher education (50.3 % and 47.8 %, accordingly). Unfortunately, prevalence of smoking among women - physicians of Moscow is much higher, than among women of national representative sample with a similar educational level (26.5 % against 7.8 %)<sup>3</sup>

42% of the Russian men-health professionals are smokers; 44% of men and 6% of women of the Health Professionals of the Moldova, 38% and 42% of men-physicians smoke accordingly in the Lithuania and Estonia<sup>4</sup>.

Analysis of interview data in three cross-sectional population studies showed that the tobacco-smoking rate of the physicians in the country with low prevention activity dropped to 18%, which is still much higher than the smoking rate in the US and other European countries<sup>5</sup>

Physicians of Finland smoke less than their colleges in other European countries ( 7% of male and 4% of female) than physicians of France (34%), Greece (44–54%), the Netherlands (38%) and Denmark (33%)<sup>6-7-8-9-10</sup>. Only 3% of physicians of the USA smoke against of 23% of population<sup>11</sup>.

Many studies show that the prevalence of smoking among female nurses was higher than that of the general female population<sup>12-13-14-15-16</sup>. The higher prevalence of smoking among

<sup>1</sup> World no tobacco day 2005: [[http://www.euro.who.int/document/Tob/TOB\\_Factsheet.pdf](http://www.euro.who.int/document/Tob/TOB_Factsheet.pdf)] Health professionals and tobacco control. A briefing file for the WHO European Region. Geneva World Health Organization; 2005.

<sup>2</sup> Same with #1. Health Professionals and Tobacco Control. A briefing file for the WHO European Region; 2005, 17 pages

<sup>3</sup> A. Alexandrov et al, Prevalence of smoking among Physicians of Moscow, 2001, <http://www.nosmoking.ru/sciense/31032002.rtf>

<sup>4</sup> American Cancer Society University presentation: Effective Advocacy and Movement Building for Tobacco Control, 23-25 April, 2003, Romania; Tobacco Control Strategy Planning for Tobacco Control Movement Building, Guide #2. American Cancer Society, UICC, 2003, 63 pages

<sup>5</sup> U. John, M. Hanke, European Journal of Cancer Prevention 2003; June, 235-237.

<sup>6</sup> Changes in smoking prevalence among Finnish physicians 1990–2001, European Journal of Public Health, 2004; 14: 201–203

<sup>7</sup> Josseran L, King G, Velter A, Dressen C, Grizeau D. Smoking behavior and opinions of French general practitioners. J Natl Med Assoc 2000;92:382-90.

<sup>8</sup> Christensen B. [General practitioners and smoking. General practitioners' knowledge, attitudes and smoking habits and the relationship between these assessed by a questionnaire study in the county of Aarhus]. Ugeskr Laeger 1993;155:307-10

<sup>9</sup> Polyzos A, Gennatas C, Veslemes M, Daskalopoulou E, Stamatiadis D, Katsilambros N. The smoking-cessation promotion practices of physician smokers in Greece. J Cancer Educ 1995;10:78-81.

<sup>10</sup> Dekker HM, Looman CW, Adriaanse HP, van der Maas PJ. Prevalence of smoking in physicians and medical students, and the generation effect in The Netherlands. Soc Sci Med 1993;36:817-22.

<sup>11</sup> Nelson DE, Giovino GA, Emont SL, Brackbill R, Cameron LL, Peddicord J, Mowery PD: Trends in cigarette smoking among US physicians and nurses. JAMA 1994, 271:1273-5.

<sup>12</sup> Kawane H, Soejima R. Smoking among the staff of a medical school hospital. In: Aoki M, Hisamichi S, Tominaga S, eds. Smoking and health. Proceedings of the sixth world conference on smoking and health, Tokyo, 9-12 November 1981. Amsterdam: Excerpta Medica, 1988;685-687.

<sup>13</sup> Oshima A, Nakamura M. Cigarette smoking among some occupational groups in Osaka Prefecture. Nippon Koshu Eisei Zasshi 1988;35:527-530. (In Japanese)

<sup>14</sup> Hay DR. The smoking habits of nurses in New Zealand: results from the 1976 population census. NZ Med J 1980;672:391-393.

<sup>15</sup> Sacker A. Smoking habits of nurses and midwives. J Adv Nurs 1990;15:1341-1346.

<sup>16</sup> Adriaanse H, Van Reek J, Zandbelt L, et al. Nurses' smoking worldwide: a review of 73 surveys of nurses' tobacco consumption in 21 countries in the period 1959-1988. Int J Nurs Stud 1991;28:361-375.



nurses is a global trend<sup>17</sup> The World Health Organization (WHO), however, has called for further recognition among medical professionals of the problems that smoking brings to their own field and their responsibility in terms of personal conduct and appropriate practice.

Anti-smoking campaigns in which nurses have participated have been successful in the United States and Canada<sup>18</sup> the prevalence of smoking in nurses has decreased as much as in other health workers. Nurses who quit smoking fulfill their function as health educators well, and in the United States and the United Kingdom, studies have evaluated the effectiveness of teaching nurses how to give smoking cessation advice and how to implement it themselves<sup>19-20-21</sup>.

International Tobacco Researchers<sup>22</sup> consider, that when smoking prevalence among the medical profession falls below that of the general population, after several decades the prevalence in the general population would also decrease.

Tobacco smoking prevention and cessation efforts, primarily in developed countries, have been effective at reducing heart disease, cancer, and other smoking-related illnesses. Prevention efforts in the United States have combined elements of health education, cessation techniques, and legislative activity to address the smoking problem<sup>23</sup>. Large decreases in smoking prevalence illustrate the success of these efforts. In 1965, the percentage of current smokers 18 years of age and older was 51.9 for men, 33.9 for women; By 2002, corresponding percentages were 25.2 for men (51% decrease), 20.0 for women (41% decrease)<sup>24</sup>.

Other pictures of current smoking prevalence among population have been shown in developing countries, as Ukraine (67% men and 20% women)<sup>25</sup>, Kazakhstan (65.3%), Armenia (61.8%), and Russia (60.4%). Results showed that smoking among women remains uncommon in Armenia, Georgia and Moldova (rates of 2.4%–6.3%). In Belarus, Ukraine, Kazakhstan, and Russia, rates were higher (9.3%–15.5%)<sup>26</sup>.

The socio-cultural, economic and political changes which occurred in the transition period following the independence of Kyrgyzstan in 1991 created a favourable environment for the tobacco industry. In this period the tobacco industry was able to establish a strong lobby in the Kyrgyz Republic which resisted anti-tobacco policy interventions.

The Tobacco Control problem is extremely crucial in the Kyrgyz Republic (KR). According to the national epidemiological study of tobacco use in 2005, 25% of population (52% of men and 2 % women) aged 15 years and older were current users of the tobacco<sup>27</sup>; 20% of population (42% of men and 1, 5% women) were current smokers of the manufactured cigarettes. The majority of smokers men (61 %) were in the age group 35-44 years, and 2,5% smokers women were in the age group 25-34 years. In the study, 5.5% of respondents had tried other tobacco products such as nasvay (chewing tobacco), pipes, and cigars. Among them, 3,4% were current user of nasvay (7% of men and 1,3% women). Among current nasvay users, 60% resided in the tobacco growing region of Batken<sup>28</sup>

Tobacco consumption causes 6% of all death cases in the world and approximately 3% of global burden of illnesses, according to the DALY index (disability adjusted life years) which is calculated with account of disease and death rate. Moreover, the number of deaths from

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<sup>17</sup> Same with #17.

<sup>18</sup> Same with #17.

<sup>19</sup> Clark JM, Rowe K, Jones K. Evaluation of the effectiveness of the coronary care nurses' role in smoking cessation. *J Clin Nurs* 1993;2:313-322.

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<sup>22</sup> Davis RM. When doctors smoke. *Tobacco Control* 1993;2:187-188.

<sup>23</sup> Centers for Disease Control and Prevention (CDC): [<http://www.cdc.gov/tobacco/bestprac.htm>] Best Practices for Comprehensive Tobacco Control Programs. 1999.

<sup>24</sup> Centers for Disease Control and Prevention (CDC): [[http://www.cdc.gov/tobacco/research\\_data/adults\\_prev/prevali.htm](http://www.cdc.gov/tobacco/research_data/adults_prev/prevali.htm)] Smoking Prevalence among U.S. Adults. 2005.

<sup>25</sup> Tobacco in Ukraine: national survey of knowledge, attitudes and behavior. A survey of Ukrainian population by Kiev International Institute of Sociology commissioned by the International Centre for Policy Studies, kyiv 2005, 84 pages

<sup>26</sup> Anna Gilmore A., Pomerleau J., McKee M., Rose R., Haerpfer Ah.W., Rotman D., Tumanov S.Prevalence of Smoking in 8 Countries of the Former Soviet Union: Results From the Living Conditions, Lifestyles and Health Study. *American Journal of Public Health*, 12. 2004, Vol 94, No.12, 2177-2187

<sup>27</sup> WHO Global InfoBase: [www.infobase.int](http://www.infobase.int), January, 2007

<sup>28</sup> Bekbasarova Ch. and others. Prevalence of Tobacco Use among Population of the Kyrgyz Republic at the Age of 15 Years and Older. Abstract #3426. *Building capacity for a tobacco-free world*. The 13<sup>th</sup> World Conference on Tobacco OR Health. Washington, DC, USA 2006

the tobacco related diseases continues to grow and smoking will cause 12% of deaths in the world by 2020 if current trends will be kept on<sup>29</sup>.

If in 1985 Tobacco was responsible of 2566 deaths (8% of all deaths) in Kyrgyzstan, in 1995 it was increased to 12% (3562 deaths). The data of the international researchers evidences that half of all deaths caused by consumption of tobacco falls to the middle-aged group (35-69 years old). Herewith the deceased inhabitants of Kyrgyzstan due to tobacco consumption in this age group have lost on average 21 years of life expectancy<sup>30</sup>

Studies have shown that Physicians and Nurses can act as important figures in reducing societal smoking prevalence<sup>31-32-33-34-35-36</sup> [11-14], and can contribute to stemming the projected increase in mortality and morbidity from cigarette-related diseases<sup>37-38</sup>

On 31.12.2005 in the medical organizations under of the Ministry of Health Kyrgyz Republic are 12 920 doctors and 29818 nurses<sup>39</sup>. They are big army for implementation FCTC in Kyrgyzstan. We could use this capacity for education of patients within implementation of FCTC through Primary Health Care and Hospital level. Physicians and Nurses of the Kyrgyz Republic can play also an important role in implementation of the FCTC and give advice; guidance and answers to questions related to the consequences of tobacco use and can serve as role models for non-smoking. Therefore, they should be non-smoking.

In the Kyrgyzstan there has been no nationwide survey on the Tobacco Use Prevalence study among Physicians and Nurses of the Kyrgyz Republic. In view of this, we considered it important to survey tobacco use prevalence among Physicians and Nurses of the Kyrgyz Republic and identify their attitudes toward tobacco control and prevention.

## 2. Research Goal

The overall objectives are to estimate the prevalence of tobacco use among physicians and nurses and their attitudes towards tobacco control in Kyrgyz Republic.

### Specific objectives are followings:

1. Prevalence of all current Tobacco Users, including nasvay users among Physicians and Nurses;
2. Prevalence of current manufactured cigarettes smokers (daily and occasional) among physicians, by sex, age groups and professions (surgeon, therapist, managers and others);
3. Prevalence of current manufactured cigarettes smokers (daily and occasional) among Nurses by sex, age groups and profession (surgical nurses, managers, therapeutic nurses and others);
4. Mean number of cigarettes per day smoked by sex (male and female), occupation (Physician and Nurse);
5. Past smoking prevalence among Physicians and Nurses of the Kyrgyz Republic;
6. Prevalence of smoking cessation among smoker Physicians and Nurses;
7. Prevalence of passive smoking among Physicians and Nurses of the Kyrgyz Republic;
8. Prevalence of knowledge and attitudes of smoker and nonsmoker Physicians by sex;
9. Prevalence of knowledge and attitudes of smoker and nonsmoker female Nurses;
10. Estimation of preparation of Physicians of the Kyrgyz Republic for counseling patients to stop smoking;

<sup>29</sup> WHO World Health Report, 2002

<sup>30</sup> Richard Peto, Alan Lopez et al, Mortality from smoking in developed countries, 1950 – 2000, Oxford Medical Publication, 1994, 553 pages.

<sup>31</sup> Dileep G. Bal, Jon C. Lloyd, Marc W. Manley. The Role of the Primary Care Physician in Tobacco Use Prevention and Cessation.: *C A C a n c e r J C l i n* 1995; 45:369-374

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<sup>35</sup> Bialous SA, Sarna L: Sparing a few minutes for tobacco cessation: if only half of all nurses helped one patient per month quit smoking, more than 12 million smokers would overcome their addictions every year. *Am J Nurs* 2004, 104:54-60.

<sup>36</sup> Same with #1. Health Professionals and Tobacco Control. A briefing file for the WHO European Region; 2005, 17 pages

<sup>37</sup> Rodgers A, Ezzati M, Vander Hoorn S, Lopez AD, Lin RB, Murray CJ: Distribution of Major Health Risks: Findings from the Global Burden of Disease Study. *PLoS Med* 2004, 1:e27.

<sup>38</sup> Ezzati M, Lopez AD, Rodgers A, Vander Hoorn S, Murray CJ, Comparative Risk Assessment Collaborating Group: Selected major risk factors and global and regional burden of disease. *Lancet* 2002, 360:1347-60.

<sup>39</sup> Source: Republican Medico-Information Centre of the Ministry of Health of the Kyrgyz Republic, 2006

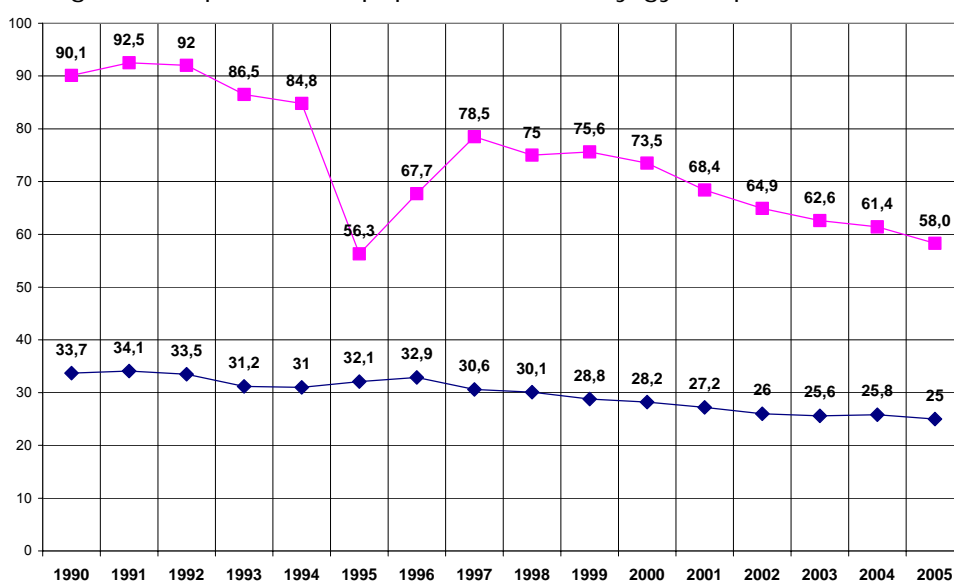
11. Estimation of preparation of Nurses of the Kyrgyz Republic for counseling patients to stop smoking.

### 3. Research Methodology

#### Study population

According to the National Database for the Ministry of Health of the Kyrgyz Republic on 01.01.2006, health care is provided by about 12.9 thousand physicians and about 29.8 thousand nurses. The proportion of Physicians and medical specialists with middle education, including nurses, per 10,000 population for the Kyrgyz Republic for 1990-2005 is presented in the Figure 1. This figure shows that the number of Physicians and Nurses is decreasing. Thus, in 1991 the supply by physicians was 33.7 per 10,000 population. In 2005 this indicator decreased to 25 per 10,000. Accordingly, the supply of nurses decreased from 90.1 to 58.0 at the end of 2005.

Figure. 1 Number of Physicians (blue) and Medical Specialists (red) with middle education, including nurses, per 10,000 population in the Kyrgyz Republic, 1990 – 2005.



Source: National Medico-Information Centre of the Ministry of Health of the Kyrgyz Republic (MoH KR)

There is an apparent imbalance in regional distribution and qualitative composition of health staff caused by low salaries, lack of motivation and mechanisms for securing health staff in the regions, especially in rural areas. Also there is the outflow and high fluctuation of staff, and the poor material and technical base. Despite annual increase in the number of young specialists, doctors graduating from Medical universities, there is a shortage of doctors in rural areas and an excess of narrow specialists in urban areas. The reverse situation is observed with nurses. In rural areas there is an excess of nurses with a doctor nurse ratio of: 1:5 in Batken oblast, 1:4 in Naryn oblast and 1:1 in Bishkek city; whereas international practice shows that the optimal ratio should be 1:3. The number of Physicians and Nurses working in hospitals and Family Medicine Centres (polyclinics) on January 2006 is presented in the Table 1.

**Table 1. Proportion of Physicians and Nurses in curative-preventive organizations in the Kyrgyz Republic by region (January, 2006).**

Region/oblast	Physicians		Nurses	
	n	%	n	%
Bishkek	3437	35,9	4590	20,9
North	2444	25,5	6109	27,8
South	3690	38,6	11269	51,3
<b>Kyrgyzstan</b>	<b>9571</b>	<b>100,0</b>	<b>21968</b>	<b>100,0</b>

**Sample frame and design** The data from the First National Health InfoBase on January 2006 was used as the sample frame for developing the sample design. A two-stage random (institute, health professionals) stratified (region) cluster sample was used for selection of the sampling size. The first factor which needed to be taken into consideration in the development of the sample design was the number of Physicians and Nurses working in each medical organization. The organizations with the number of Physicians less than 40, or with Nurses less than 80 persons at end of December 2005 were not selected. In first stage 110 curative and preventive organizations from the total 256 organizations with number of Physicians more than 40, or with Nurses more than 80 persons were selected (tab. 2)

**Table 2. Proportion of the selected medical organization during 1st stage of sample design by regions.**

	Hospitals, n	Medicine Centers, n	Total, n	%
Bishkek	15	18	33	30
Other urban	14	15	29	26
Rural areas	22	26	48	44
<b>Total</b>	<b>51</b>	<b>59</b>	<b>110</b>	<b>100</b>

**Table 3. Distribution of the selected medical organizations in second stage of sample design by regions.**

	Hospitals, n		Medical Centers, n		Subtotal, n		Total, n	%
	Urban	Rural	Urban	Rural	Urban	Rural		
Bishkek	3	0	2	0	5	0	5	20,8
<b>North</b>								
Issyk-kul	1	0	1	1	2	1	3	12,5
Naryn	0	1	1	0	1	1	2	8,3
Talas	1	1	0	1	1	2	3	12,5
Chuy	1	1	1	0	2	1	3	12,5
Subtotal	3	3	3	2	6	5	11	45,8
<b>South</b>								
Jalalabat	0	1	1	1	1	2	3	12,5
Batken	1	1	0	0	1	1	2	8,3
Osh	1	1	0	1	1	2	3	12,5
Subtotal	2	3	1	2	3	5	8	33,3
<b>Kyrgyzstan</b>	<b>8</b>	<b>6</b>	<b>6</b>	<b>4</b>	<b>14</b>	<b>10</b>	<b>24</b>	<b>100,0</b>

The distribution of the selected sample in comparison with response rate of the Physicians and Nurses is presented in Table 4.

**Table 4. Distribution of the selected sample by regions.**

Regions	Sample				Respondents			
	Physicians		Nurses		Physicians		Nurses	
	n	%	n	%	n	%	n	%
Bishkek	605	35,6	487	21	540	37,2	333	18,0
North	494	29,1	751	33	428	29,5	615	33,3
South	601	35,4	1062	46	482	33,2	898	48,6
<b>Kyrgyzstan</b>	<b>1700</b>	<b>100,0</b>	<b>2300</b>	<b>100</b>	<b>1450</b>	<b>100,0</b>	<b>1846</b>	<b>100,0</b>

Health researchers and pharmacists were not included in the study. All Physicians and Nurses who work at the selected institutions were invited to participate in the survey.

### **The Questionnaire of Survey**

The questionnaire of the Tobacco Use Prevalence Study among Physicians and Nurses of the Kyrgyz Republic was developed by using the questionnaires of the Global Health Professional and National Epidemiological Tobacco Use Prevalence Surveys. The Global Health Professional questionnaire was translated into Russian. The drafted questionnaire was pre-tested in Bishkek. The final version of the questionnaire was discussed with the research team and the interviewers and was approved by Minister of Health for study. The questionnaire was also translated into the Kyrgyz language. All Kyrgyz Interviewers received the translated questionnaire for their use.

### **Training for Interviewers**

During April, 2006 the training of Interviewers was conducted. Instructions for interviewing were developed and distributed. All 16 Interviewers and 8 supervisors for all 8 regions (including Bishkek) were trained. Each received the instructions for interviewing that were developed.

### **Data collection, entering and processing of survey**

63% of the respondents were interviewed during April 2006. The remaining 37% of Physicians and Nurses were interviewed during May 2006. After the supervisors reviewed the completed questionnaires for each region, they were submitted to the researchers. The responses from the submitted questionnaires were reviewed and entered into the computer. Instructions on the computer data entry procedures for Technical Officers were developed and Technical Officers received training. Data were entered into the computer using Excel software during July - August. By the end of August 2006 the Technical Officers completed the data entry. During September and October 2006 the entered data were checked for mistakes by both the Technical Officers and the Interviewers.

