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**TOBACCO USE AND ATTITUDES
TOWARDS A SMOKE-FREE POLICY:
SURVEY IN THE WORLD HEALTH
ORGANIZATION IN GENEVA**

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RESUME

La consommation de tabac est la première cause de mortalité dans les pays occidentaux. Plusieurs études scientifiques ont également montré l'impact du tabagisme passif sur la santé. L'Organisation mondiale de la santé (OMS) a récemment identifié le contrôle du tabagisme (actif et passif) comme l'une de ses priorités pour les prochaines décennies. Ce contrôle peut être réalisé dans le cadre d'environnements professionnels sans fumée et de l'aide aux fumeurs souhaitant arrêter de fumer. Le lieu de travail devrait donc être aménagé afin de protéger les non-fumeurs de la fumée d'autrui. Une telle stratégie permet de réduire la consommation de cigarettes et fait progresser les fumeurs dans leur désaccoutumance au tabac. En 1999, le groupe « Tobacco free initiative » de l'OMS a mandaté l'Unité de prévention, (unité commune à l'Institut universitaire de médecine sociale et préventive et à la Polyclinique médicale universitaire de Lausanne) de réaliser une enquête chez les employés de l'OMS. Les objectifs de cette enquête étaient les suivants : décrire la perception des employés et leurs connaissances en termes de contrôle du tabagisme ; déterminer leur exposition au tabagisme passif ; connaître leur attitude envers une organisation totalement « smoke free » ; évaluer l'intérêt des fumeurs à bénéficier d'une aide à la désaccoutumance dans le cadre de leur activité professionnelle.

Un questionnaire, constitué de 32 items et basé sur des questions testées et validées, a été adressé par courrier électronique à l'ensemble des employés de l'OMS, accompagné par une lettre d'introduction écrite conjointement par le service médical commun et les auteurs de l'enquête. Un lien avec le site web de l'Institut universitaire de médecine sociale et préventive de Lausanne a permis aux destinataires de répondre au questionnaire. Deux rappels ont été réalisés. Les analyses univariées ont été réalisées par le test de Chi-carré ou le test de Fischer pour les variables catégorielles et par le T-test ou ANOVA pour des variables en continu. Une analyse par régression logistique a été réalisée afin de connaître l'association entre le statut de fumeur et la perception du contrôle du tabagisme au sein de l'OMS, ceci après ajustement pour des variables potentiellement confondantes telles que le niveau éducationnel, le sexe, l'âge et le statut professionnel.

Le taux de participation a été de 50% (852/1696). La représentativité de la population de l'étude peut être considérée comme bonne puisqu'il n'y a pas de différence en termes d'âge, de rapport hommes/femmes et de prévalence du tabagisme entre cette population et la population source, à savoir l'ensemble des employés de l'OMS.

La majorité des répondants sont des femmes (66%) et la moyenne d'âge de 45 ans. Deux tiers des répondants ont bénéficié d'une éducation de type universitaire ou équivalente. La prévalence de fumeurs réguliers (journaliers ou occasionnels) est de 18% et celle d'anciens fumeurs de 27%.

Globalement, cette étude montre que la majorité des employés de l'OMS sont favorables à une interdiction totale du tabagisme dans leur organisation. Cela dénote un accord avec la politique lancée par le groupe « Tobacco free initiative ». Il faut cependant nuancer

cette affirmation en relevant qu'environ la moitié des fumeurs sont opposés à cette stratégie et que l'analyse multivariée confirme la discordance entre fumeurs et non-fumeurs quant à la perception de la pertinence d'un environnement totalement sans fumée à l'OMS. Ce résultat n'est pas surprenant puisque la grande majorité des fumeurs sont au stade de pré-contemplation, c'est-à-dire un stade où ils n'envisagent pas, ou seulement dans un avenir lointain, d'arrêter de fumer. Cette étude montre également que la grande majorité des fumeurs suivent les recommandations, c'est-à-dire ne pas fumer dans le bâtiment. Parmi les fumeurs, un tiers estime qu'un environnement sans fumée les aiderait à arrêter de fumer et une grande majorité à diminuer leur consommation.