Total 3434 Questionnaires, including 1485 for Physicians and 1949 for Nurses were received from supervisors. Approximately 4% of entered (138) questionnaires were not included to the study analyses because of absence completed main characteristics, as sex, date of birth, education (71%) or were completed partly (only general information (22% of them) or by not Health Professionals (7%). Statistical analysis of the data was performed using Microsoft Excel and SPSS-12. In total 3296 questionnaires were recommended to analyses.

### **Sample size and response rate**

The total sample size includes 1700 Physicians and 2300 Nurses from 24 medical organisations. 85 % of Physicians (41% men and 59% women) and 80% of Nurses (95% women and approximately 5% of men) participated in the survey. Distribution of the Respondents by regions is presented in Table. 5.

**Table 5: The response rate by regions**

Regions	Physicians			Nurses		
	Sample	Response rate		Sample	Response rate	
	n	n	%	n	n	%
Bishkek	605	540	89,3	487	333	68,4
North	494	428	86,6	751	615	82,0
South	601	482	80,2	1062	898	84,6
<b>Kyrgyzstan</b>	<b>1700</b>	<b>1450</b>	<b>85,3</b>	<b>2300</b>	<b>1846</b>	<b>80,3</b>

### **Smoking criteria**

The prevalence of smoking was calculated as follows:

$$\text{Prevalence (\%)} = \frac{(\text{daily smokers} + \text{occasional smokers}) \times 100}{\text{Number of responders}}$$

The following smoking criteria have been used:

1. A "smoker" is someone who, at the time of the survey, smokes any tobacco product either daily or occasionally.
2. A "daily smoker" is someone who smokes any tobacco product at least once a day. People who smoke every day, but not on days of religious fasting, are still considered as "daily smokers."
3. An "Occasional smoker" is current a smoker who does not smoke every day.
4. A "non-smoker" is someone who, at the time of the survey, does not smoke at all.

## **4. Results of survey**

### **4.1. A social portrait of the respondents**

A total of 3296 health professionals completed questionnaires (1450 Physicians and 1846 Nurses) from 24 curative and preventive organizations of the Ministry of Health of the Kyrgyz Republic were analyzed. 704 Health Professionals (250 Physicians and 454 Nurses) did not participate in the survey. 138 returned questionnaires (35 Physicians and 103 Nurses) but were not included in the analysis due to excessive missing information. Other reasons for nonparticipations of Health Professionals are presented in the table 6.

**Table 6. Distribution of the reasons for not participating in the survey.**

	Physicians		Nurses	
	n	%	n	%
Left country	37	17,2	96	27,4
Maternity leave	94	43,7	97	27,6
Leave without pay	37	17,2	64	18,2
Holiday or leaving for study	21	9,8	44	12,5
Refusal	26	12,1	50	14,2
<b>Total</b>	<b>215</b>	<b>100,0</b>	<b>351</b>	<b>100,0</b>

Thus, 85 % of Physicians (41% men and 59% women) and 80% of Nurses (95,4% women and 4,6% of men) participated in the survey. Distribution of the Physicians of the Kyrgyz Republic who participated in the survey by sex and by regions is presented in table 7.

**Table 7. Distribution of the Respondents by sex and regions**

	Physicians						Nurses					
	Total		Male		Female		Total		Male		Female	
	n	%	n	%	n	%	n	%	n	%	n	%
Bishkek	540	37,2	237	40	303	35,4	333	18	13	15,3	320	18,2
North	428	29,5	132	22,3	296	34,5	615	33,3	30	35,3	585	33,2
Sourth	482	33,2	224	37,8	258	30,1	898	48,6	42	49,4	856	48,6
<b>Kyrgyzstan</b>	<b>1450</b>	<b>100</b>	<b>593</b>	<b>100</b>	<b>857</b>	<b>100</b>	<b>1846</b>	<b>100</b>	<b>85</b>	<b>100</b>	<b>1761</b>	<b>100</b>

#### 4.1.1. The Physicians of the Kyrgyz Republic

1450 Physicians (593 men and 857 women) of the Kyrgyz Republic participated in this survey. 37% of participants were from Bishkek, the capital of our country, approximately 30% from north and 33% from south regions. 504 physicians (35%) participated from other cities of Kyrgyzstan and 406 ( 28%) physicians from rural regions.

36,6% of participants were physicians of surgery (54,3% of male and 24,3% of female) and 40, 6% were from therapeutic departments ( 20,7% - male and 54,4% - female). Also, 5% Public Health doctors and 8,1% of Physicians of the ancillary departments participated in the survey.

**Table 8. Distribution respondents by profession and sex**

	Total		Male		Female	
	n	%	n	%	n	%
Managers of medical organizations	45	3,1	25	4,2	20	2,3
Managers of surgical departments	40	2,8	35	5,9	5	0,6
Managers of therapeutic departments	37	2,6	15	2,5	22	2,6
Physicians of surgical (including gynecology) departments	530	36,6	322	54,3	208	24,3
Physicians of therapeutic departments	589	40,6	123	20,7	466	54,4
Public Health Physicians (Sanitary-epidemiological Physicians)	68	4,7	16	2,7	52	6,1
Physicians – teachers of the medical universities, allocated in the hospitals	22	1,5	17	2,9	5	0,6
Physicians of Diagnostic Departments, Laboratory including X-ray; administrative and planning division	101	7,0	32	5,4	69	8,1
Not indicated (missing)	18	1,2	8	1,3	10	1,2
<b>Total</b>	<b>1450</b>	<b>100</b>	<b>593</b>	<b>100</b>	<b>857</b>	<b>100</b>

Approximately 2/3 of respondents (76,6%) are married physicians (85% of men and 70,7% of women); 11% live single; 6%, either separately or divorced; and 3,5% are widowers (table 9).

**Table 9. Distribution of respondents by marital status and sex.**

	Total		Male		Female	
	n	%	n	%	n	%
Married	1110	76,6	504	85,0	606	70,7
Single	159	11,0	52	8,8	107	12,5
Divorced/ live separately	89	6,1	15	2,5	74	8,6
Widow	51	3,5	6	1,0	45	5,3
Not indicated (missing)	41	2,8	16	2,7	25	2,9
<b>Total</b>	<b>1450</b>	<b>100,0</b>	<b>593</b>	<b>100,0</b>	<b>857</b>	<b>100,0</b>

1238 physicians (85,4%) have children, including 1,6% of single physicians and 3% of respondents who did not indicate their marital status. Most physicians (60,2%) have 2 or 3 children; 21,7% of respondents have 4 or 5 children, and 15,2% have one child. Only 2,7% persons have more than 6 children. 5,6% of married physicians do not have children, 45% of those are in the age group 24-34 years and 55% of those at age group 35-44 years old.

Out of the 1450 participants, 80% are Kyrgyz; 6,1% of Physicians are Russian and 11% are other nationalities. 2,7% of respondents did not answer (table 10).

87% of respondents were Moslem, 86,7% of those Kyrgyz; 6,1% were Orthodox; 4,1% were atheist; and 1% have other religions. 1,8% of respondents did not answer.

**Table 10. Distribution of respondents by nationality and sex.**

	Total		Male		Female	
	n	%	n	%	n	%
Kyrgyz	1163	80,2	481	81,1	682	79,6
Russian	89	6,1	24	4,0	65	7,6
Other nationality	159	11,0	74	12,5	85	9,9
Missing	39	2,7	14	2,4	25	2,9
<b>Total</b>	<b>1450</b>	<b>100,0</b>	<b>593</b>	<b>100,0</b>	<b>857</b>	<b>100,0</b>

The mean age of participants in the survey was 41,8 years. Data were distributed in 5 age groups. Distribution of the respondents by age group and sex are presented in the table 11. A few participants age 70 years and older, were not included in the analyses. However, some interns, who are working in Hospitals and continue their clinical postgraduate studying were included.

**Table 11. Distribution of respondents by age group and sex**

	Total		Male		Female	
	n	%	n	%	n	%
<b>23--24</b>	35	2,4	16	2,7	19	2,2
<b>25-34</b>	334	23,0	135	22,8	199	23,2
<b>35-44</b>	507	35,0	196	33,1	311	36,3
<b>45-54</b>	415	28,6	158	26,6	257	30,0
<b>55-64</b>	136	9,4	71	12,0	65	7,6
<b>65-69</b>	23	1,6	17	2,9	6	0,7
<b>Total</b>	<b>1450</b>	<b>100</b>	<b>593</b>	<b>100,0</b>	<b>857</b>	<b>100,0</b>



#### 4.1.2. The Nurses of the Kyrgyz Republic

1846 Nurses (1761 women and 85 men) participated in the survey. Analyses of data was made only among female Nurses because they included 95,4% of the participants. 18,2 % of respondents (hereinafter referred to as Nurses) were from Bishkek. Other Nurses were from North (33,4%) and South (48,6%) regions. Most of the Nurses worked in the therapeutic (47,4%) and surgical (40,1%) departments. 8,6% of Nurses worked in the auxiliary departments. 2,2% of the respondents worked in Public Health institutions; and 1,5% of the participants were Chief Nurses.

**Table 12. Distribution Nurses by profession**

	Total	
	n	%
Chief Nurses of medical organizations or departments	27	1,5
Nurses of the surgical (including gynecology) departments	706	40,1
Nurses of therapeutic departments, including family nurses	835	47,4
Nurses of Diagnostic Departments, Laboratory including X-ray; administrative and planning division	151	8,6
Assistants of Public Health Officers (Sanitary-epidemiological Physicians)	38	2,2
Not indicated (missing)	4	0,2
<b>Total</b>	<b>1761</b>	<b>100,0</b>

65,6% of Nurses are married; 16,5% live single; 8,3% live separately or are divorced; and 5,8% are widowers. Unfortunately, many of the respondents (3,8%) did not answer their marital status (table 13).

**Table 13. Distribution female Nurses by marital status**

	n	%
Married	1155	65,6
Single	291	16,5
Divorced/ live separately	146	8,3
Widow	102	5,8
Missing	67	3,8
<b>Total</b>	<b>1761</b>	<b>100,0</b>

74,1% of female Nurses had children at the interview time, 19,6% of those had 1 child. The majority of Nurses (57,5%) have 2 or 3 children; and 21,2% of respondents have 4 or 5 children. Only 1,8% of persons had more than 6 children. 12,7% of respondents among single Nurses had children. 10 % of married Nurses answered that they did not have a child, 50% of those were in the age group 20-24 years and 26,7% were in the age group 25-34 years old. 22,4% were in the age groups 35-44 and 45-54 years also did not have any child.

Out of 1761 female respondents (67,5%) are Kyrgyz, 10% are Russian and 20% are other nationalities. The majority of respondents (86,5%) were Moslem, 75,3% of those are Kyrgyz.

Data were distributed in the 6 age groups, but the last age group (64-69 years old) was not included for analyses because this group consisted of only 16 respondents, less than 1% from total number of participants. Therefore the respondents were distributed in the 5 age groups (table 14). The average age of Nurses was 37,2 years.

**Table 14. Distribution female Nurses by age group**

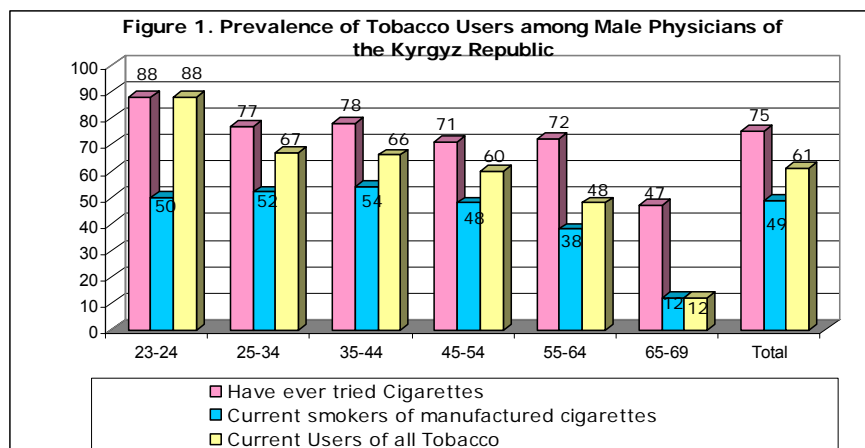
Age groups	Female		Female	
	n	%	n	%
18-24	243	13,8	243	13,9
25-34	516	29,3	516	29,6
35-44	519	29,5	519	29,7
45-54	375	21,3	375	21,5
55-64	92	5,2	92	5,3
65-69	16	0,9		
<b>Total</b>	<b>1761</b>	<b>100,0</b>	<b>1745</b>	<b>100</b>

#### 4. 2. Tobacco Use Prevalence among Physicians of the Kyrgyz Republic

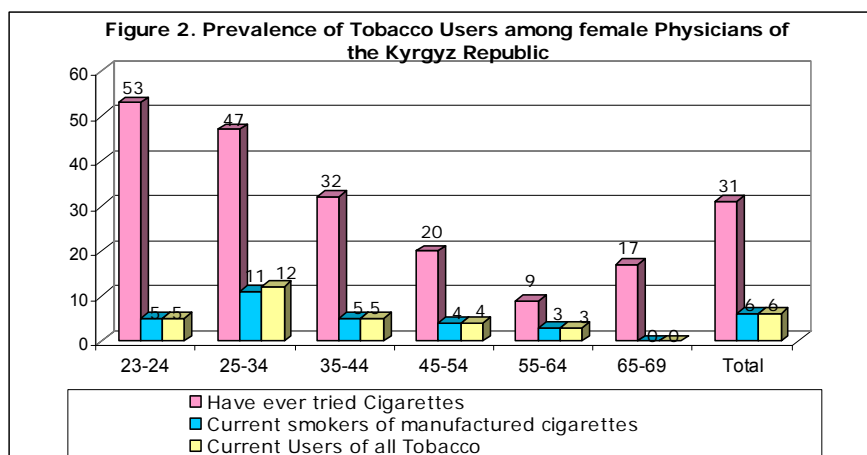
48,5% of Physicians of the Kyrgyz Republic (74, 5% of male and 30,5% of female) have ever tried cigarettes or experimented with cigarette smoking (Fig. 1-2), 29,6 % of those (or 14,3% of persons) have experimented smoking only 1-2 times in their lives. 29 % (61% of male and 6,2% of female) of those were current users of all tobacco products. 1,3% of physicians were current smokers of the roll-own cigarettes. 24,6% of respondents were current smokers of all type of cigarettes. 3,7% of male Physicians of Kyrgyz Republic answered that they use nasvay currently. Also 5,4% male and less than 0,5% female respondents smoke cigars.

##### 4.2.1. Current smokers of the manufactured cigarettes

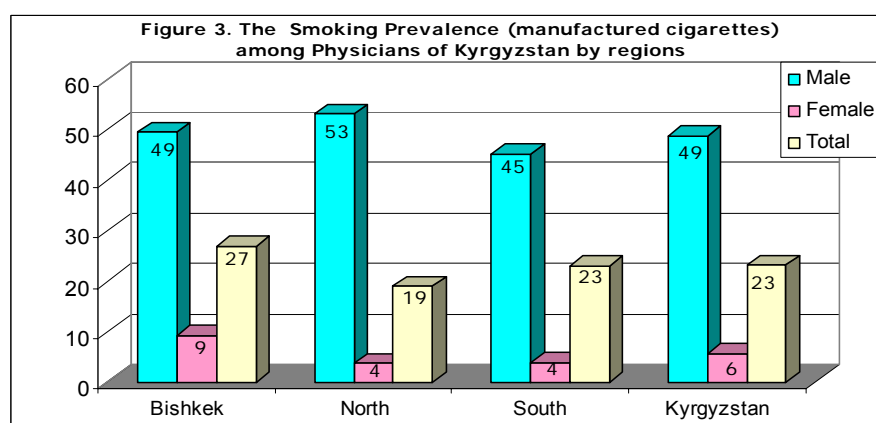
23,5% of respondents (49% of male and 5,7% of female) and 81% of all tobacco users answered that they prefer the manufactured cigarettes. For those who "Have ever smoked 100 cigarettes in their lifetime," 88,7% of current smokers smoke manufactured cigarettes, and 8,6% of those smoked less than 100 cigarettes. 2,7% of persons indicated: "Don't know" or refused to answer. Tobacco Use Prevalence among Physicians of the Kyrgyz Republic by age group is presented in the figures 1 and 2.



The analysis (figures 1 and 2) by age groups shows that most smokers are in the age-groups of 23-24, 25-34 and 35-44 years among males (50%, 52% and 54% accordingly), and for females (5%, 11% and 5% respectively). This is evidence for a tobacco epidemic among young physicians.



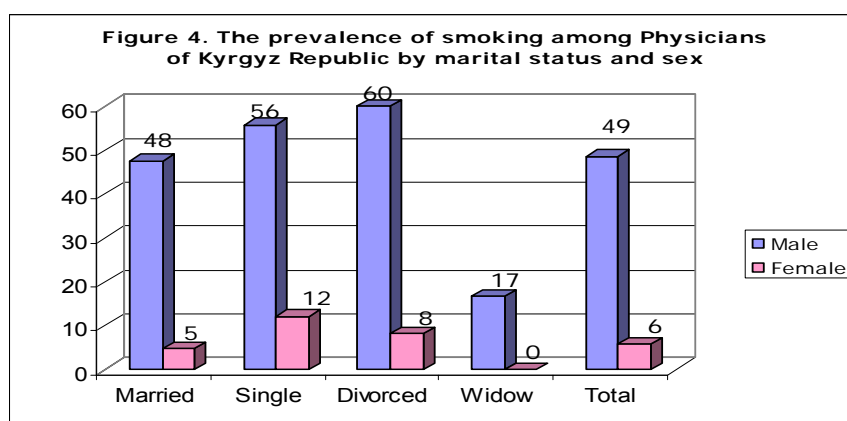
80,4% of current smokers, or 18,7% of Physicians (40,3% of male and 3,7% of female) were regular smokers. Only 7,8% male and approximately 2% of female Physicians are occasional smokers of manufactured cigarettes. The prevalence of current smokers by regions is presented in figure 3.



The analysis (figure 3) by regions shows the number of male smokers is higher in the north region and for female smokers in the capital, Bishkek.

Analysis of smoking rates by nationality showed that 47, 8% of Kyrgyz, 41, 7% of Russian and 55,4% of other nationalities of men respondents were current smokers. 50% of the males did not indicated their nationality were smokers. Among female Russian physicians, smoking prevalence is higher (13,8%) than for Kyrgyz (5,3%) and other (2,4%) nationalities.

As shown in the figure 4, smoking prevalence was higher among divorced/separated (60%) and single (56%) male physicians than for married respondents; Smoking rates are higher among single female respondents (12%) than for married (5%) or divorced (8%).



The comparative analysis of smoking prevalence in Bishkek, and by other urban and rural regions by sex shows that prevalence doesn't differ among male respondents (tab. 15). However, among female physicians the smoking rate was very high in urban regions, especially in the capital, Bishkek (9,2%).

**Table 15. The prevalence of smoking among Physicians of the Kyrgyz Republic by place of residence and sex**

	Total			Male			Female		
	nr*	ns**	%	nr	ns	%	nr	ns	%
Bishkek	540	145	26,9	237	117	49,4	303	28	9,2
Other urban	504	98	19,4	168	82	48,8	336	16	4,8
Rural	406	94	23,2	188	89	47,3	218	5	2,3
<b>Kyrgyzstan</b>	<b>1450</b>	<b>337</b>	<b>23,2</b>	<b>593</b>	<b>288</b>	<b>48,6</b>	<b>857</b>	<b>49</b>	<b>5,7</b>

\*- nr – number of Respondents, \*\*- ns- number of smokers

Analysis of smoking prevalence by profession shows that the smoking rate is higher among all male managers of the surgical departments, male surgeons and Physician teachers of the medical universities. Smoking prevalence was higher among female Public Health departments (13,%) and Physicians of the of the surgical (including gynecology) departments (9,6%).

**Table 16. Smoking Prevalence among Physicians of the Kyrgyz Republic by profession**

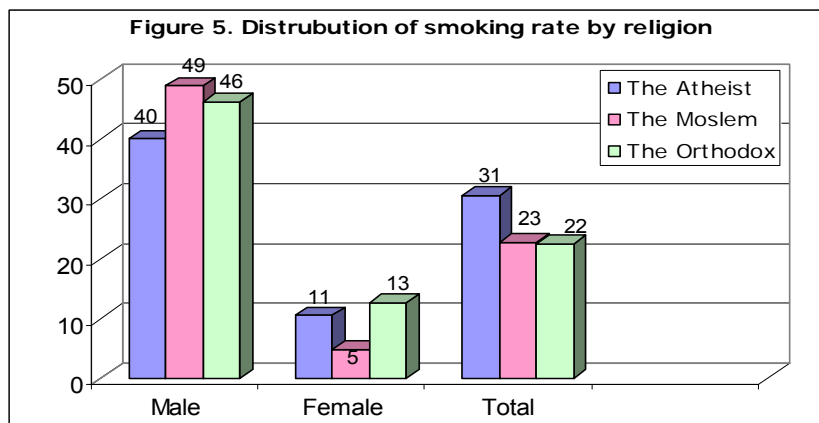
	Male- smokers			Female - smokers		
	nr*	ns**	%	nr	ns	%
Managers of medical organizations	25	11	44,0	20	1	5,0
Managers of surgical departments	35	19	54,3	5	0	0,0
Managers of therapeutic departments	15	7	46,7	22	0	0,0
Physicians of surgical (including gynecology) departments	322	164	50,9	208	20	9,6
Physicians of therapeutic departments	123	56	45,5	466	18	3,9
Public Health Physicians (Sanitary-epidemiological Physicians)	16	5	31,3	52	7	13,5
Physicians – teachers of the medical universities, allocated in the hospitals	17	10	58,8	5	1	20,0
Physicians of Diagnostic Departments, Laboratory including X-ray; administrative and planning division	32	16	50,0	69	2	2,9
Not indicated (missing)	8	0	0,0	10	0	0,0
<b>Total</b>	<b>593</b>	<b>288</b>	<b>48,6</b>	<b>857</b>	<b>49</b>	<b>5,7</b>

\*- nr – number of Respondents, \*\*- ns- number of smokers

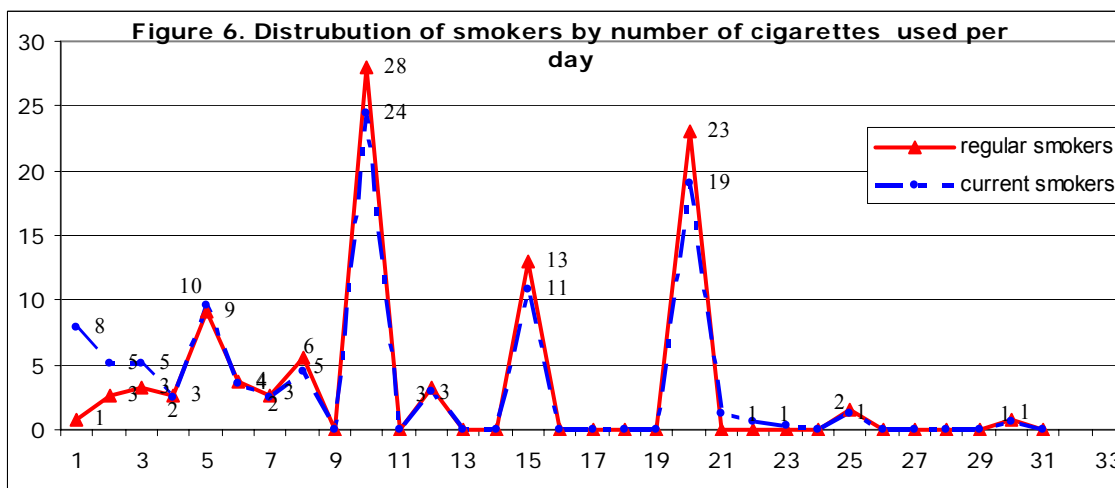
Analyses of smoking rate by religion did not show major differences (figure 5). Approximately 40% of male and 10,5% of female atheists are smokers. Among Moslem male Physicians 48,8% and Orthodox men 46,2% were smokers. However among, female Orthodox respondents (12,7%) smoking rate were higher than among Moslem (4,9%).

The average number of cigarettes per day, smoked by current smokers was 10 pieces per day. Male respondents smoked approximately 11 pieces per day, females 6 pieces. Smoker doctors of Bishkek averaged 9,8 pieces of cigarettes a day, 10,5 male, 6,8 female. Other urban smoking population averaged 10,2 pieces of cigarettes per day (11,1 male and 5,6

female); and in villages 11,1 pieces of cigarettes per day (11,5 male and 3,2 female). Respondents in villages smoke a little bit more (11,1 pieces) than urban smokers (10,2 pieces).

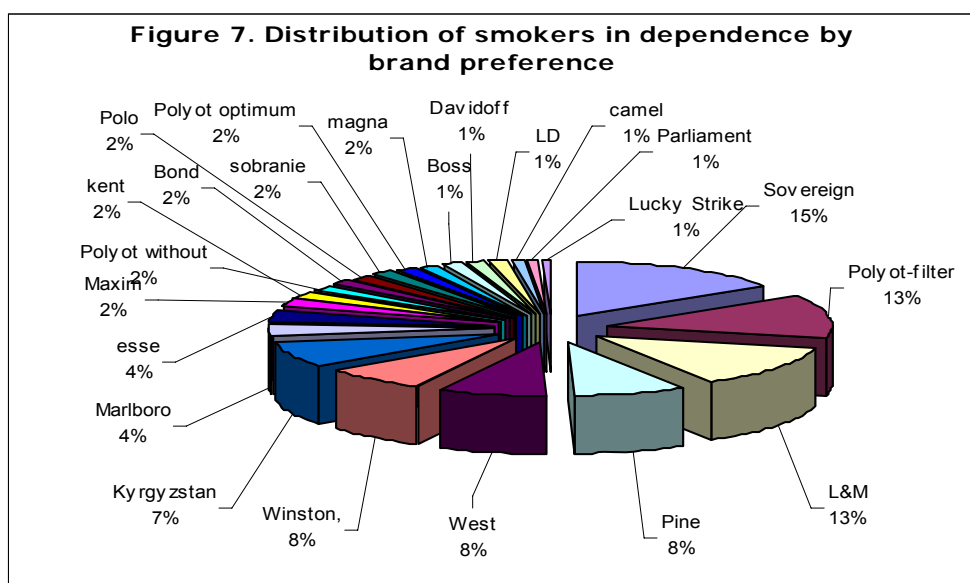


Distribution of quantity of cigarettes smoked during a day by current and regular smokers is presented in figure 6. Approximately 24 % of current and 28% of regular smokers smoke 10 cigarettes per day. One pack of cigarettes (20 pieces) were used by 19% of current and by 23% of regular smokers. 15 pieces per day were used by 11% and 13% current and regular smokers respectively. 5, 30 and 40 pieces were smoked respectively 10%, 1% and 0,5% smokers.



99% of smokers Physicians of the Kyrgyz Republic prefer manufactured cigarettes with filter. Only 1% of respondents smoke manufactured cigarettes without a filter («Polyot without filter», the joint-stock company "Reemstma-Kyrgyzstan").

Analyses of smoking by cigarette brands (figure 7) shows a great spectrum of brand preferences used by current smokers: 15% of current smokers prefer brand «Sovereign», 26% «Polyot with filter» and «L&M» (on 13% of each). Approximately the same percent of brands (8%) Winston, West, Pine, Kyrgyzstan were used by current smokers. Brand «Marlboro» is smoked only by 4% of Physicians.



Analyses of the categories of cigarettes consumed by smokers showed that 47,2% of current smokers prefer cigarettes with the a filter, 39 % of these use cigarettes with filter "Light"; and 5,4% used cigarettes with "Menthol". Also cigarette categories «Ultra lights», «Stream Tec» are preferred by 2,7%, 2,4% smokers accordingly; and cigarettes without filter used by 2,2 % of consumers of the cigarettes.

#### **4.2.2. Expenditure on manufactured cigarettes**

95,3 % of smokers buy their own cigarettes, 1,4% did not answer and 3,3 % of smokers do not buy them. The majority of smokers who do not buy cigarettes (82%) fall in the age groups of 24-34 (45,5%) and 35-44 years (36,4%). Most smokers who did not buy cigarettes (82%) were treated by someone, others 18% took cigarettes at home.

The majority of smokers buy cigarettes in packs of 20 pieces (77%). Manufactured cigarettes by the piece were bought by 21 % and by block by 2% of smokers. 28, 4 % of those who bought a cigarette by piece and 3, 6% of those who bought it by the pack, have answered that they buy cigarettes respectively by pack and also by block.

Also, the majority of smokers who bought cigarettes by the piece were young physicians who fall in the age groups of 23-24 (9,0 %), 25-34 (45 %) and 35-44 (39%) years. A minimum number of people (up to 1%), who bought cigarettes by the pack falls within the age groups of 23-24 and 65-69 years (table 17).

67,2 % of smoking population buy cigarettes in pack of 20 pieces, falling most frequently in the age groups of 35-44 and 44 -54 years.

**Table 17 Distribution of smokers, who buy cigarettes by quantity purchased**

Age group	Smokers	Buy a piece		buy a pack	
	n	N	%	n	%
23-24	8	6	9,0	2	0,8
25-34	86	30	44,8	54	21,9
35-44	115	26	38,8	87	35,2
45-54	83	3	4,5	79	32,0
55-64	27	2	3,0	23	9,3
65-69	2	0	0,0	2	0,8
<b>Total</b>	<b>321</b>	<b>67</b>	<b>20,9</b>	<b>247</b>	<b>76,9</b>

### Cost of cigarettes

21% of smoker respondents, who pay for cigarettes, bought them by the piece; 77% by the pack and 2% got cigarettes in block. 77,6 % of smokers bought a cigarette per day for the cost of 1 Som each. 13,4 % of those bought them for 0,5 Som (50 tyyn) a piece. 9% of smokers got cigarettes at 1,5- 2 Soms per cigarette. The average cost of cigarette by piece is 1 Soms.

**Table 18. Cost of a cigarette by piece**

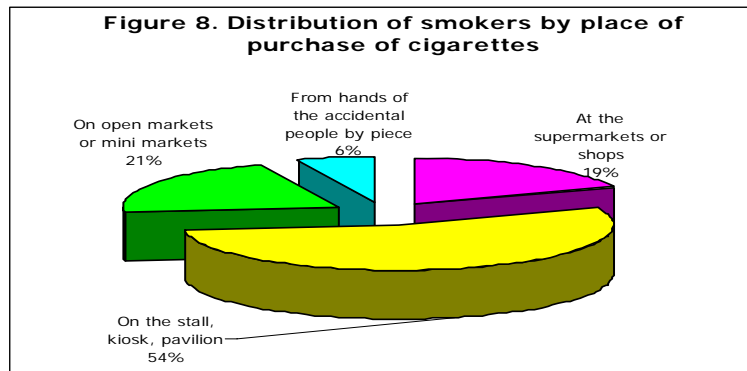
Cost of cigarette by piece, soms	n	%
0,5	9	13,4
1	52	77,6
1,5	5	7,5
2	1	1,5
<b>Total</b>	<b>67</b>	<b>100,0</b>

Analysis of data showed that the cost of one pack (20 pieces) of the cheapest brand of cigarettes is 5 Soms; and the most expensive brands of cigarettes are 60 Soms. Only 1,8 % of smokers bought cigarette packs at 5-6 Soms (Polyot without filter) and less than 1% of smoker physicians buy the most expensive brand "Davidoff". Approximately 34,5% of smokers used the cigarettes which cost 10-15 Soms per pack. Many smokers (51,3%) prefer to buy the cigarettes for 20 soms. 7,6% of smokers Physicians pay for their own bad habit more than 25 Soms. The mean cost of cigarettes by pack is 17,2 Soms.

**Table 19 Cost of a pack of cigarettes, paid by smokers**

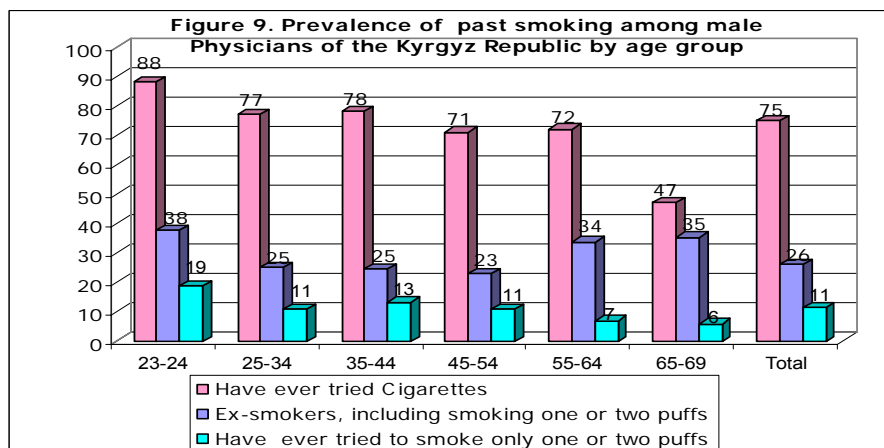
Cost of a pack, soms	N	%
5-6	5	1,8
10	50	18,2
11-14	32	11,6
15	13	4,7
16-18	11	4,0
<b>20</b>	<b>141</b>	<b>51,3</b>
25	10	3,6
30	5	1,8
35	6	2,2
60	2	0,7
<b>Total</b>	<b>275</b>	<b>100,0</b>

28,4% of those who buy a cigarette by the piece also buy them by pack; and 3,3% of those who pay for a pack, also bought cigarettes in block. More than 50% of smoker Physicians bought manufactured cigarettes in the stall, kiosk (booths), pavilion. Approximately the same percent of smokers got them at supermarkets, shops, and on the open market, including the mini-markets (figure 8). Unfortunately 6 % of smokers buy cigarettes from casual people selling them in the streets by piece.

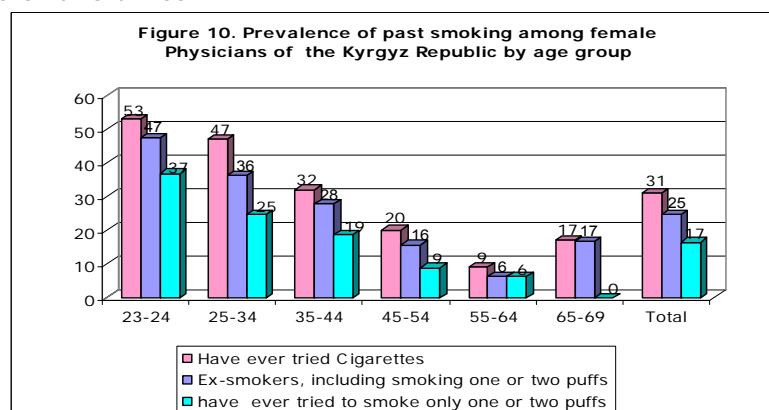


#### 4.2.3. Past smoking prevalence among Physicians of the Kyrgyz Republic

25% of Respondents or 52% of those who have ever tried cigarettes are ex-smokers. The majority of ex-smokers (56,8%) have only ever tried or experimented with cigarette smoking, even one or two puffs in their life time. Prevalence of past smoking among male Physicians (fig. 9) is low in the comparative analysis with past smoking rate among female Physicians of the Kyrgyz Republic (figure 10).



Approximately one-third of male ex-smokers have smoked at least 100 cigarettes in their lifetime, 17% less than 100 cigarettes, and 43,5% of those have tried or experimented with smoking only one or two times.



For female ex-smokers: 80,6% of female respondents, who have ever tried or experimented with smoking were ex-smokers. Female respondents who have only tried or experimented with smoking and ex-smokers were highest in the age groups 23-24, 25-34 and 35-44 years. More than 100 cigarettes have used by 2% of and less than 100 cigarettes by 16,5% of female ex-smokers; and 66,5% of those were experimenters of smoking.

#### 4.2.4. The prevalence of other Tobacco use, such as chewing Tobacco "Nasvay", Cigars, pipes among Physicians of the Kyrgyz Republic



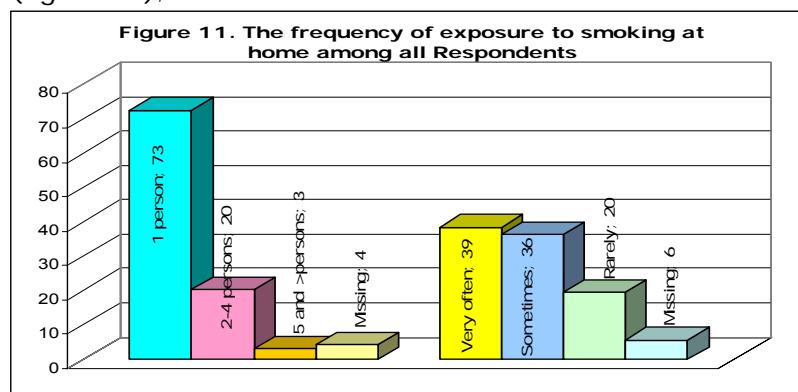
14,5% of respondents (26,7% of male and 6% of female) have ever tried or experimented other tobacco products, such as nasvay, pipe and cigars. 51% of those (44% of male and 72,5% of female) have ever tried or experimented with other tobacco only 1-2 times; 25, 8% male and 4% of female of those, used more than 100 cigars (pipes) or used nasvay more than 100 times. 18% of male and 8% of female have used less than 100 cigars (pipes) or used nasvay less than 100 times.

### The prevalence of current and past Nasvay using among Physicians

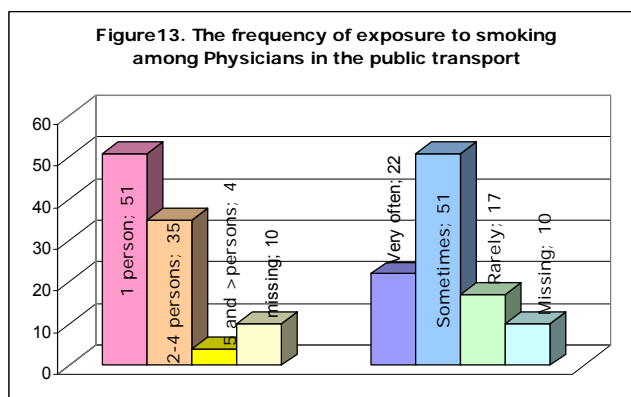
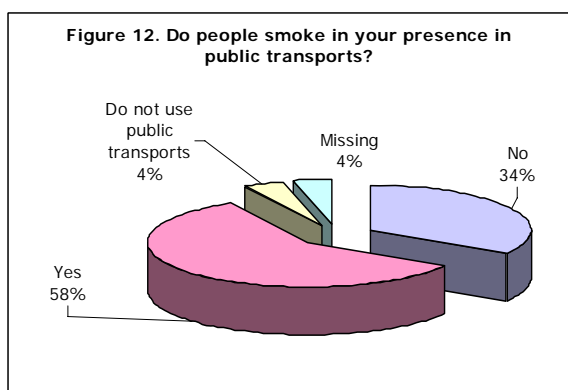
3,7% of male Physicians of Kyrgyz Republic answered that they are using nasvay currently. The majority of current users of nasvay were young male physicians in the age groups 23-24 (18,2%), 25-34 (27,3%) and 35-44 (27,3%) years. 68% of current users of nasvay were young male physicians at age 23-25 years old from the southern region of Kyrgyzstan where tobacco is cultivated. Also 5,4% male and less than 0,5% female respondents smoke cigars. Among female respondents, current users of nasvay was not found. However 0,8% of female respondents answered that have used nasvay in past. 4,6 % of respondents were ex-users of nasvay. 74% of those, were in the age groups 35-44 and 45-55 years. Unfortunately one-third of male respondents, who answered that they have used nasvay did not answer if they were ex-users.

### 4.2.5. Passive smoking among general Physicians of the Kyrgyz Republic

29,4% of Physicians (17,5% of male and 37,6% of female) answered that someone smoked at home in their presence. One person smoked at home in presence of respondents in 73% of cases (figure 11);



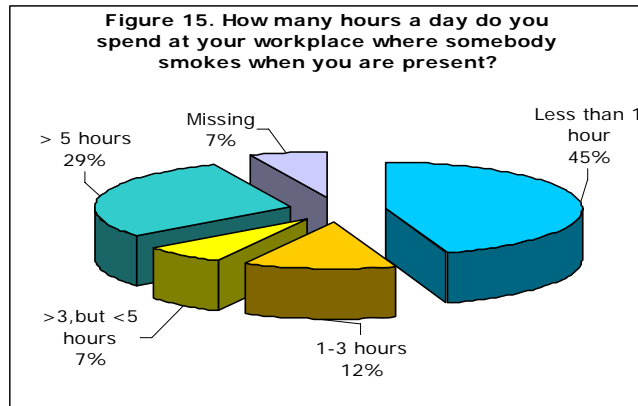
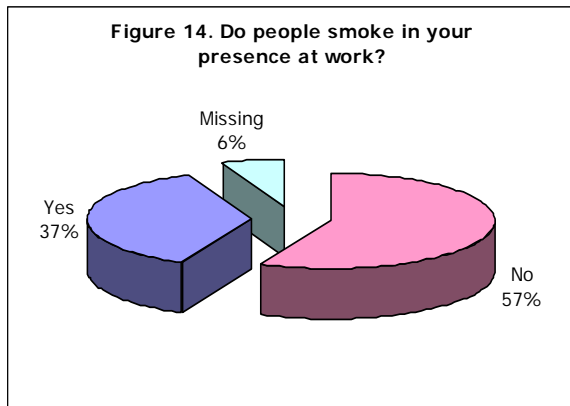
Exposure to smoking was found to be “very often” in 39% and “sometimes” in 36% of cases. Exposure of Physicians to smoking in public transports was much higher than their exposure to smoking at home. More than half of Physicians answered “Yes” (figure 12) on the question “Do other people smoke in your presence in public transports?” 58% of physicians were exposed to smoking in public transport (65% women, and 35% men). “One person smoked in public transport in my presence” was answered by more than 50% of Physicians; 2-4 persons smoked in presence 35% of respondents (figure 13).



50% of Physicians exposed to smoking in public transport stated that it occurred “Sometimes” and 22% of those stated “Very often.” 70,4 % of respondents were exposed to

smoking in public transport because of driver's smoking, and 28,2% because of smoking by passengers.