Ces résultats confirment l'importance d'un environnement sans fumée pour favoriser la progression de la désaccoutumance au tabac auprès des fumeurs. La majorité de ceux-ci montrent un intérêt à bénéficier de support ou d'aide pour la désaccoutumance au tabac offerts par l'Organisation (substituts nicotiniques, conseils du médecin).

CONCLUSION

Cette enquête révèle que l'attitude consistant à promouvoir un lieu de travail sans fumée est appropriée et satisfait la grande majorité des employés. Toutefois, certains fumeurs restent réticents à suivre ces recommandations. Par conséquent, une campagne d'information pourrait être lancée afin de sensibiliser l'ensemble des employés sur les enjeux du tabagisme passif et du contrôle du tabac au sein d'une entreprise, en particulier en rappelant que le premier but est le contrôle de la fumée et non pas des fumeurs et qu'une telle politique est bénéfique autant pour les fumeurs que pour les non-fumeurs. En parallèle, des aides à la désaccoutumance au tabac pourraient être offertes, en particulier des conseils individuels ou des sessions de groupes ainsi que la promotion de l'aide pharmacologique (substituts nicotiniques, Bupropion).

1 BACKGROUND

The worldwide epidemic of tobacco-related diseases continues to worsen as tobacco use spreads. Smoking causes approximately 30-40 percent of all deaths in the middle-aged population (35 to 69 years)¹. Scientific data have also shown the effects of passive smoking on short- and long-term morbidity and mortality². The risk of tobacco-related diseases decreases within a few years of smoking cessation^{3,4}. Although the vast majority of smokers are aware of these health problems and want to quit, less than half of them succeed in stopping permanently before the age of 60⁵.

Tobacco control has been identified by the World Health Organization (WHO) as one of the top priorities for the upcoming decades⁶. Tobacco control can be achieved by many means: economic control measures such as taxation, bans on tobacco advertising and sponsorship, health warnings, smoking cessation programs, and tobacco-free environment policies, such as reducing exposure at the workplace⁷. Several studies have shown that a non-smoking policy in the workplace limit the use of tobacco during working hours and help to reduce the total consumption of cigarettes per smoker and the smoking prevalence among the employees^{8,9,10,11}. Restrictions on smoking at the workplace, especially when coupled with a smoking cessation program, may encourage many smokers to quit. Restrictions may also provide direct economic benefits, such as a reduction of short- and long-term disability, workers' compensation, staff turnover and absenteeism. Furthermore, the organization's image might benefit from a smoking restriction policy. The amount of time smokers spend at work and the opportunity to mobilize colleagues to change health habits have made the workplace an important focus for tobacco control. WHO has implemented a smoke-free policy in its building since 1989¹². After 10 years of a such policy, WHO Tobacco Free Initiative decided to survey the WHO employees' perceptions of this policy.

Dr. Derek Yach (Executive Director, Noncommunicable Diseases and Mental Health, former project manager of WHO Tobacco Free Initiative) asked in 1999 the Unit of Prevention of the Institute of Social and Preventive Medicine to perform such a survey.

2 OBJECTIVES

The main goal of the survey was to help the WHO to evaluate the non-smoking policy implemented at the Geneva WHO headquarters. In particular, the objectives were the following:

1. To describe workers' perception and knowledge of the current tobacco control policy within their organization.
2. To determine workers' exposure to environmental tobacco smoke.
3. To survey employee attitudes toward a non-smoking workplace.
4. To ascertain the smoking status of the respondent and to determine smokers' interest in quitting smoking.
5. To determine smokers' interest in participating in smoking cessation programs.

3 METHODS

SETTING AND SUBJECTS ENROLLMENT

We chose to perform a survey of all WHO employees rather than of a random sample. This is the usually recommended procedure because some weaknesses in the sampling method (i.e., oversampling for small professional categories) may impede the generalization of the results.