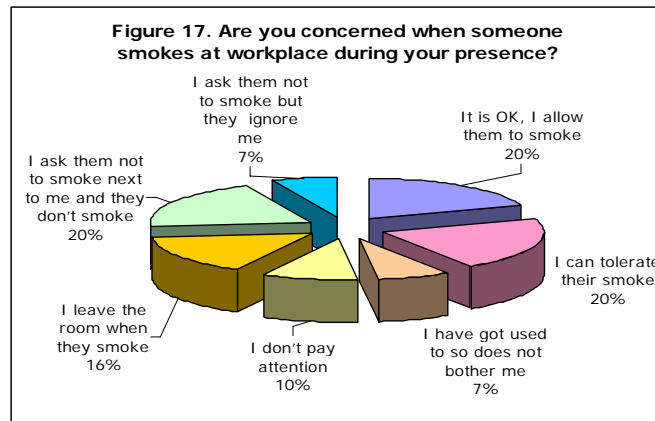
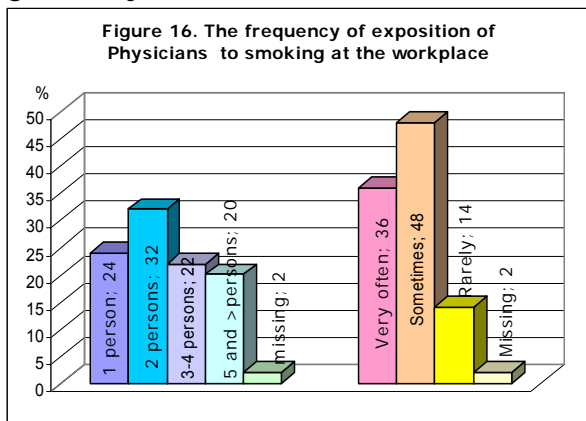
Unfortunately, exposure to smoking in the workplace in medical organizations is also high. 37% of physicians answered that someone smoked in their presence at work (figure 14).



Analysis of exposure to smoking at the workplace by sex showed another picture compared to exposure to smoking in public transport. 61% of male and 39% of female respondents were exposed to smoking from their colleagues at the workplace. Less than 1 hour exposure in the workplace occurred for 45% of Physicians (58% of male and 42% of female); for more than 5 hours 29% (72,6% of male and 27,4% of female); and for 1-3 hours 12% of respondents (figure 15).

32% of those exposed at their workplace answered that 2 people smoke in their presence at the workplace; 1, 3-4, and more than 5 people smoke confirmed respectively 24%, 22% and 20% of those (figure 16). The distribution of respondents exposed to smoking at the workplace by their colleagues by expressing concern about smoking in their presence, is presented in figure 17.

Unfortunately, 20% allowed smokers to smoke in his (her) presence at the workplace, 20% of those tolerated their smoke, 10% did not pay attention, and 16% left the room when they smoked. Only 20% of those who requested: "Do not to smoke" mentioned that the person stopped smoking in their presence;" but 7% of requests "Do not smoke" were ignored by smokers.

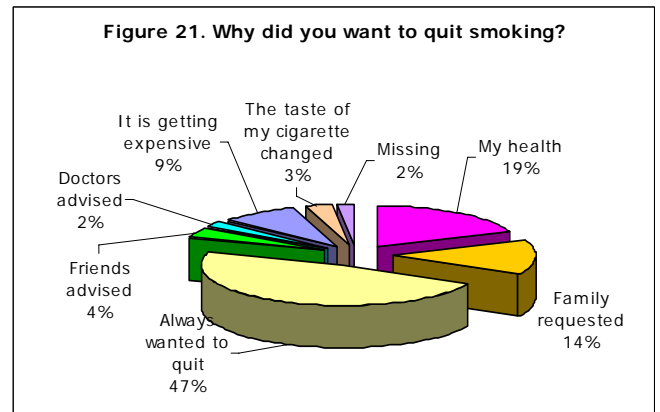
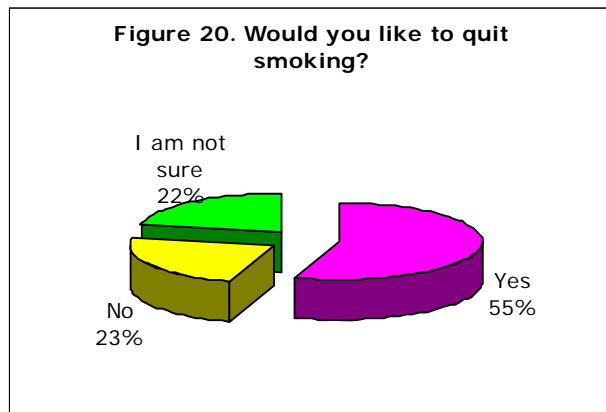
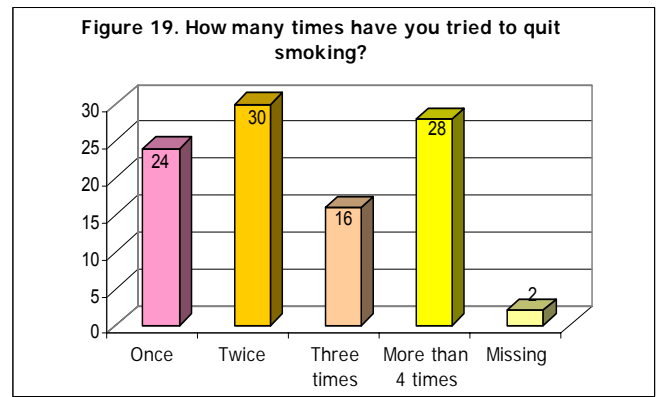
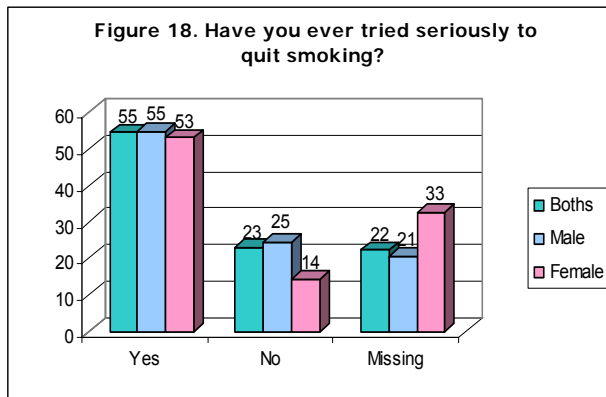


The section on Passive smoking for smokers and ex-smokers was not analyzed because more than one-third did not answer the questions in this section

#### 4.2.6. Smoking cessation among current smoker Physicians

54,6% of current smokers (55% of male and 53,1% of female) have ever tried seriously to quit smoking. Unfortunately one-third of female and 20% of male current smokers did not answer this question (figure 18). The majority of smokers who have tried to quit smoking

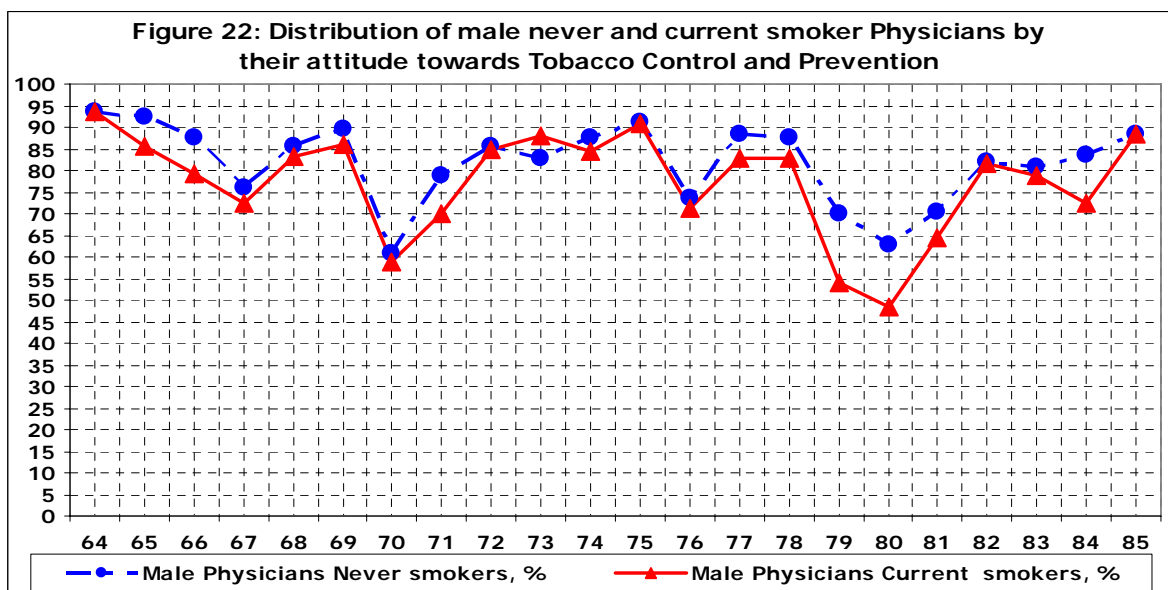
have tried once (24%), twice (30%), 3 times (16%); and 28% of those tried more than 4 times (figure 19).



55% of current smokers would like to quit smoking (figure 20); 23% don't want to quit; and 22% of aren't sure is they want to quit (figure 21).

#### 4.2.7. Knowledge and attitude of Physicians toward tobacco control and prevention

Knowledge and attitude of Physicians to Tobacco Control were studied by using the questions in the section "Knowledge and attitudes" of the Global Health Professional Survey questionnaire developed by the World Health Organization and modified by the Queen's University Family Medicine. Distribution of the answers by sex of never and current smoker Physicians to questions (64 to 85) in the questionnaire are presented in table 20 and figures 22-23.



**Table 20 Distribution of current\* and never smokers Physicians accord to their knowledge and attitudes toward tobacco control and prevention by sex**

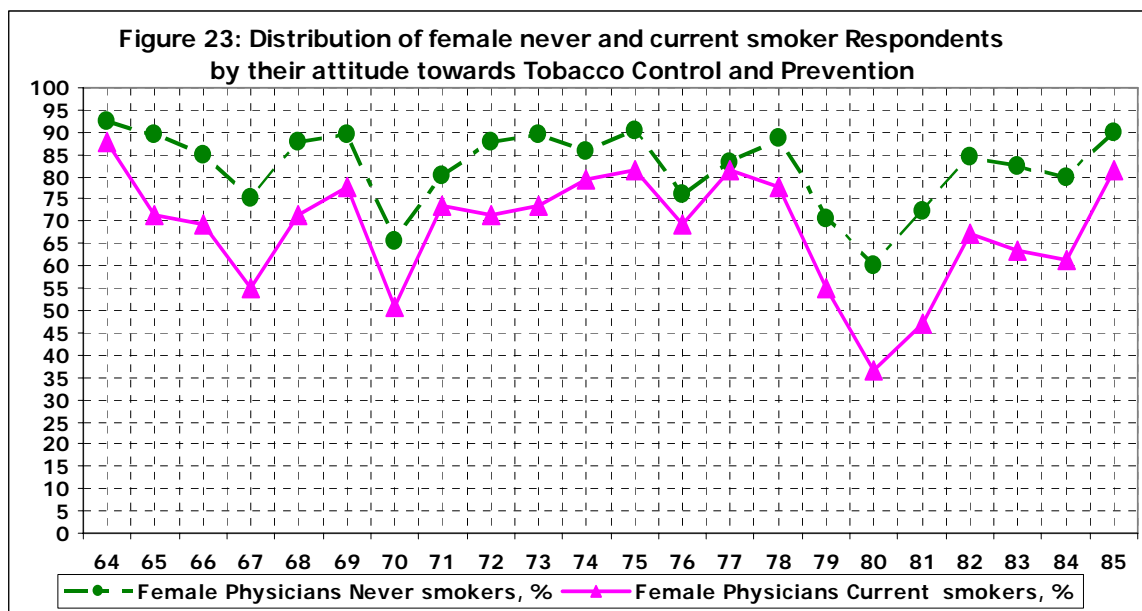
Questions	Male, %		Female, %	
	Never smokers	Current smokers	Never smokers	Current smokers
64. Smoking is harmful to your health.	93,8	93,4	92,4	87,8
65. Health professionals serve as role models for their patients and the public.	92,4	85,4	89,5	71,4
66. Health professionals should set a good example by not smoking.	87,6	79,2	84,8	69,4
67. Patient's chances of quitting smoking are increased if a health professional advises him or her to quit.	75,9	72,2	75,2	55,1
68. Health professionals should routinely ask about their patients smoking habits.	85,5	83,3	87,9	71,4
69. Health professionals should routinely advise their smoking patients to quit smoking.	89,7	86,1	89,3	77,6
70. Health professionals who smoke are less likely to advise people to stop smoking.	60,7	58,7	65,7	51,0
71. Health professionals should get specific training on cessation techniques.	78,6	70,1	80,3	73,5
72. Health professionals should speak to community groups about smoking.	85,5	84,7	87,9	71,4
73. Smoking in enclosed public places should be prohibited.	82,8	87,8	89,3	73,5
74. Health warnings on cigarette packages should be in big print.	87,6	84,4	85,7	79,6
75. Tobacco sales to children and adolescents should be banned .	91,0	91,0	90,3	81,6
76. Sport sponsorships by tobacco industry should be banned.	73,8	71,2	76,1	69,4
77. There should be a <u>complete</u> ban on the advertising of tobacco products.	88,3	82,6	83,4	81,6
78. Hospitals and health care centres should be "smoke-free".	87,6	82,6	88,6	77,6
79. The price of tobacco products should be increased sharply.	70,1	53,8	70,5	55,1
80. Neonatal death is associated with passive smoking.	62,8	48,3	59,9	36,7
81. Maternal smoking during pregnancy increases the risk of Sudden Infant Death Syndrome.	70,3	64,2	72,2	46,9
82. Passive smoking increases the risk of <u>lung disease</u> in non-smoking adults.	82,1	81,4	84,6	67,3
83. Passive smoking increases the risk of <u>heart disease</u> in non-smoking adults.	80,7	78,8	82,2	63,3
84. Paternal smoking increases the risk of lower respiratory tract illnesses such as pneumonia in exposed children.	83,4	72,2	79,8	61,2
85. Health professionals should routinely advise patients who smoke to avoid smoking around children.	88,3	88,5	90,0	81,6

\* - current smokers of the manufactured cigarettes

(n = 145 for never smokers male physicians; n = 288 for current smokers male physicians = 589 for never smokers female physicians; n = 49 for current smokers female physicians).

As accepted, awareness about harmful consequences of smoking for health among male Physicians, both for never and current smokers, is equally high (diagram 22), but not 100%. This awareness among female smokers is a little low (87,8%) than among never smoker (92,4%) physicians (diagram 23).

Comparative analyses of data of male never and current smokers showed that the answers to the majority questions did not differ significantly and are high (Table 20, Diagram 22). However, only 55% of female smokers agreed with the question: "Patient's chances of quitting smoking are increased if a health professional advises him or her to quit" against 75% of never smoker Physicians (figure 23).



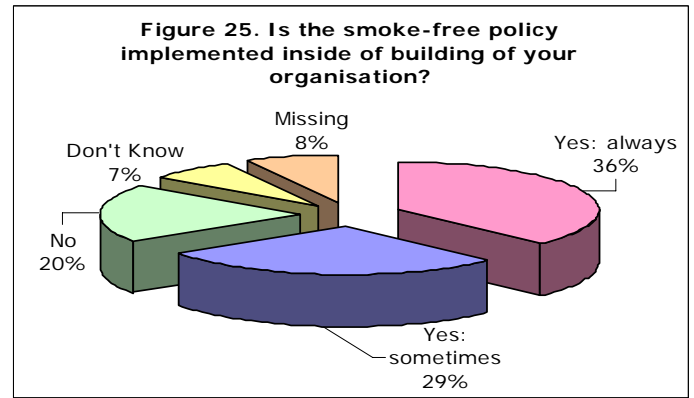
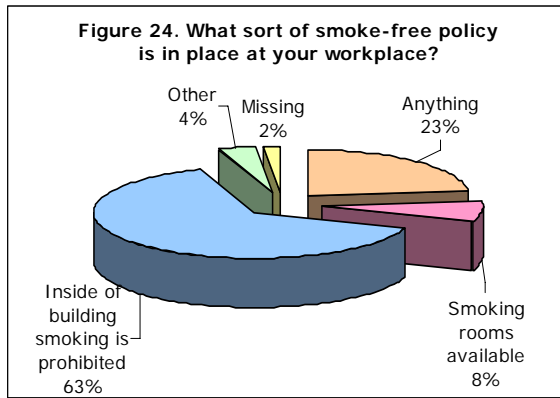
48,3% of male and 36,7% female current smokers agreed with the question: " Neonatal death is associated with passive smoking;" This agreement was low among female and male never smokers.

Less than 60% of agreement was found with questions: "Health professionals who smoke are less likely to advise people to stop smoking," "The price of tobacco products should be increased sharply" as never and current male and female smokers.

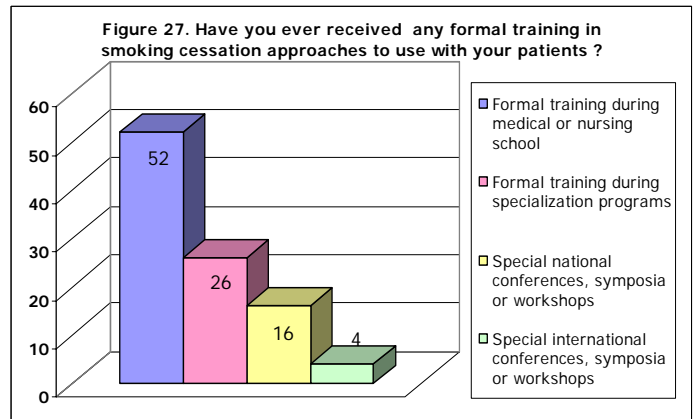
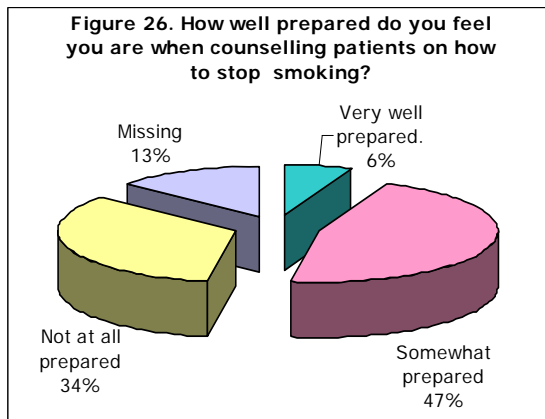
Approximately 70% of never and current smoker Physicians answered that they agree with other questions in this section (table 20).

The Order of the Ministry of Health of the Kyrgyz Republic #139 "On prohibition of smoking in the building of the medical organization" was approved on 12.04.2005; therefore the question "Is the smoke-free policy in place at your workplace?" was included in the questionnaire.

More than 60% of Physicians answered that smoking is prohibited inside their building (figure 24). However 23% of respondents confirmed that the smoke free policy was not really implemented in their workplace. 36% of respondents answered that the smoke-free policy of the Ministry of Health is implemented "always" (figure 25), and 29% of physicians confirmed it as "sometimes".



Also a very low human capacity for implementation of the FCTC and the national tobacco control law was found. Unfortunately, physicians feel unprepared for helping their patients to quit smoking (figure 26). Half of respondents answered that they somewhat prepared to help their patients to quit smoking, very well prepared only 6% of those

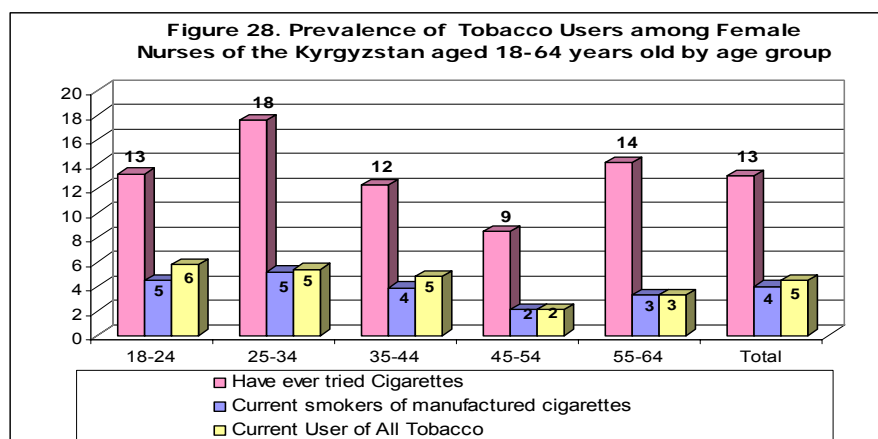


The majority of Physicians have received their knowledge on smoking cessation from formal training in the medical university. Only one quarter of Physicians of the Kyrgyz Republic were trained during specialization programs; and 20% of respondents trained during national and international workshops or conferences.

### 4.3. Tobacco Use Prevalence among female Nurses of the Kyrgyz Republic

Analyses of tobacco use prevalence data among Nurses was made only among female Nurses because the number of male respondents was very few (85 male nurses aged 18-64 years old, against 1761 females aged 18-69 years). Among female respondents in the age group 65-69 years only 16 people answered, and all of them were never smokers. Thus, prevalence data were analyzed only for female respondents (1745 persons) aged 18-64 years old.

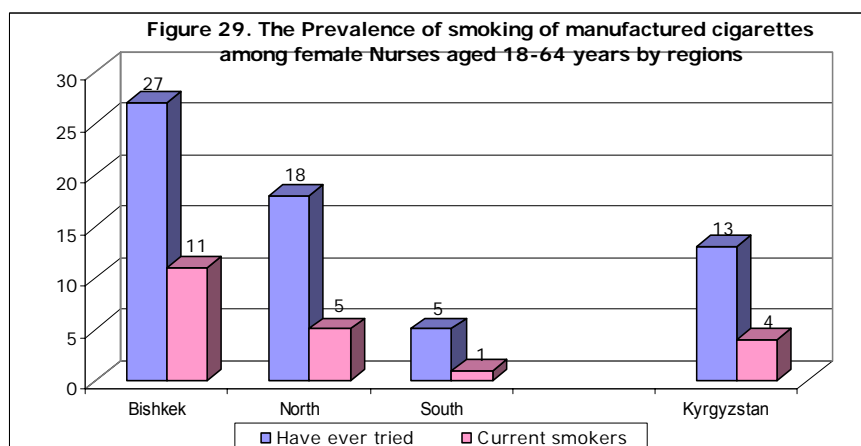
13% of female Nurses (referred to as Nurses) of the Kyrgyz Republic have ever tried cigarettes or experimented with cigarette smoking (figure 28). 9,2% were ex-smokers of manufactured cigarettes, 52% of these (or 5,2% of respondents) experimented with smoking only 1-2 times in their lives. Among ex-smokers, only 4% answered that they have smoked more than 100 cigarettes, and 29% answered less than 100 cigarettes in their lifetime.



#### 4.3.1. Current smokers of the manufactured cigarettes

5 % of Nurses were current users of all tobacco products, with 4% current users of manufactured cigarettes. 61 % of current manufactured cigarettes smokers smoked more than 100 cigarettes in their lifetime. 13 % of them, smoked less than 100 cigarettes and 11,6% of person did not know or did not answer. and 14,5% did not indicate anything. Tobacco Use Prevalence among Nurses of the Kyrgyz Republic by age group is presented in the figure 28. The analysis by age groups showed that the maximum number of smokers were in the age-groups of 18-24 and 25-34 years (figure 28).

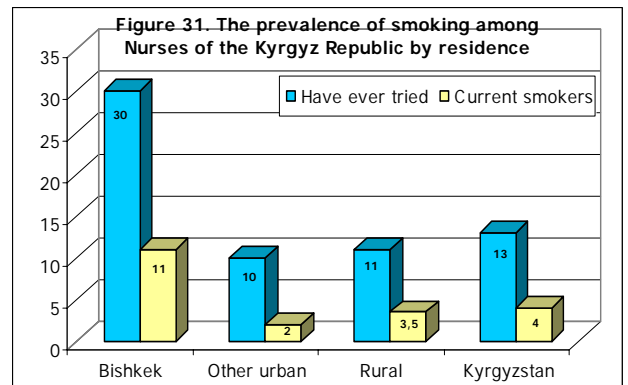
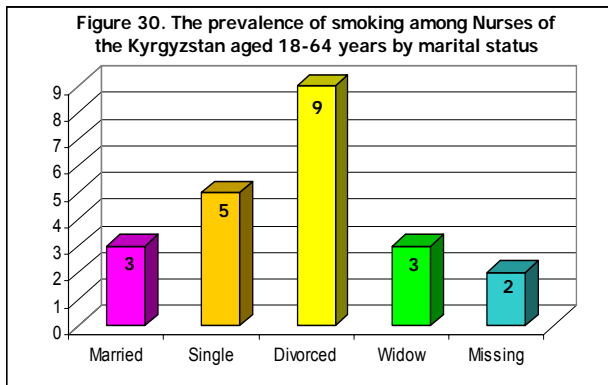
This is clear evidence that there a tobacco epidemic among young Nurses. 56,5% of current smokers, or 2,2% of female respondents, were regular smokers; and 17,4% of current smokers and approximately less than 1% of Nurses were occasional smokers of manufactured cigarettes. Unfortunately, 20% of current smokers, or 0,8% respondents, did not answer the question about current smoking. The prevalence of smoking of manufactured cigarettes among Nurses by regions is presented in figure 29.



The analysis of smoking rates by regions found that 52% of smokers were from Bishkek, 38% from North, and 12% South regions.

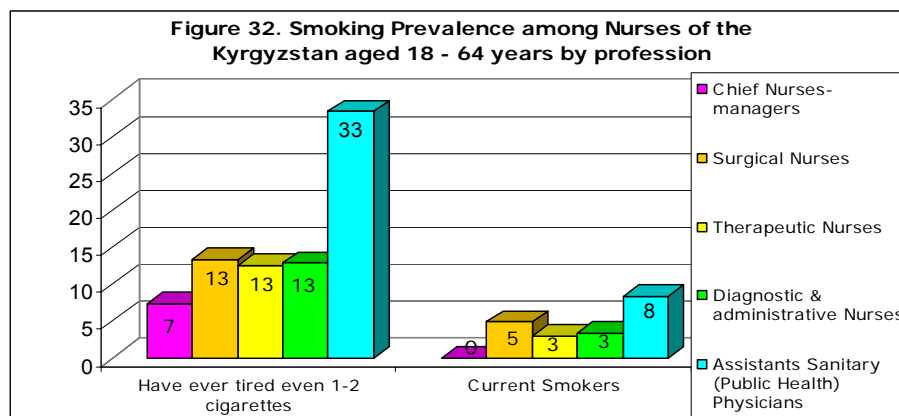
Analysis of smoking rates by nationality showed that among current smoker Nurses of manufactured cigarettes, 3,5% were Kyrgyz, 12,1% Russian and 2,3% other nationalities.

The prevalence of smoking among divorced or separated Nurses (9%) was higher than for married Nurses (figure 30). The smoking rate is higher among single respondents (5%) than for married (3%) and divorced (3%).



A comparative analysis showed that smoking prevalence among female Nurses in Bishkek was much higher than among the same colleagues from other urban and rural regions (figure 31).

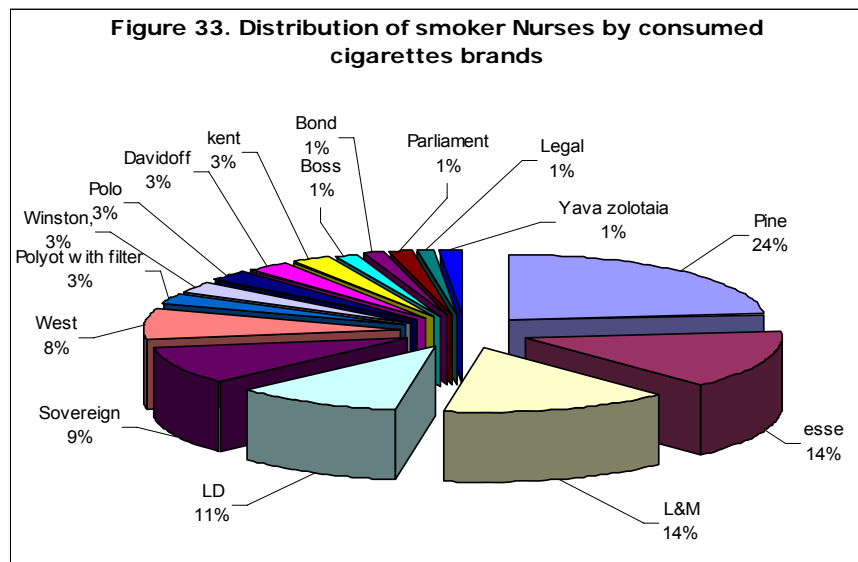
Analysis of smoking prevalence by profession shows that smoking rates were higher among Nurses working in surgical (including gynecology) departments, and 2 times greater among assistants of Sanitary-epidemiological Physicians (Public Health Doctors), than among Nurses working in therapeutic (including family medicine centers) and Diagnostic Departments, Laboratories including X-ray, and administrative and planning divisions (figure 32).



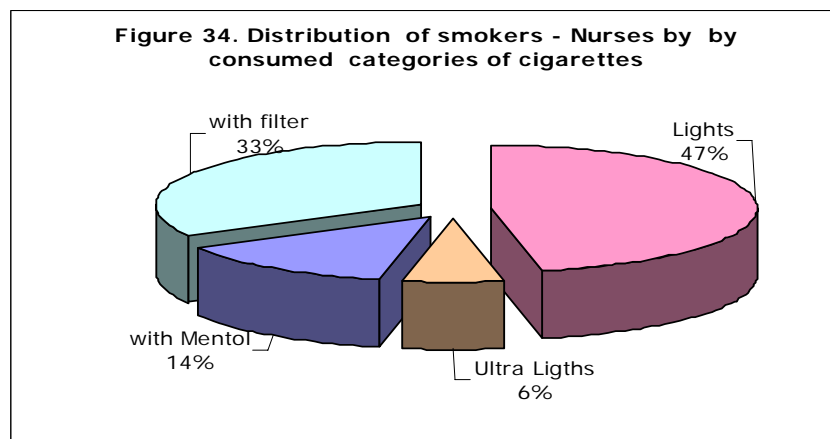
The mean number of cigarettes per day, smoked by current regular smokers was 8,7 pieces a day and 2 pieces a day for occasional smokers.

24 % of smoker female respondents used cigarettes with filter "Pine" (fig. 33). Approximately the same percent of smokers prefer «Esse» (14%), «L&M» (14%), and «LD» (11%). Also other more preferred brands of cigarettes were «Sovereign» (9%) and « West » (8%), 20% of smokers used other brands of manufactured cigarettes, such as «Polyot with filter» «Winston», «Polo», «Kent», «Davidoff» and etc «Marlboro» was not used by anyone.





Analyses of the categories of cigarettes consumed by smoker Nurses showed (figure 34), that 47 % of current smokers prefer cigarettes "Light", 33% with the filter; and 14% used cigarettes with "Menthol;" 6% of them used «Ultra lights».



#### 4.3.2. Expenditure on cigarettes

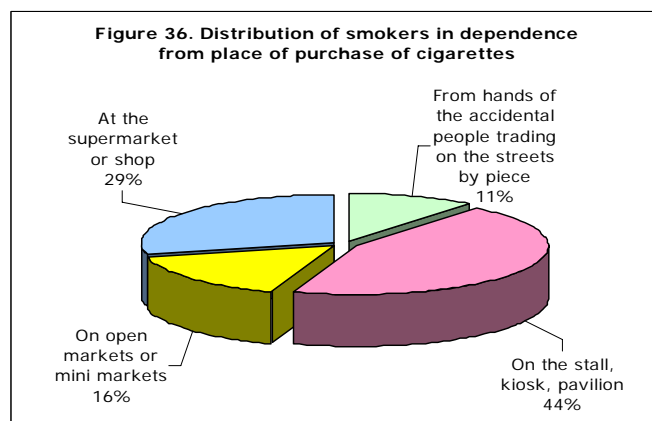
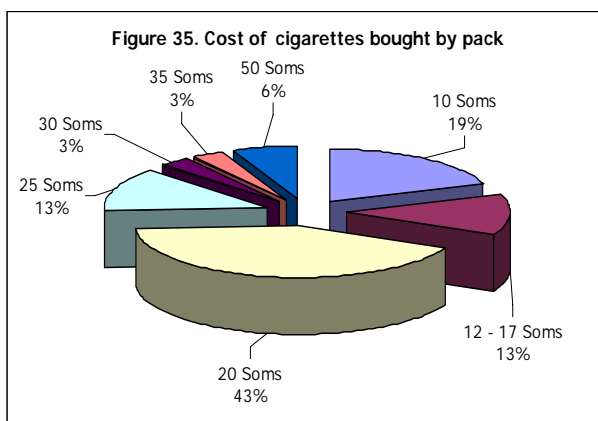
90 % of smokers buy cigarettes; 6 % do not buy them; and 6 % did not answer. All smokers who do not buy their own cigarettes were treated by someone and fall into the age groups of 24-34 (67%) and 35-44 years (33%).

The majority of smokers bought cigarettes in packs of 20 pieces (69 %). 29% of smokers bought them by the piece, and 2% by block.

54 % of those who bought a cigarette by the piece were young Nurses aged 18-34 years. 31% of those who bought a cigarette by the piece were in the age group 35-44 years, and 15% were in the age group 45-54 years. The mean cost of cigarette by piece was 1 Soms.

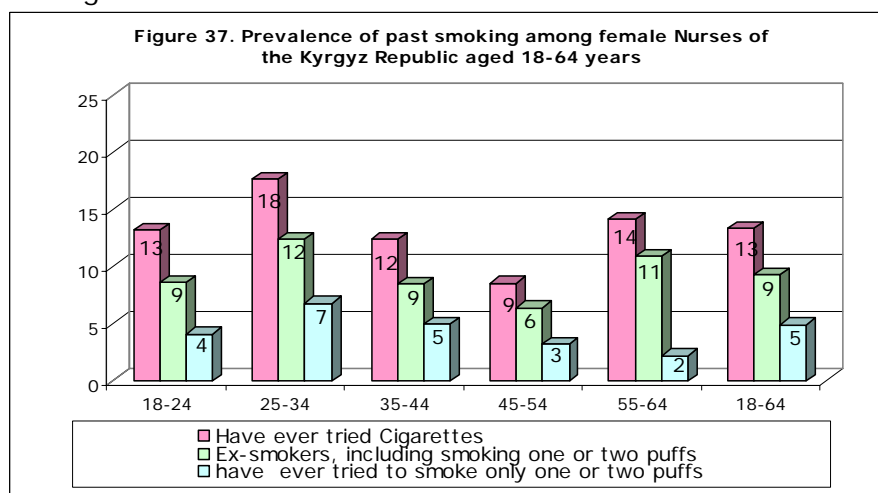
The cost of one pack (20 pieces) of the cheapest brand of cigarettes bought by Nurses was 10 Soms; and the cost of the most expensive brand was 50 Soms. 43% of smoker Nurses bought cigarettes at 20 Soms and 19% of them at 10 Soms (figure 35). The mean cost of cigarettes by pack was 20,7 Soms.

44% of smokers Nurses bought manufactured cigarettes in the stall, kiosk (booths), pavilion; and 29% of them got their cigarettes at supermarkets or shops. 16% bought them at the open market or mini-markets and 11 % from people selling them in the streets by piece (fig.36).



#### 4.3.3. Past smoking prevalence among Nurses of the Kyrgyz Republic

70% of Nurses who have ever tried cigarettes are ex-smokers. The majority of ex-smokers (52,1%) have only ever tried or experimented with cigarette smoking, even one or two puffs in their life time. 4,3% of ex-smokers have smoked at least 100 cigarettes in their lifetime, 28,8% smoked less than 100 cigarettes and 43,5% have tried or experimented with smoking only one or two times. Prevalence of past smoking among female Nurses is presented on the figure 37.



#### 4.3.4. The prevalence of other Tobacco use, such as chewing Tobacco "Nasvay", Cigars, Pipes

2% of female Nurses have ever tried or experimented with other tobacco products, such as nasvay, pipe and cigars. 70% of these have ever tried or experimented to use other tobacco products only 1-2 times. 18, 2% used more than 100 cigars (pipes) or nasvay more than 100 times, and 12% used less than 100 cigars (pipes) or used nasvay less than 100 times.

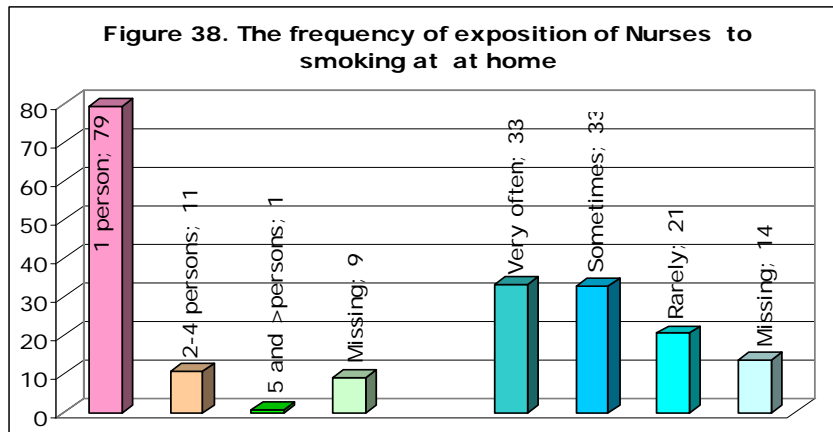
##### The prevalence of current and past Nasvay use among female Nurses

6,1% of those who have ever tried or experimented other tobacco products, were current users, and 12,1% of these were past users of Nasvay. 100% of current and 50% of past Nasvay users were inhabitants of Batken region, where the tobacco leaf for Nasvay is grown. 50% of other past Nasvay users were Nurses from Bishkek.

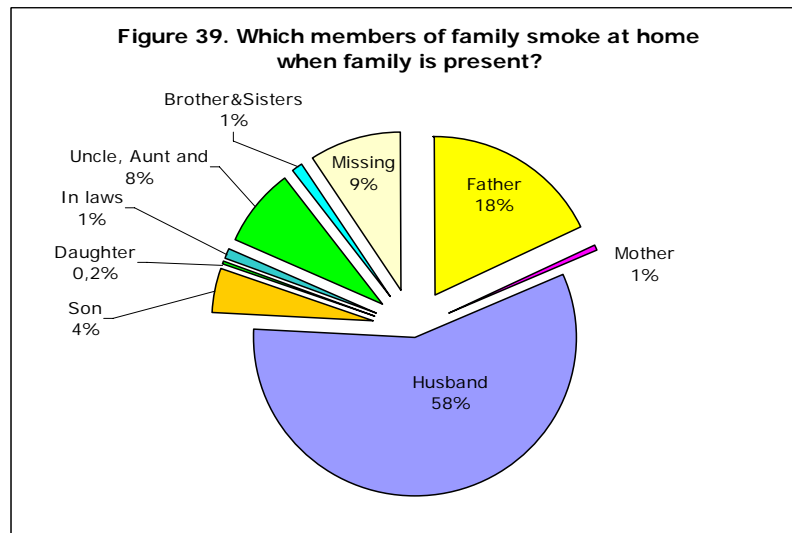
#### 4.3.5. Passive smoking among general Nurses of the Kyrgyz Republic

The majority of Nurses (58%) answered that no one smoked at home against 33% of those who said that someone smoked at home in their presence. Unfortunately 9 % of respondents did not answer this question.

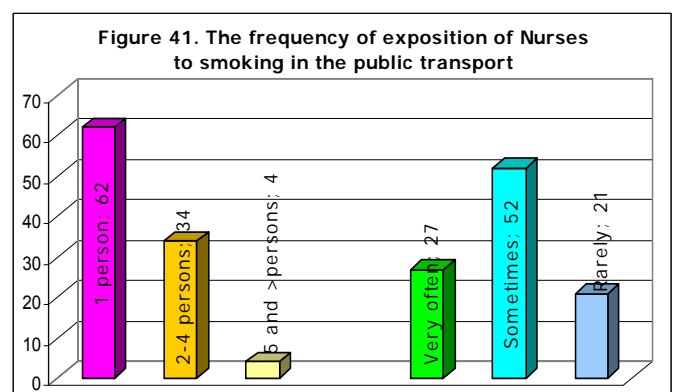
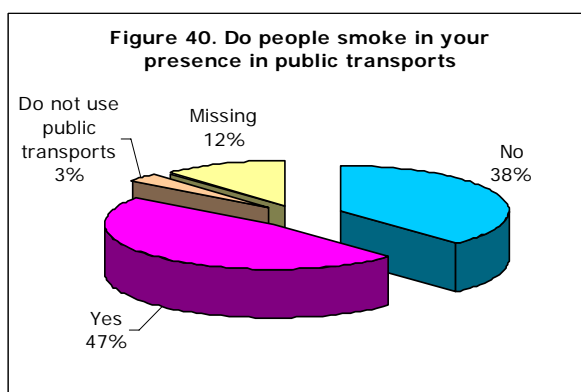
The majority of cases stated that one person smokes at home (82%), and 11% said that 2-4 persons smoke at home (figure 38). The same percent of cases (11%) said that someone smoked very often (33%) or sometimes (33%).



Very often the persons smoking at home were husbands of Nurses (58%); 18% of cases smokers at home were fathers and 8% were uncles or aunts. Also 4% were sons and 1% brothers (figure 39).



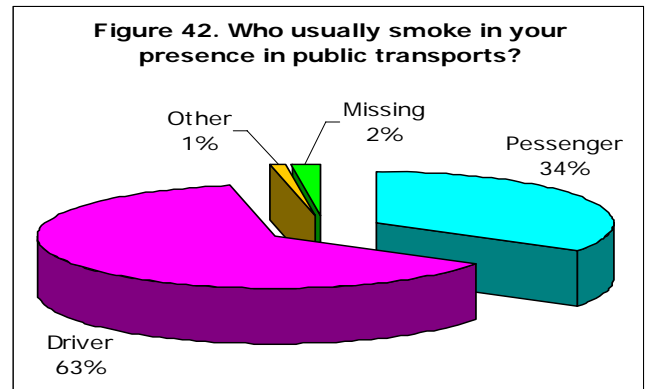
Approximately 50% of female Nurses mentioned being exposed to smoking on public transports (figure 40), 3% of Nurses said that they do not use public transport. 50% of Nurses answered that one person smoked on public transport in their presence (figure 41); 34% of these said 2-4 persons smoked in their presence. 52% of Nurses exposed to smoking on public transport mentioned sometimes, 27% very often, and 21% mentioned rarely.



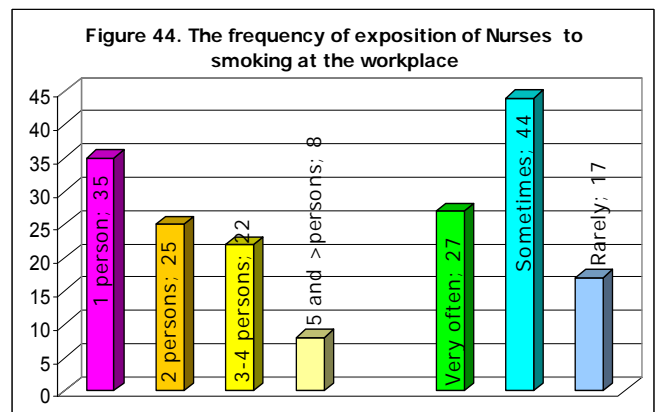
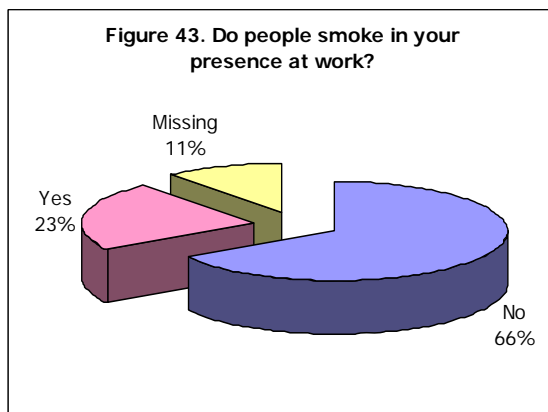
63% of Nurses exposed to smoking on public transport said that the driver smoked (figure 42);

34% said passengers; only 1% said other people smoked in public transport.