We designed a questionnaire based on validated questions on employees' perceptions of smoking restrictions at the workplace^{13,14} (Appendix 1). This questionnaire was adapted for use in all international organizations based in Geneva. It was first submitted to physicians of the Joint Medical Service for modification's recommendations and approval. It was then pre-tested on a small sample of health-care workers at the Institute of Social and Preventive Medicine of Lausanne University. The 32-item questionnaire is divided into three distinct sections, the first for all employees, the second only for ex-smokers and the third section only for current smokers.

As almost all WHO employees have access to Internet and an electronic mail (e-mail) address, we decided to carry out the survey via electronic communication. We performed a qualitative informal pilot test among ten WHO employees to ensure that they had basic familiarity with the terminology and the use of electronic mail. The study population was selected from an e-mail address list for employees which was provided by the WHO computer department. Only 66 of the 1696 (4%) employees were not eligible because they lacked access to the WHO Intranet Network and Internet. These 66 employees belonged to organization departments with fewer computer facilities (e.g., gardening) and received the questionnaire by way of postal mail.

The WHO computer department regularly updates e-mail-address files and verified them to minimize the risk of duplication (i.e., employees with more than one e-mail address). We allotted 16 weeks for survey collection to allow employees in mission during Spring 1999 to participate in the survey. We estimate that the permanent employee turnover rate represents no more than 3 to 4 % of the overall WHO population

STUDY PROCEDURES

In Spring 1999, the computer department sent an e-mail to all 1630 WHO employees, announcing a survey of smoking at the workplace. It was accompanied with a cover letter in French and English, in which the Joint Medical Service (JMS) explained the objectives of the survey and the measures that had been taken to ensure anonymity and

confidentiality (Appendix 2). Few days later WHO employees received a 2nd e-mail with a link allowing them to connect to the Website of the Institute of Social and Preventive Medicine of Lausanne University. Both and five days following the 2nd communication, we posted a message on the front page of the WHO Intranet, reminding employees to respond to the survey. Eight weeks later, we sent a third reminder, again with a hyperlink to the questionnaire as in the first mail.

DEFINITION OF MAJOR VARIABLES

We first categorized different types of smokers according to the WHO smoking definition. A never smoker was a nonsmoker who either had never smoked at all or previously been an experimenter (i.e., a person who smoked less than 100 cigarettes or the equivalent amount of other tobacco products in his/her life). Those who smoked more than 100 cigarettes or the equivalent throughout their lives, but were not smoking on regular basis, were considered occasional smokers. Former smokers were people who did not smoke at the time of the survey but had in the past. Those who smoked at least one cigarette a day at the time of the survey were considered to be current daily smokers. For the analysis of the perception of the WHO's current tobacco control policy, we combined the two categories « occasional smokers » (n= 39) and « current daily smokers » (n=108) into one single category named « current smokers ». Current smokers were then classified according to the Stage of Change model¹⁵. The different stages were defined according to the intention to stop smoking and the time period for quitting. A smoker was in the *precontemplation* stage if he/she did not want to quit within the next six months. A smoker who planned to quit within the next six months but not the next month was classified in the *contemplation* stage, whereas the one who planned to quit within the next 30 days was classified in the *preparation* stage.

Professional status was categorized as either "Professional Service", subcategorizing employees in the administration, health affairs and other non technical jobs, or "General Service", such as support work, production, transport and maintenance.

STATISTICAL ANALYSIS

We first assessed the representativeness of the survey's respondents by comparing the distribution of several sociodemographic variables observed for the corresponding distributions observed in the source population (i.e., all the WHO employees). We then compared the distribution of sociodemographic and professional characteristics, as well as the answers to the questions on the current WHO tobacco control policy (Tables 1 to 4), according to the smoking status (current smoker, former smoker, never smoker). Third, opinions of the current smokers on smoking and potential WHO interventions to help them to quit were analyzed (Tables 6 and 7).

Between-group differences in the distribution of categorical variables were tested for their statistical significance (fixed at 5%) using the chi-square test or the exact Fisher test as appropriate. Similarly, between-group differences in the mean of continuous variables were tested through ANOVA or T-test as appropriate. The p-values are mentioned in the Results section only when significant (< 0.05).