Among those, who answered other people, 60% said husbands, 20% said friends of drivers and 20% said relatives.

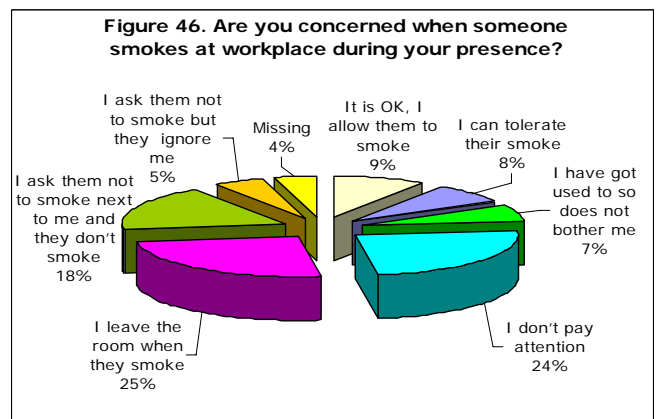
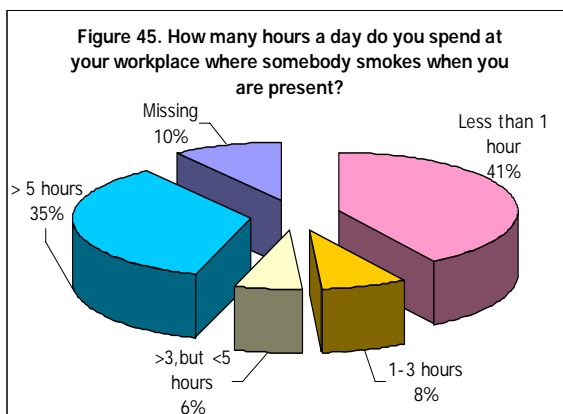


23% of Female Nurses were exposed to smoking by their colleagues at the workplace (figure 43). 36% of those, exposed at their workplace, answered that 1 person smoked in their presence; and 2, 3-4 and more than 5 people smoking at the work place were 25%, 22% and 8% respectively (figure 44). 28% of Nurses, exposed at the workplace, answered that they were exposed to smoking very often; 45% said "some times" and 17% mentioned "rarely."



Less than 1 hour of exposure in the workplace was mentioned by 41% of Nurses, more than 5 hours 35%, and 1-3 hours and more than 3 but less than 5 hours by 8% and 6% respectively (figure 45).

The distribution of the respondents who were exposed to smoking at their workplace by their colleagues and who expressed concern about the smoking in their presence is presented in figure 46.



Approximately one quarter of respondents, who answered this question, said that they did not pay attention to the smoking of colleagues in their presence. The same percent of Nurses said that they left the room when others smoke, and one quarter of Nurses allowed

smoking in their presence at the workplace (9%), and 8% tolerate the smoke, and 7% said that they got used to it and that it did not bother them (7%). Only 18% of those who had asked the smoker to: "Do not to smoke next" mentioned that the smoker did not smoke. 5% of those who requested "Do not smoke," were ignored by the smokers.

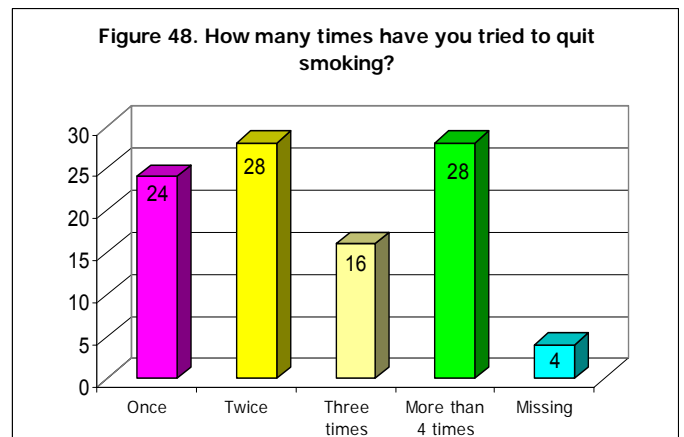
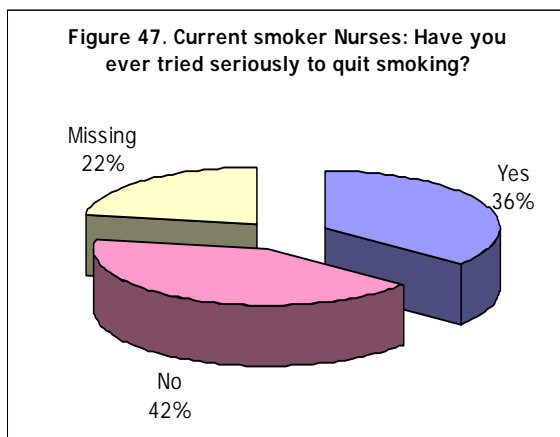
The section on Passive smoking for smokers and ex-smokers was not analyzed because more than one-third of them did not answer on questions of this section

Unfortunately, 89% of Ex-smoker Nurses did not answer the question "Have you ever tried seriously to quit smoking?" Therefore data of 11% of ex-smokers were not analyzed.

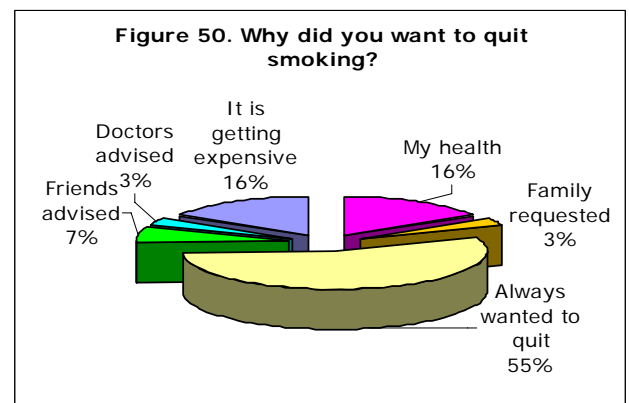
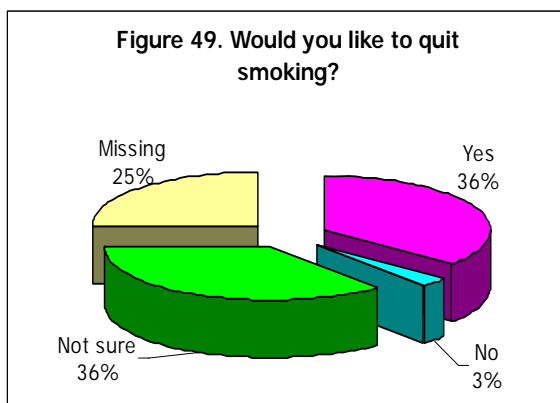
#### 4.3.6. Smoking cessation among current smoker Nurses

36,2% of current smoker Nurses have ever tried seriously to quit smoking. 42% of current smokers did not try to quit smoke. Unfortunately, 22% of current smokers did not answer on this question (figure 47).

The same percent of the smoker Nurses, who had ever tried to quit smoking, tried to quit twice (28%); and 28% tried more than 4 times; 24% tried to quit smoking once; and 16% of them more than 3 times (figure 48).



36% of smoker Nurses would like to quit smoking. The same percent (36%) of their answer "Not sure", and 3% of current smokers answered this question as "No." Unfortunately, 25% of smoker Nurses did not answer on this question (figure 49).



55% of those, who would like to quit smoking, said that they always wanted to quit; 16% of them said because of the health problem, and same percent answered: "Smoking is getting expensive." Only 3% of cases said that it was advised by doctors and 7% of those wanting to quit said that they were advised by friends (figure 50).

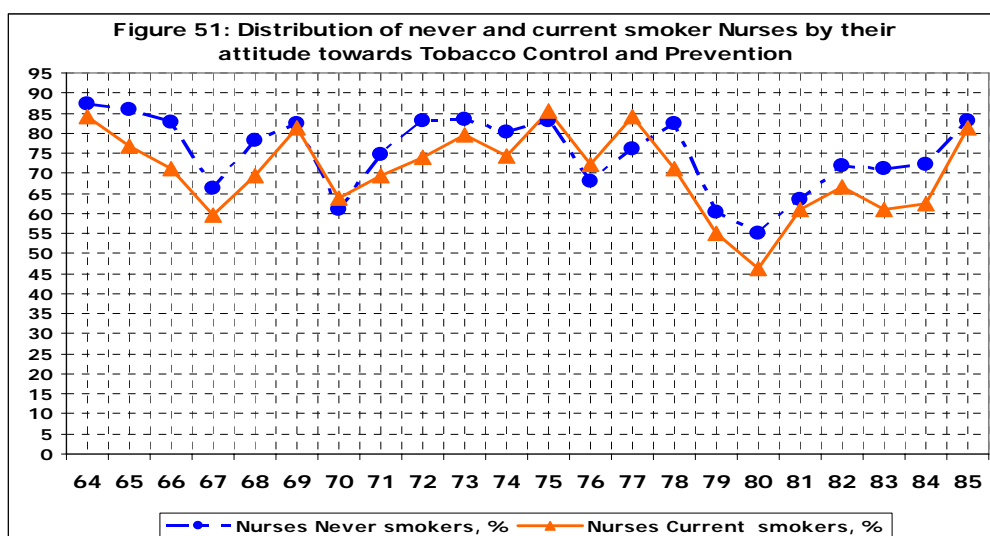
### 4.3.7. Knowledge and attitude of Nurses toward tobacco control and prevention

Distribution of the answers of never and current smoker Nurses to the 22 questions (numbers 64 to 85) of the questionnaire is presented in table 21 and figure 51.

Knowledge and attitude of Nurses about Tobacco Control were studied by using the questions of the section "Knowledge and attitudes" of the Global Health Professional Survey questionnaire developed by the World Health Organization and modified by the Queen's University Family Medicine.

87,2% of never smoker Nurses thought that smoking is harmful. This was not different from of current smokers (84,1%) as in table 21 and figure 51.

Comparative analyses of data never and current smokers showed that the answers to the majority of questions did not differ significantly and are higher than 70% (Table 21, Diagram 51) except for number of questions 67, 70, 79-81, 83-84.



Uppermost of agreements were found among never smokers with questions "Smoking is harmful to your health" (87,2%) and "Health professionals serve as role models for their patients and the public" (86%). Majority current smokers agreed with question "Tobacco sales to children and adolescents should be banned" (85,5%), same percent (84,1%) of those with "There should be a complete ban on the advertising of tobacco products" and "Smoking is harmful to your health".

**Table 21. Distribution of current and never smokers Physicians by sex according to their knowledge and attitudes toward tobacco control and prevention**

Question	Female Nurses, %	Male Nurses, %
70. Health professionals who smoke are less likely to advise people to stop smoking.	61,0	63,8
71. Health professionals should get specific training on cessation techniques.	74,8	80,8
72. Health professionals should speak to community groups about smoking.	83,0	84,9
73. Health professionals serve as role models for their patients and the public.	86,9	86,8
74. Smoking in enclosed public places should be prohibited.	83,9	78,8
75. Health warnings on cigarette packages should be in big print.	82,6	74,8
76. Health professionals should set a good example by not smoking.	82,3	85,4
77. Patient's chances of quitting smoking are increased if a health professional advises him or her to quit.	82,3	85,4
78. Tobacco sales to children and adolescents should be banned.	82,3	85,4
79. Health professionals should routinely ask about their patients smoking habits.	68,1	73,1
80. Short sponsorships by tobacco industry should be banned.	68,1	73,1
81. There should be a complete ban on the advertising of tobacco products.	86,3	84,1
82. There should be a complete ban on the advertising of tobacco products.	86,3	84,1

<b>78.</b> Hospitals and health care centres should be "smoke-free".	82,4	71,0
<b>79.</b> The price of tobacco products should be increased sharply.	60,4	55,1
<b>80.</b> Neonatal death is associated with passive smoking.	54,9	46,4
<b>81.</b> Maternal smoking during pregnancy increases the risk of Sudden Infant Death Syndrome.	63,3	60,9
<b>82.</b> Passive smoking increases the risk of <u>lung disease</u> in non-smoking adults.	71,8	66,7
<b>83.</b> Passive smoking increases the risk of <u>heart disease</u> in non-smoking adults.	71,2	60,9
<b>84.</b> Paternal smoking increases the risk of lower respiratory tract illnesses such as pneumonia in exposed children.	72,1	62,3
<b>85.</b> Health professionals should routinely advise patients who smoke to avoid smoking around children.	83,0	81,2

\* - current smokers of the manufactured cigarettes

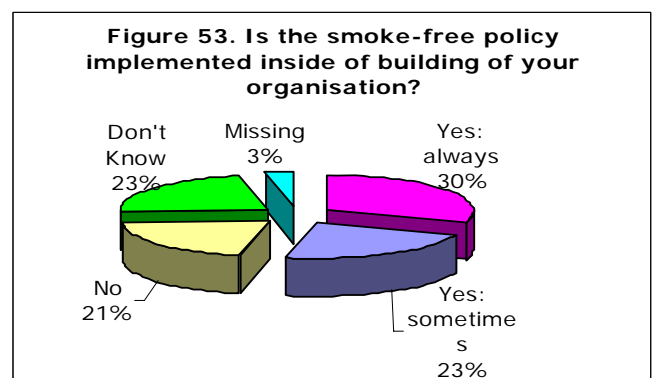
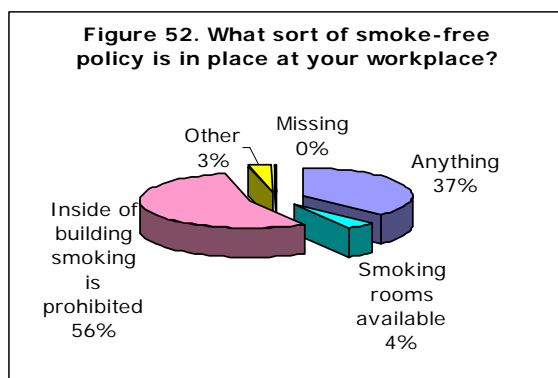
Unfortunately, only 55% of Nurses and 46% of current smokers agreed with the question: "Neonatal death is associated with passive smoking;" Approximately 60% of never and current smoker Nurses were agreed with questions "Health professionals who smoke are less likely to advise people to stop smoking," and "Maternal smoking during pregnancy increases the risk of Sudden Infant Death Syndrome".

Less than 65% of agreements were found among current smokers with following questions:

- "Patient's chances of quitting smoking are increased if a health professional advises him or her to quit";
- "The price of tobacco products should be increased sharply" ;
- "Passive smoking increases the risk of heart disease in non-smoking adults;
- "Passive smoking increases the risk of lung disease in non-smoking adults";
- "Paternal smoking increases the risk of lower respiratory tract illnesses such as pneumonia in exposed children".

This agreement also was low among never smokers (from 60,4% to 72%).

Since 12.04.2005 smoking in the building of the medical organization was banned by Order of the Ministry of Health. On the question "What sort of smoke-free policy is in place at your workplace?" 56% of Nurses confirmed that smoking is prohibited inside their building (figure 52), but 37% of those answered "Anything".

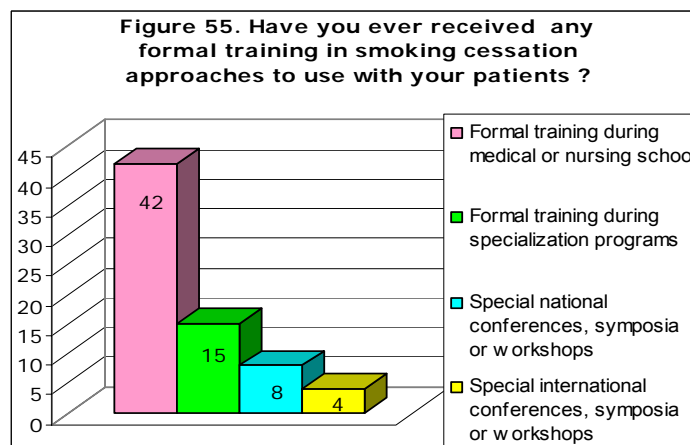
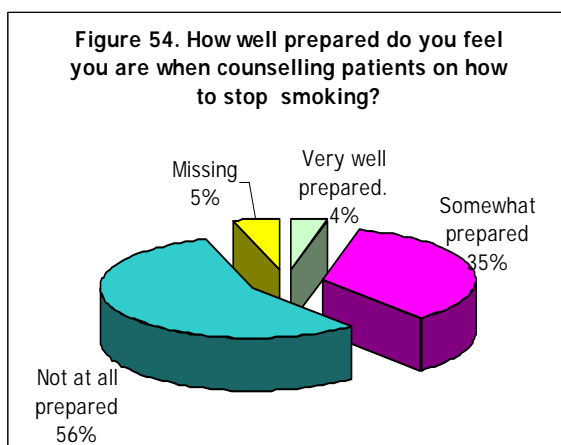


"Yes, always" and "Yes, sometimes" on the question "Is the smoke-free policy in place at your workplace?" were answered only by 53% of Nurses. 21% of respondents thought that the smoke-free policy in place at their workplace was not really implemented.

Also a very low human capacity for implementation of the FCTC and the national tobacco control law was found. Unfortunately, only 4% of Nurses answered that they very well



prepared and 35% of those somewhat prepared for helping their patients to quit smoking (figure 54). More than half of those were not prepared.

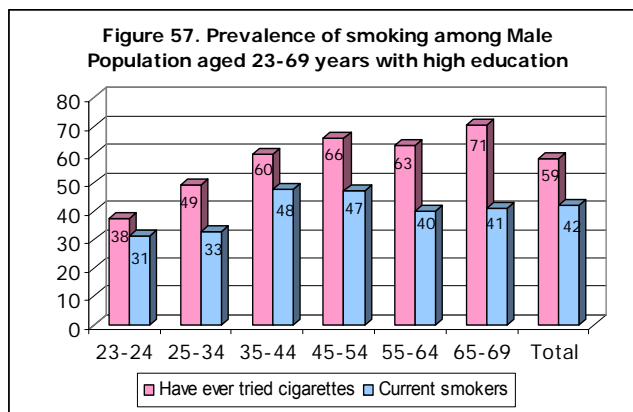
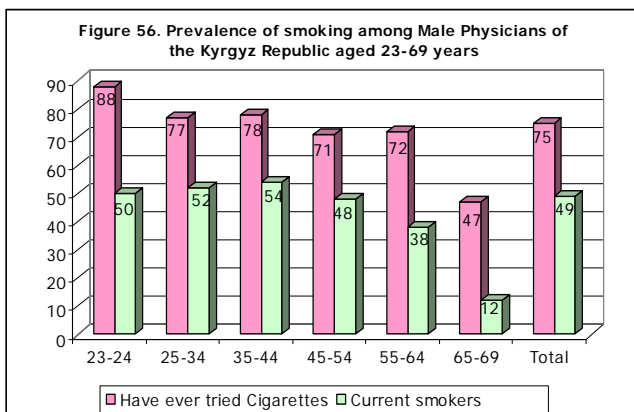


42% of Nurses have received their knowledge on smoking cessation from formal training in the medical university. Only 15% of Nurses of the Kyrgyz Republic were trained during specialization programs; and a very few respondents were trained during national (8%) and international (4%) conferences.

## 5. Discussion

In the second part of the 20<sup>th</sup> century, smoking prevalence among Physicians in developed countries dropped significantly. The known 40 years (1951-1991) prospective survey conducted by Richard Doll and Bradford Hill [5] demonstrated a significant lowering of this harmful habit among British Physicians. Presently, only 13-15% of Physicians are smoking in Great Britain and Scandinavian countries [7]. Significant success has been achieved in the USA where in 1949, only 60% of Physicians smoked, while in 1964 – 30%, and in early 1990s only 5-10% of Physicians smoked [4,9], in Canada, Finland, and Italy 28% of Physicians are smoking now compared to 40% approximately 10 years ago [3]. However, smoking prevalence among Physicians and nurses in developed and transitional countries is high.

The comparative analyses of manufactured cigarettes smoking among male Physicians and male general population of the Kyrgyz Republic in the same age group (23-69 years) with similar level of education shows that prevalence of current smokers of manufactured cigarettes among Physicians of Kyrgyz Republic is higher than smoker-men among general population (figures 56-57).



Smoking Prevalence among female physicians in Kyrgyzstan is much higher than among women of national representative sample (6% against 2%) with a similar educational level. Smoking rate is 10 times more than among young female Physicians with a similar



educational level in age group 25-34 years (11,1% against 1%); and is two time higher in age group 35-44 years. Current smoking rate was approximately twice more among Nurses than among general female population as well.

Such a broad gap might happen due to the survey technique difference, and also at revealing of the fact of smoking among young women of the general population questioned at home in the course of the face-to face methodology.

Current smoking prevalence among male Physicians of the Kyrgyzstan does not differ from that male Physicians of Russia, Moldova<sup>40</sup>, Bosnia and Herzegovina<sup>41</sup>. However, I. Zatushevski presented that 32% of Moldavian male Physicians were smokers<sup>42</sup>. The current smoking prevalence among female Physicians of Kyrgyzstan is much lower from that in Moldova, Bosnia and Herzegovina. Smoking rate among Nurses of Kyrgyzstan also is much lower from that in Bosnia and Herzegovina.

In Bishkek, 49% of male and 9% of female Physicians were smokers against 55.3% of male and 17.3% of female smoker Physicians in Yerevan, Armenia<sup>43</sup>, 50,3% of male and 26,5% of female smoker Physicians in Moscow<sup>44</sup>.

The harm of smoking has been known for hundreds of years, almost as long as tobacco has been used in Europe<sup>45</sup>. The evidence base for manufactured tobacco is huge: over 70,000 scientific articles for the period of 1950-1999 only<sup>46</sup>. Nevertheless, fighting smoking remains a difficult task.

Producers of manufactured tobacco have been skillfully lobbying their interests<sup>47</sup>, investing huge amounts in advertising and corruption<sup>48</sup>, creating romantic and heroic glamour around smoking<sup>49</sup>, developed a marketing policy aimed at children, teenagers and recently – women<sup>50-51</sup>. Even Physicians and nurses are not an exception; otherwise how can such high level of current cigarette smoking be explained both among doctors and nurses.

Unlike in most of developed countries, awareness of the harm of smoking in Kyrgyzstan is low. The level of their knowledge remains low compared to, for instance, colleagues from Bosnia and Herzegovina or Armenia. It is possible that this low level of awareness of the danger of smoking is the reasons for high smoking prevalence among medical staff in Kyrgyzstan.

Considering an important priority role of medical staff in fighting smoking in developed countries<sup>52</sup> and low awareness about the problem of smoking among Kyrgyz physicians whose role in forming public awareness about health should be key, there is an urgent need to strengthen work to increase the knowledge of medical staff and lowering the level of smoking otherwise one can not expect a rapid improvement of the tobacco epidemics in Kyrgyzstan.

In general, a persistent advice to stop smoking leads to a success with approximately 5% of cases, a repeated participation of a physician in this process of rescue from this habit raises the effectiveness of interference<sup>53</sup>, according to some data – up to 20-36%. Regular persistent advice of medical staff to patients to stop smoking and provide help to those who decided to stop smoking plays an important role in lowering smoking among the population<sup>54</sup>.

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<sup>40</sup> 4- American Cancer Society University presentation: Effective Advocacy and Movement Building for Tobacco Control, 23-25 April, 2003, Romania; Tobacco Control Strategy Planning for Tobacco Control Movement Building, Guide #2. American Cancer Society, UICC, 2003, 63 pages

<sup>41</sup> GHPS Hodgetts G, Broers T, and Godwin M: Smoking behavior, knowledge and attitudes among Family Medicine and nurses in Bosnia and Herzegovina. *BMC Fam Pract* 2004, 5:12.

<sup>42</sup> Zatushevski Irina. Smoking among Doctors in Moldova. 4<sup>th</sup> ECTOH, 2007, [http://asp.artegis.com/utlis/Files/getBook.jsp?SELECTED\\_FILE\\_ID=11712](http://asp.artegis.com/utlis/Files/getBook.jsp?SELECTED_FILE_ID=11712)

<sup>43</sup> - Paul C Perrin, Ray M Merrill and Gordon B Lindsay. Patterns of smoking behavior among physicians in Yerevan, Armenia. *BMC Public Health* 2006, 6:139 The electronic version of this article is the complete one and can be found online at: <http://www.biomedcentral.com/1471-2458/6/139>

<sup>44</sup> A. Alexandrov et al, Prevalence of smoking among Physicians of Moscow, 2001, <http://www.nosmoking.ru/science/31032002.rtf>

<sup>46</sup> Danishevski K., McKee M. Campaigners fear that Russia's new tobacco law won't work. *BMJ* 2002;324(7334):382.

<sup>47</sup> Alechnowicz K., Chapman S. The Philippine tobacco industry: «the strongest tobacco lobby in Asia». *Tob Control* 2004;13 (Suppl 2):ii71—8.

<sup>48</sup> Prokhorov A.V. Getting on smoking' route 66: tobacco promotion via Russian mass media. *Tob Control* 1997 Summer;6(2):145—6.

<sup>49</sup> Pollay R. Zebras in Russia! Where next? *Tobacco Control* 2003;12(1):89—90.

<sup>50</sup> Mackay J., Amos A. Women and tobacco. *Respirology* 2003;8(2):123—30.

<sup>51</sup> McKee M. Competing interests: the importance of transparency. *Eur J Public Health* 2003;13(3):193—4.

<sup>52</sup> Mackie J.W., Oickle P. School-based health promotion: the physician as advocate. *CMAJ* 1997 May 1;156(9):1301—5.

<sup>53</sup> Richmond R.L. Physicians can make a difference with smokers: evidence-based clinical approaches. Presentation given during the Symposium on Smoking Cessation at the 29th World Conference of the IUATLD/IUICMR and Global Congress on Lung Health, Bangkok, Thailand, 23—26 November 1998. *International Union Against Tuberculosis and Lung Disease. Int J Tuberc Lung Dis* 1999 Feb;3(2):100—12.

<sup>54</sup> Lancaster T., Stead L. Physician advice for smoking cessation. *Cochrane Database Syst Rev* 2004 Oct 18;(4):CD000165.

Smoking is a factor which has the highest impact on health, while doctors may seriously influence smoking prevalence<sup>55</sup>. However, besides lack of knowledge and skills doctors often have low faith in their ability in order to stop smoking and the motivation to stop smoking. A Physician or nurse may and should influence the way of living of their patients<sup>56</sup>; however, prior to this, they should change their own way of life in which case their effort on providing help to patients will be successful.

This national representative Tobacco Use Prevalence Survey among Physicians and Nurses was organized in the Kyrgyz Republic for the first time, therefore a comparative analysis cannot be conducted.

Although a reform in the healthcare system is on, physicians and nurses turned out to be unprepared. According to data, in most cases physicians give advice to stop smoking very late, mostly to those who have myocardial infarction<sup>57</sup> or to those who have lung cancer. Overall, 6% of Physicians and 4% of nurses in Kyrgyzstan believe they have enough education in order to help patients give up smoking.

It is possible that changing the function of medical staff of the first aid group, particularly, nurses in forming a healthy way of life will become an important step in increasing the role of medical workers in fighting smoking. Without participation and the leading role of medical staff in the process of fighting smoking, unfortunately, the Program on protecting public health against the harmful impact of tobacco will not be successful.

## 6. Conclusions

### Tobacco Use Prevalence among Physicians of the Kyrgyz Republic

74, 5% of male and 30,5% of female Physicians of the Kyrgyz Republic have ever tried cigarettes or experimented with cigarette smoking. 29 % (61% of male and 6,2% of female) of those were current users of all tobacco products. 23,5% of respondents (49% of male and 5,7% of female) current smoker of the manufactured cigarettes.

18,7% of Physicians (40,3% of male and 3,7% of female) were regular smokers. 7,8% male and approximately 2% of female Physicians are occasional smokers of manufactured cigarettes. 1,3% of physicians were current smokers of the roll-own cigarettes. 5,4% male and less than 0,5% female respondents smoke cigars.

Smoking rate is higher among young physicians: in the age-groups of 23-24, 25-34 and 35-44 years 50%, 52% and 54% accordingly among males, and for females 5%, 11% and 5% respectively.

The number of male smokers is higher in the north region and for female smokers in the capital, Bishkek. 47, 8% of Kyrgyz, 41, 7% of Russian and 55,4% of other nationalities of men respondents were current smokers. Among female Russian physicians, smoking prevalence is higher (13,8%) than for Kyrgyz (5,3%) and other (2,4%) nationalities.

The smoking prevalence was higher among divorced/separated (60%) and single (56%) male physicians than for married respondents; Smoking rates are higher among single female respondents (12%) than for married (5%) or divorced (8%).

Analysis of smoking prevalence by profession shows that the smoking rate is higher among all male managers of the surgical departments, male surgeons and Physician teachers of the medical universities. Smoking prevalence was higher among female Public Health departments (13,%) and Physicians of the of the surgical (including gynecology) departments (9,6%).

The average number of cigarettes per day, smoked by current smokers was 10 pieces per day. Male respondents smoked approximately 11 pieces per day, females 6 pieces.

<sup>55</sup> Pbert L., Moolchan E.T., Muramoto M., Winickoff J.P., Curry S., Lando H., Ossip-Klein D., Prokhorov A.V., DiFranza J., Klein J.D.; Tobacco Consortium, Center for Child Health Research of the American Academy of Pediatrics. The state of office-based interventions for youth tobacco use. *Pediatrics* 2003 Jun;111(6 Pt 1):e650—60

<sup>56</sup> Pbert L., Moolchan E.T., Muramoto M., Winickoff J.P., Curry S., Lando H., Ossip-Klein D., Prokhorov A.V., DiFranza J., Klein J.D.; Tobacco Consortium, Center for Child Health Research of the American Academy of Pediatrics. The state of office-based interventions for youth tobacco use. *Pediatrics* 2003 Jun;111(6 Pt 1):e650—60

<sup>57</sup> Tkatchenko E., McKee M., Tsouros A.D. Public health in Russia: the view from the inside. *Health Policy Plan* 2000 Jun;15(2):164—9.

Respondents in villages smoke a little bit more (11,1 pieces) than urban smokers (10,2 pieces).

99% of smokers Physicians of the Kyrgyz Republic prefer manufactured cigarettes with filter. Only 1% of respondents smoke manufactured cigarettes without a filter («Polyot without filter», the joint-stock company "Reemstma-Kyrgyzstan").

25% of Respondents or 52% of those who have ever tried cigarettes are ex-smokers. 14,5% of respondents (26,7% of male and 6% of female) have ever tried or experimented other tobacco products, such as nasvay, pipe and cigars.

3,7% of male Physicians of Kyrgyz Republic answered that they are using nasvay currently. The majority of current users of nasvay were young male physicians in the age groups 23-24 (18,2%), 25-34 (27,3%) and 35-44 (27,3%) years. However 0,8% of female respondents answered that have used nasvay in past.

### **Passive smoking among general Physicians of the Kyrgyz Republic**

Someone smoked at home in presence of 29,4% of Physicians (17,5% of male and 37,6% of female). 73% of cases one person smoked at home in their presence;

58% of physicians were exposed to smoking in public transport (65% women, and 35% men) and 37% of physicians exposed in the workplace in medical organizations at work.

54,6% of current smokers (55% of male and 53,1% of female) have ever tried seriously to quit smoking. Unfortunately one-third of female and 20% of male current smokers did not answer this question.

55% of current smokers would like to quit smoking; 23% don't want to quit; and 22% of aren't sure is they want to quit.

### **Knowledge and attitude of Physicians toward tobacco control and prevention**

The awareness about harmful consequences of smoking for health among male Physicians, both for never and current smokers, is equally high, but not 100%. This awareness among female smokers is a little low (87,8%) than among never smoker (92,4%) physicians

Only 55% of female smokers agreed with the question: "Patient's chances of quitting smoking are increased if a health professional advises him or her to quit" against 75% of never smoker Physicians. Unfortunately, 48,3% of male and 36,7% female current smokers agreed with the question: " Neonatal death is associated with passive smoking;" This agreement was low also among female and male never smokers.

Less than 60% of agreement was found with questions: "Health professionals who smoke are less likely to advise people to stop smoking," "The price of tobacco products should be increased sharply" as never and current male and female smokers.

More than 60% of Physicians answered that smoking is prohibited inside their building However 23% of respondents confirmed that the smoke free policy was not really implemented in their workplace.

Also a very low human capacity for implementation of the FCTC and the national tobacco control law was found. Unfortunately, physicians feel unprepared for helping their patients to quit smoking. Half of respondents answered that they somewhat prepared to help their patients to quit smoking, very well prepared only 6% of those.

The majority of Physicians have received their knowledge on smoking cessation from formal training in the medical university. Only one quarter of Physicians of the Kyrgyz Republic were trained during specialization programs; and 20% of respondents trained during national and international workshops or conferences.

### **Tobacco Use Prevalence among female Nurses of the Kyrgyz Republic**

13% of female Nurses of the Kyrgyz Republic have ever tried cigarettes or experimented with cigarette smoking. 9,2% were ex-smokers of manufactured cigarettes. 5 % of Nurses were current users of all tobacco products, 4% of their - current users of manufactured cigarettes. 2,2% of female respondents, were regular smokers; and 17,4% of current

smokers and approximately less than 1% of Nurses were occasional smokers of manufactured cigarettes.

Unfortunately, 20% of current smokers, or 0,8% respondents, did not answer the question about current smoking. The analysis of smoking rates by regions found that 52% of smokers were from Bishkek, 38% from North, and 12% South regions.

Analysis of smoking rates by nationality showed that among current smoker Nurses of manufactured cigarettes, 3,5% were Kyrgyz, 12,1% Russian and 2,3% other nationalities.

A comparative analysis showed that smoking prevalence among female Nurses in Bishkek was much higher than among the same colleagues from other urban and rural regions.

Analysis of smoking prevalence by profession shows that smoking rates were higher among Nurses working in surgical (including gynecology) departments, and 2 times greater among assistants of Sanitary-epidemiological Physicians (Public Health Doctors), than among Nurses working in therapeutic (including family medicine centers) and Diagnostic Departments, Laboratories including X-ray, and administrative and planning divisions.

The mean number of cigarettes per day, smoked by current regular smokers was 8,7 pieces a day and 2 pieces a day for occasional smokers.

24 % of smoker female respondents used cigarettes with filter "Pine". Approximately the same percent of smokers prefer «Esse» (14%), «L&M» (14%), and «LD» (11%). «Sovereign» and « West » preferred by 9% and 8% of smokers. 20% of smokers used other brands of manufactured cigarettes, such as «Polyot with filter» «Winston», «Polo», «Kent», «Davidoff» and etc «Marlboro» was not used by anyone.

6,1% of those who have ever tried or experimented other tobacco products, were current users, and 12,1% of these were past users of Nasvay (chewing Tobacco). 100% of current and 50% of past Nasvay users were inhabitants of Batken region, where the tobacco leaf for Nasvay is grown. 50% of other past Nasvay users were Nurses from Bishkek.

### **Passive smoking among general Nurses of the Kyrgyz Republic**

33% of Nurses said that someone smoked at home in their presence. The majority of cases stated that one person smokes at home (82%), and 11% said that 2-4 persons smoke at home. The same percent of cases (11%) said that someone smoked very often (33%) or sometimes (33%). Very often the persons smoking at home were husbands of Nurses (58%); 18% of cases smokers at home were fathers and 8% were uncles or aunts.

50% of female Nurses mentioned being exposed to smoking on public transports, 50% of those answered that one person smoked on public transport in their presence, 34% of these said 2-4 persons smoked in their presence. 52% of Nurses exposed to smoking on public transport mentioned sometimes, 27% very often, and 21% mentioned rarely. 63% of Nurses exposed to smoking on public transport by driver, 34% of their by passengers.

23% of Female Nurses were exposed to smoking by their colleagues at the workplace. 36% of those, exposed at their workplace, answered that 1 person smoked in their presence; and 2, 3-4 and more than 5 people smoking at the work place were 25%, 22% and 8% respectively. 28% of Nurses, exposed at the workplace, answered that they were exposed to smoking very often; 45% said "some times" and 17% mentioned "rarely."

Approximately one quarter of respondents, who answered this question, said that they did not pay attention to the smoking of colleagues in their presence. The same percent of Nurses said that they left the room when others smoke, 9% of Nurses allowed smoking in their presence at the workplace and 8% tolerate the smoke.

36,2% of current smoker Nurses have ever tried seriously to quit smoking. 42% of current smokers did not try to quit smoke. Unfortunately, 22% of current smokers did not answer this question. 36% of smoker Nurses would like to quit smoking. The same percent of their not sure that want to quit or no.

55% of those, who would like to quit smoking, said that they always wanted to quit; 16% of them said because of the health problem, and same percent answered: "Smoking is getting expensive." Only 3% of cases said that it was advised by doctors and 7% of those wanting to quit said that they were advised by friends.

## **Knowledge and attitude of Nurses toward tobacco control and prevention**

87,2% of never smoker Nurses thought that smoking is harmful. This was not different from of current smokers (84,1%)

Uppermost of agreements were found among never smokers with questions "Smoking is harmful to your health" (87,2%) and "Health professionals serve as role models for their patients and the public" (86%). Majority current smokers agreed with question "Tobacco sales to children and adolescents should be banned" (85,5%), same percent (84,1%) of those with "There should be a complete ban on the advertising of tobacco products" and "Smoking is harmful to your health".

Unfortunately, only 55% of Nurses and 46% of current smokers agreed with the question: "Neonatal death is associated with passive smoking". Approximately 60% of never and current smoker Nurses were agreed with questions "Health professionals who smoke are less likely to advise people to stop smoking," and "Maternal smoking during pregnancy increases the risk of Sudden Infant Death Syndrome".

Less than 65% of smoker Nurses known that "Patient's chances of quitting smoking are increased if a health professional advises him or her to quit", "Passive smoking increases the risk of heart disease in non-smoking adults", "Passive smoking increases the risk of lung disease in non-smoking adults", "Paternal smoking increases the risk of lower respiratory tract illnesses such as pneumonia in exposed children". Only from 60,4% to 72% never smokers also were agreed with above points.

56% of Nurses confirmed that smoking is prohibited inside their building, but 37% of those answered "Anything" on the question "What sort of smoke-free policy is in place at your workplace?"

Also a very low human capacity for implementation of the FCTC and the national tobacco control law was found. Unfortunately, only 4% of Nurses answered that they very well prepared and 35% of those some what prepared for helping their patients to quit smoking. More than half of those were not prepared.

42% of Nurses have received their knowledge on smoking cessation from formal training in the medical university. Only 15% of Nurses of the Kyrgyz Republic were trained during specialization programs; and a very few respondents were trained during national (8%) and international (4%) conferences.

### **Thus:**

- Current Prevalence of smoking of manufactured cigarettes among male Physicians aged 23-69 years is slightly higher than that data of general male population with same age group and similar educational level (49% compared to 42%).
- Smoking Prevalence among female physicians of Kyrgyzstan is much higher, than among women of national representative sample (6% against 2%) with a similar educational level. Smoking rate is 10 times higher than among young female Physicians in age group 25-34 years with a similar age group and educational level (11, 1% against 1%); Current smoking rate was approximately two times higher among Nurses than among general female population as well.
- Current smoking prevalence lowers with the increase of the age group: among men from 52% in the age of 25-34 up to 12% in the age of 65-69 years, among women from 11% in the age of 25-34 years to 0.0% in the age of 65-69 and older. The same picture is found among female Nurses
- Intensive smoking among male physicians is significantly higher than with their women colleagues and female Nurses.
- Current smoking prevalence among male Physicians of the Kyrgyzstan does not differ from that male Physicians of Russia, Moldova, Bosnia and Herzegovina. The current smoking prevalence among female Physicians of Kyrgyzstan is much lower from that in Moldova, Bosnia and Herzegovina. Smoking rate among Nurses of Kyrgyzstan also is much lower from that in Bosnia and Herzegovina.

- 29,4% of Physicians (17,5% of male and 37,6% of female) and 33% of Nurses exposed to smoking at home, 58% of physicians (65% women, and 35% men) and 50% of Nurses - in public transport, 37% and 23% of Female Nurses were exposed to smoking by their colleagues at the workplace in medical organizations.
- One quarter of Nurses, who answered this question, said that they did not pay attention to the smoking of colleagues in their presence, the same percent of Nurses said that they left the room when others smoke, approximately 17% of them allowed smoking in their presence at the workplace or tolerate the smoke,
- 55% of current smoker Physicians (55% of male and 53,1% of female) have ever tried seriously to quit smoking, the same percent of current smokers would like to quit smoking; 23% don't want to quit; and 22% of aren't sure if they want to quit.
- 36,2% of current smoker Nurses have ever tried seriously to quit smoking and would like to quit smoking. 42% of current smokers did not try to quit smoke. The same percent of them not sure that want to quit or no.
- The high level of agreement of the respondents (from 84% to 94%) was received to the question «Smoking is harmful to your health”, nevertheless, the awareness of the harm of smoking in Kyrgyzstan was found to be rather low. Also the level of knowledge of the health professionals remains low compared to, for instance, colleagues from Bosnia and Herzegovina or Armenia.
- Although the reform in the health system has been conducted over last 10 years, including in the area post graduate education of physicians and nurses for health promotion and prevention of non-communicable diseases, the Kyrgyz health professionals turned out to be unprepared. Overall, 6% of physicians and 4% of nurses in Kyrgyzstan believe they have enough education in order to help patients to give up smoking.

## **7. Recommendation**

1. Physicians and nurses, particularly at the primary health care have to impact on the patients' life style, but first they should change their own way of life, and for that reason the Ministry of Health of the Kyrgyz Republic has to develop and introduce urgently the program for smoking cessation among Physicians and Nurses, including involving of those Health Professionals to the tobacco prevention and cessation for their patients.
2. At taking into account the role of paramount importance assigned to health professionals on protection of health of citizens from harmful tobacco impact along with low awareness level of the Kyrgyz physicians who should take up a key position in raising awareness among the population about health issues there is the need to strengthen efforts aimed at knowledge improvement of health professionals for reduction of tobacco consumption both among the latter, and among the population. With this purpose it deems necessary:
  - To strengthen a leading role of health professionals in smoking prevention and cessation among the population;
  - To revise functions of primary health care health professionals, particularly nurses, in formation of a healthy, tobacco-free life-style, at taking into account the fact of doctors' high degree involvement of physicians in the process for treatment of patients, thus, should provide consultations among patients to help quit smoking;
  - Development of the smoking prevention program for health professionals of hospitals and primary health care services, including continuous support provision to smoking employees, wishing to give up smoking;
  - To conduct 'quit-smoking' seminars, conferences for health professionals, and to include the issues of tobacco consumption control, smoking prevention and giving up in agendas of all meetings, congresses and conferences devoted to healthy life-style at regional and national levels;
  - To take an active part in actions devoted to the World No Tobacco Day;

3. To include smoking prevention and cessation activities as a priority in various programs and projects on health care services, particularly, in the area of basic non-communicable diseases control;
4. Periodic publication of articles in scientific and educational medical magazines on modern methods of tobacco products use prevention and cessation and consequences of their consumption;
5. Conducting of actions, campaigns, directed on smoking cessation among doctors and nurses, such as «Smoke-Free Hospitals or Family Medicine Centers» or campaigns on cigarettes sale prohibition in hospitals and in its territory or campaigns «Quit and Win among health professionals»;
6. Involvement of health professionals in campaigns aimed at general public, lobbying of interests of implementation of the WHO Frame Convention on Tobacco Control and the national tobacco control law;
7. To include the stop-smoking program among health professionals and to promote incentives for doctors and nurses to the National Program for Tobacco Control in the Kyrgyz Republic for 2008-2015 and its Medium-Term Action Plan.

“Approved”  
 Minister of Health of the Kyrgyz Republic  
 \_\_\_\_\_ SH. Niazov  
 « \_\_\_\_ » \_\_\_\_\_ 2006

## Questionnaire

### National Study to estimate the Prevalence of Tobacco use among Health Professionals of the Kyrgyz Republic

<b>Strictly confidential</b>
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Date:   Day   Month   Year

The serial #

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(The serial will be filling by organizers)

Code of Region and Institution

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### DEAR RESPONDENT!

Your institution has been chosen by two-stage cluster random sample method for the participation in the National survey to estimate the Prevalence of Tobacco Use among Physicians and Nurses and Their Attitudes towards Tobacco Control in Kyrgyz Republic (KR), which is carrying out by the Public Center for Tobacco Control in close collaboration with Ministry of Health of the KR by support the Canadian International Development Research Centre acting on behalf of Research for International Tobacco Control (RITC). Your answers will promote creation and development of the National Strategy for Tobacco Control and diseases prevention caused by consumption of tobacco among population of the Kyrgyzstan, including among health professionals .

We would like to inform you information that all is strictly confidential for all others including members of your institution, researchers and policymakers. Your anonymity is guaranteed, all the data and results of the survey will be used in a general form in order to obtain an overall picture of the tobacco use prevalence among Physicians and Nurses of the KR. On behalf of Public Center for Tobacco Control and Ministry of Health of the Kyrgyz Republic we invite you to participate in this survey.

**MANY THANKS IN ADVANCE, FOR YOUR COLLABORATION!**



## I. BACKGROUND INFORMATION

1. Sex?

- a. male
- b. female

2. Year of birth?

19   month

3. Marital status?

- a. Married or living in a partnership
- b. single
- c. separated or divorced
- d. widowed

4. How many children you have?   persons

5. Nationality

- a. Kyrgyz
- b. Russian
- c. Other

6. How tall are you?    cm

7. Yours weight is    kg

8. What your education level?

- a. High + scientific degree
- b. High
- c. Unfinished high
- d. Average, average- technical

9. How long have you been studying after ordinary school (including postgraduate study and doctoral studies)

years

10. Which best describes your current occupation? If you have several jobs, please describe the one you consider to be the main one?

1. Manager (Director, Chief Doctor, Deputy Chief Doctor (Director), Head of Medical Institutions and ets)

2. Head of the Surgical Department of the Hospital or Family Medicine Centre (Policlinic)

2.1. general surgeon

2.2. cardio surgeon

2.3. gynecologist

2.4. other surgeon Physician \_\_\_\_\_  
Please specify

3. Head of Therapeutic Department of the Hospital or Family Medicine Centre (Policlinic)

3.1. therapist

3.2. neurologist

3.3. pediatricist

3.4. other therapeutic Physician \_\_\_\_\_  
Please specify

4. Physician of Public Health

4.1. Sanitary-and-epidemiologic Physician

4.2. Health Promoters

4.4. Others

5. Officer of Medical Academy (Institution)

5.1. Professor, Docent

5.2. Teachers (Assistant of Professor)

6. Researcher, Scientific Workers

7. Nurses (midwife) Surgical Clinic (Policlinic)

8. Nurses Therapeutic Clinic (Policlinic)

9. Other \_\_\_\_\_  
Please specify

11. What is your religion?

1. The Atheist

2. The Moslem

3. The Orthodox

4. Other \_\_\_\_\_  
Please specify

## SECTION II. TOBACCO USE PREVALENCE

### SECTION II-A. PREVALENCE OF SMOKING CIGARETTES

---

1. Do you currently smoke cigarettes?
  - a. Yes ⇒ **GO TO QUESTION 3**
  - b. No
  
2. Have you ever tried or experimented with cigarette smoking, even one or two puffs in your life time?
  - a. Yes
  - b. No
  - c. Don't know
  - d. Refused } ⇒ **GO TO QUESTION 22**
  
3. How old were you when you first tried a cigarette?
  - a. I cannot remember
  - b. 7 years old or younger
  - c. 8 or 9 years old
  - d. 10 or 11 years old
  - e. 12 or 13 years old
  - f. 14 or 15 years old
  - g. 16 or 17 years old
  - h. 18 years old or older
  
4. Have you ever smoked at least 100 cigarettes in your lifetime?
  - a. Yes
  - b. No
  - c. Don't know (Don't remember) or Refused
  - d. Have tried a cigarette even one or two puffs in your life time? ⇒ **GO TO Q 22** } ⇒ **GO TO Q 5**
  
5. During the past 30 days (one month), have you ever smoked a cigarette even for few puffs?
  - a. Yes
  - b. No
  - c. DK (Don't remember) or Refused } ⇒ **GO TO Q 6**

### SECTION II-B. FOR CURRENT SMOKERS AND EX-SMOKERS

---

**SURVEYOR FOR THOSE WHO SAID "NO" TO QUESTION 5, ASK THE FOLLOWING QUESTIONS IN A PAST FORM**

6. How many times do you smoke (did smoke)?  
  
!\_\_!\_\_! years or !\_\_!\_\_! months
  
7. How often do/DID you smoke?
  - a. every day ⇒ **GO TO QUESTION 10**



- c. On open markets or mini markets
  - d. From hands of the accidental people trading on the streets by piece
18. Do/DID you roll-your own cigarettes?
- a. Yes
  - b. No ⇒ **GO TO QUESTION 22**
19. How do/DID you get tobacco to roll-your own?
- a. I buy in packing on !\_\_!\_\_!\_\_!\_\_! grams
  - b. I buy it loose per kg or gram
  - c. I grow my tobacco and use it
  - d. Someone always give me.
  - e. I never purchase it
- } **PLEASE ⇒ GO TO Q 22**
20. How often do/DID you buy tobacco to roll-your own?
- a. Every day
  - b. Once in every week
  - c. Once in 2 weeks
  - d. Once in every month
  - e. Once in 3 months
  - f. Once in 6 months
21. How much do/DID you usually pay for the loose tobacco you purchase
- a. -----soms per package in 100 gram
  - b. -----soms per 100 gram by retail
  - c. -----soms per kg by the gross
  - d. -----soms other, please specify \_\_\_\_\_

**SECTION II-C. NASVAY, CIGARS, PIPES**

22. Have you ever tried or experimented with other tobacco products such as nasay, pipe, cigars at least once in your life time?
- a. Yes
  - b. No
  - c. Don't know
  - d. Refused
- } ⇒ **GO TO SECTION ON PASSIVE SMOKING,**  
**QUESTION 44**
23. How old were you when you first tried nasvay, cigarillo, pipe or other tobacco?
- a. I cannot remember
  - b. 7 years old or younger
  - c. 8 or 9 years old
  - d. 10 or 11 years old
  - e. 12 or 13 years old
  - f. 14 or 15 years old
  - g. 16 or 17 years old
  - h. 18 years old or older
24. Have you ever smoked at least 100 cigar (pipe) or used Nasvay 100 times in your lifetime?
- a. Yes
  - b. No
  - c. Don't know (Don't remember) or Refused
  - d. Have tried a cigarette even one or two puffs in your life time? ⇒ **GO TO Q 44**
- } ⇒ **GO TO Q 25**  
**(for those, who use nasvay)**

Who at all does not use nasvay, but smokes other tobacco products, please, ⇒ **GO to the QUESTION 39**

**SECTION II-D. NASVAY IN PRESENT AND PAST**

25. During the past 30 days (one month), have you ever used nasvay?  
a. Yes  
b. No  
c. DK  
d. REF
26. Do you currently use nasvay?  
a. Yes  
b. No

**FOR THOSE WHO SAID “NO” TO QUESTION 26, PLEASE, FOLLOWING QUESTIONS IN A PAST FORM**

27. How long have you been using OR HAD YOU USED nasvay regularly  
a. !\_\_!\_\_!Year or b. !\_\_!\_\_! months
28. How often do/DID you use nasvay currently?  
a. I currently use N every day,  
b. I currently use N not on every day but at least once a week ⇒ **GO TO Q 29**  
c. I currently use N not every week but at least once a month ⇒ **GO TO Q 30**
29. How many days a week do/DID you usually use nasvay?  
a. Please specify ----- days ⇒ **GO TO QUESTION 31**
30. How many days a month do/DID you usually use nasvay?  
a. Please specify ----- days ⇒ **GO TO QUESTION 31**
31. Approximately how many times and grams of nasvay do/DID you usually use on the days you use?  
a. -----grams/each time  
b. -----times
32. How do/DID you get nasvay?  
a. Buy/BOUGHT in a package of 15 grams ⇒ **GO TO QUESTION 35**  
b. Buy/BOUGHT in a package !\_\_!\_\_!\_\_! grams ⇒ **GO TO Q 35**  
c. Buy/BOUGHT it loose as weighted by ----- grams or kg ⇒ **GO TO Q 35**  
d. I usually buy/BOUGHT tobacco for nasvay (Kara tabak) by gross and produce it at home ⇒ **GO TO Q 33**  
e. Never buy/BOUGHT because My family grows tobacco and produce nasvay for use my own tobacco ⇒ **GO TO QUESTION 38**
33. How much Do/DID you usually pay for kara tabak to produce nasvay?  
a. !\_\_!\_\_!\_\_!-soms per kg or !\_\_!\_\_! Soms per 100 grams

34. How often and how much Do/DID you buy kara tabak to produce nasvay?  
 a. Kg in a week  
 b. Kg in a month  
 c. Other \_\_\_\_\_  
 please specify
35. Where Do/DID you usually buy nasvay?  
 a. In private small shop or booths  
 b. On a market or mini market  
 c. From hands of the accidental people
36. How often Do/DID you buy nasvay?  
 a. Every day  
 b. 2 or 3 times in week  
 c. Once in every week  
 d. Once in 2 weeks  
 e. Once in every month  
 f. Once in 3 months  
 g. Once in 6 months
37. How much Do/DID you usually pay for the nasvay when you purchase?  
 a. -----soms per package (15 grams)  
 b. -----soms per 100 grams  
 c. -----soms per kg by gross  
 d. -----soms other
38. Which of the following forms of nasvay Do/DID you use most often?  
 a. Nasvay nasal use  
 b. Nasvay oral use (tobacco under gum or under tongue)
39. Do you currently use pipes?  
 a. Yes  
 b. No
40. Do you currently use cigars?  
 a. Yes  
 b. No

If you answer both questions 39 and 40 "NO", please ⇒ **GO to QUESTION 44**  
 If you answer even one of questions 39 or 40 "YES", please ⇒ **GO to QUESTION 41**

41. How often do you smoke?  
 a. every day  
 b. not every day but at least once a week  
 c. not every week but at least once a month
42. Approximately how many pipes or cigars do you usually smoke on the days you smoke?  
 a. Please specify !\_\_\_!\_\_\_! pieces
43. How much do you usually pay for the pipes or cigars for the last month?  
 !\_\_\_!\_\_\_!\_\_\_! total soms for one month

**SECTION II-E: PASSIVE SMOKING TO ALL RESPONDENTS**

44. Do someone or people smoke in your presence at home?  
a. No  
b. Yes ----- please choose  
i. Very often  
ii. Sometimes  
iii. Rarely
45. **Which members of family smoke at home when family is present?**  
a. Father  
b. Mother  
c. Husband  
d. Wife  
e. Son  
f. Daughter  
g. In laws  
h. Uncle, aunt etc. \_\_\_\_\_  
Please specify
46. **Do people smoke in your presence in public transports**  
a. No  
b. Yes ----- please choose  
i. Very often  
ii. Sometimes  
iii. Rarely
- Who usually smoke in your presence in public transports?**  
c. I don't use public transport  
1. Passengers  
2. Driver  
3. Other \_\_\_\_\_
47. **Do people smoke in your presence at work?**  
a. No  
b. Yes ----- please choose  
i. Very often  
ii. Sometimes  
iii. rarely
48. How many hours a day do you spend at your workplace where somebody smokes when you are present  
a. Less than 1 hour  
b. 1-3 hours  
c. >3, but < 5 hours  
d. more than 5 hours
49. Are you concerned when someone smokes at workplace during your presence?  
a. It is OK, I allow them to smoke  
b. I can tolerate their smoke  
c. I have got used to so does not bother me  
d. I don't pay attention  
e. I leave the room when they smoke  
f. I ask them not to smoke next to me and they don't smoke  
g. I ask them not to smoke but they ignore me.

## Attention, please!

THOSE WHO REPLIED "NO", "DON'T KNOW" OR "REFUSED" IN **QUESTION 2** AND REPLIED "NO" TO **QUESTION 22**, GO TO SECTION "Knowledge..." **QUESTION 64**.

THOSE WHO REPLIED "YES", IN **QUESTION 22** but USE/USED ONLY "NASVAY" PLEASE GO TO **QUESTION 54** SECTION "Cessation..."

### **SECTION II-F. PASSIVE SMOKING QUESTIONS FOR SMOKERS AND EX-SMOKERS**

50. Do/DID you smoke at work next to colleagues?  
a. No  
b. Yes ----- please choose  
i. Very often  
ii. Sometimes  
iii. rarely
51. Do/DID you smoke at public transportation?  
a. No  
b. Yes ----- please choose  
i. Very often  
ii. Sometimes  
iii. rarely  
c. I don't use public transport
52. Do/DID you smoke at home when your family (including children) is in the same room?  
a. No  
b. Yes ----- please choose  
i. Very often  
ii. Sometimes  
iii. Rarely
53. How often do/DID you smoke at home when family is around?  
a. None  
b. One or two cigarettes  
c. Three or four cigarettes  
d. Five or more cigarettes  
e. I don't smoke inside the house

### **SECTION II-G. FOR ALL SMOKERS and EX-SMOKERS AND NASVAY USERS**

**PLEASE ANSWER ALL: SMOKERS, NASVAY USERS (IN PRESENT FORM)  
AND EX-SMOKERS AND EX-NASVAY USERS (IN A PAST FORM)**

54. When did you smoke or use nasvay in last time? (If you smoke currently, please, circle alternative "a")  
a. Yesterday or today  
b. 2 days - up to 1 month  
c. 1 month - up to half a year ago  
d. Half a year up to 1 year ago  
e. 1-5 years ago  
f. 5-10 years ago  
g. More than 10 years ago
55. Have you ever tried seriously to quit smoking?  
a. Yes  
b. No ⇒ **GO TO QUESTION 64**



56. When you tried quitting, how long time have you stayed without smoking?
- less than 6 days
  - One week
  - More than one week, but less than 4 weeks
  - One month (4 weeks)
  - More than one month, but less than 3 months
  - 3 - 6 months
  - More than 6 months, but less than 10 months
  - More than 10 months, but less than 12 months
  - 12 months or more or could quit smoking
57. How many times have you tried to quit smoking?
- Once
  - Twice
  - Three times
  - More than 4 times
58. When was the last time?
- During the last six months
  - Within a year
  - More than a year ago
59. Please tell me why did you want to quit smoking? (can choose more than one option)
- My health
  - Family requested
  - Always wanted to quit
  - Friends advised
  - Doctors advised
  - It is getting expensive
  - The taste of my cigarette changed
  - Other, please specify \_\_\_\_\_
60. When you quit the last time, how did you feel?
- Very nervous
  - Very uncomfortable
  - Sick
  - Did not feel anything
  - Other, please specify \_\_\_\_\_
  - Don't know
  - Refused
61. How old were you when you quit last time?
- years old
  - DK
  - REF

**Ex-smokers ⇒ GO TO the QUESTION 64**

62. Why do you think you have failed quitting smoking? (can choose more than one option)
- Could not stand without smoking
  - Was tempting because every one was smoking around me at home
  - Was tempting because there was always someone smoking around me at work
  - Was tempting because there was always someone smoking around me at cafes, or other public gathering places
  - Lack of support from family members
  - Lack of support from Medical workers
  - Stressful situation
  - Weight increase
  - Alcohol related situation
  - Could not say no to friends when they offered cigarettes
  - Felt uncomfortable around my smoking friends
  - Other , please specify \_\_\_\_\_
63. Would you like to quit smoking or using nasvay?
- Yes
  - No
  - I am not sure

### SECTION III: Knowledge and attitudes

	Check appropriate box	1. Strongly agree	2. Agree	3. Unsure	4. Disagree	5. Strongly Disagree
64	Smoking is harmful to your health.					
65	Health professionals serve as role models for their patients and the public.					
66	Health professionals should set a good example by not smoking.					
67	Patient's chances of quitting smoking are increased if a health professional advises him or her to quit.					
68	Health professionals should routinely ask about their patients smoking habits.					
69	Health professionals should routinely advise their smoking patients to quit smoking.					
70	Health professionals who smoke are less likely to advise people to stop smoking.					
71	Health professionals should get specific training on cessation techniques.					
72	Health professionals should speak to community groups about smoking.					
73	Smoking in enclosed public places should be prohibited.					
74	Health warnings on cigarette packages should be in big print.					
75	Tobacco sales to children and adolescents should be banned .					
76	Sport sponsorships by tobacco industry should be banned.					

77	There should be a <u>complete</u> ban on the advertising of tobacco products.					
78	Hospitals and health care centres should be "smoke-free".					
79	The price of tobacco products should be increased sharply.					
80	Neonatal death is associated with passive smoking.					
81	Maternal smoking during pregnancy increases the risk of Sudden Infant Death Syndrome.					
82	Passive smoking increases the risk of <u>lung disease</u> in non-smoking adults.					
83	Passive smoking increases the risk of <u>heart disease</u> in non-smoking adults.					
84	Paternal smoking increases the risk of lower respiratory tract illnesses such as pneumonia in exposed children.					
85	Health professionals should routinely advise patients who smoke to avoid smoking around children.					

#### SECTION 4: Worksite practise

- 86 Where is your workplace/practice located?  
 1. In Bishkek 2. In Oblast centre 3. In other cities or PGT (suburban) 4. In Village
- 87 Your medical organisation is  
 1. Clinic 2. Polyclinic 3 Public Health 4. Other, please specify \_\_\_\_\_
- 88 What sort of smoke-free policy is in place at your workplace?  
 1. anything  
 2. Smoking rooms available  
 3. Inside of building smoking is prohibited  
 4. Other, please specify \_\_\_\_\_
- 89 Is the smoke-free policy implemented inside of building of your organisation?  
 1. Yes: always 2. Yes: sometimes 3.No 4. Don't Know
- 90 Are the following interventions AVAILABLE to YOU to help your patients stop smoking?  
 a Traditional remedies? 1. Yes 2. No  
 b Self- help materials 1. Yes 2. No  
 c Counselling 1. Yes 2. No  
 d Medication (Nicotine gum, patch, bupropion) 1. Yes 2. No  
 e Other (specify) \_\_\_\_\_

**If you have answered "Yes" even one point of this Q-n please GO to next Q-n**

**If you have answered "No" on all points of this Q-n, including "other" please ⇒ GO TO Q 92**

- 91 Which of the following interventions do you USE to help your patients stop smoking?  
 a Traditional remedies? 1. Yes 2. No  
 b Self- help materials 1. Yes 2. No  
 c Counselling 1. Yes 2. No  
 d Medication (Nicotine gum, patch, bupropion) 1. Yes 2. No  
 e Other (specify) \_\_\_\_\_

- 92 How well prepared do you feel you are when counselling patients on how to stop cigarette smoking?  
 1. Very well prepared. 2. Somewhat prepared 3. Not at all prepared.
- 93 Have you ever received any formal training in smoking cessation approaches to use with your patients ?
- a Formal training during medical or nursing school 1. Yes 2. No
  - b Formal training during specialization programs 1. Yes 2. No
  - c Special conferences, symposia or workshops 1. Yes 2. No
  - d Other explain \_\_\_\_\_
- 93 What kind of education or training on smoking cessation do you have; and did you use these methods in the your practice with patients?
- 1. Within education program in Medical Institutes or schools (college) 1. Yes 2. No
  - 2. Within education programme of specialization or improvement of professional skill 1. Yes 2. No
  - 3. Within specialized national conferences or seminars 1. Yes 2. No
  - 4. Within specialized international conferences, symposiums or seminars 1. Yes 2. No
  - 5. Another, specify \_\_\_\_\_

**Thank you for cooperation!**

Your answers will help to improve the policy for reduction of tobacco consumption in Kyrgyzstan