More elaborate statistical analysis (Tables 7 and 8) was performed in order to assess to what extent the smoking status of the WHO employees, independent of their gender, age group and educational level, was associated with their level of satisfaction with the current non-smoking policy and their opinion on the planned implementation of a total ban on smoking. Multivariate force-entry logistic regression was used to measure the effects of these determinants in terms of adjusted odds ratios. The independent dummy-coded variables used in the model were: 1) gender; 2) smoking status, categorized as never (reference category), former, and current smoker; 3) age, categorized as younger than 35 (reference category), 35 to 44, 45 to 54, and older than 54 years; 4) educational level, categorized as having a University or equivalent degree (reference category), an intermediate degree, and no degree. We calculated the odd ratios and the 95% confidence interval (95% CI) for each independent predictor.

Information collected through the questionnaire has been kept strictly confidential. All analyses were performed using the statistical software Stata, version 6.0 (Stata Corporation, College Station, Texas, USA).

4 RESULTS

PARTICIPATION RATE AND REPRESENTATIVENESS OF THE SURVEY

Of the 1630 employees connected to internet and the 66 employees who received the survey by postal mail, 819 and 33 answered, respectively. The overall participation rate was 50.2 % (852/1696). Forty-one questionnaires were then excluded because the answers did not provide any information on the social and/or demographic characteristics. The final number of available questionnaires was 811.

In order to check the representativeness of the study population, we compared the demographic and professional characteristics of the participants of the survey with data provided by the human resources (HR) Department and other WHO sources. The proportion of males was 35% in the study population and 37% in the population identified through HR, i.e. the source population. The proportions of employees aged between 40 and 55 years were 59% and 58%, of those with fixed-term contract 64% and 66%, and of those working in the General Service 48% and 52%, in the study population and in the source population, respectively. We also compared smoking prevalence with data provided by the Joint Medical Service: the percentage of daily smokers was 14% in the survey population and 12.5% in the Joint Medical Service population. According to WHO statistics, 52% (970) of all employees worked in the General Service and 48% (897) in the Professional Service. Of the employees answering the questionnaire, 57% worked for the Professional Service and 43% for the General Service. We conclude that our study population is representative of the source population, i.e., all WHO employees.

SOCIODEMOGRAPHIC AND PROFESSIONAL CHARACTERISTICS OF THE PARTICIPANTS (TABLE 1)

The prevalence of current smokers (i.e., daily or occasional smokers) was 18% (n=147) and of former smokers 27% (n=220). The majority of the respondents (66%) were women and their mean age was 45 years. Two thirds had a university or equivalent degree, about a third worked as physicians/scientists or as secretaries and the majority has been at WHO for over 4 years. Two thirds of the employees had a fixed term contract, 43% of them worked in the General Service and 53% in the Professional Service. One third had a short term contract (38% of whom worked in the General Service and 62% in the Professional Service). Forty-five percent reported working in a private office and forty-three had an international mission in 1998. Six percent of the respondents shared their immediate work area with at least 5 other people. When comparing the distribution of these social and demographic characteristics by smoking

status, we did not find any significant statistical differences, except for the prevalence of high educational level (58.5% in current smokers vs. 69.1% in never smokers, $p = 0.05$).

Table 1 Characteristics of participants

	Never smokers (n=444) (18%)	Former smokers (n=220) (27%)	Current smokers (n=147) (55%)	Total (n=811)
Sex (%)				
Male	33.2	39.3	31.5	34.5
Female	66.8	60.7	68.5	65.5
Age				
Mean	43.9	48.3	41.6	44.7
Level of education (%)				
University	69.1	71.7	58.5	67.9
College / High school	16.4	17.8	23.9	18.1
Other	14.5	10.5	17.6	14.0
Work category (%)				
Administration	12.7	16.0	11.6	13.4
Economist / Jurist / Translator	7.1	8.2	2.9	6.7
Physician / Scientist	37.5	38.4	31.2	36.6
Secretarial	36.6	31.5	44.2	36.5
Technician	5.2	4.1	8.0	5.4
Other	0.9	1.8	2.2	1.4
Type of contract (%)				
Fixed term	62.9	73.6	63.6	66.0
Short term	37.1	26.4	36.4	34.0
Years in the organization (%)				
1-3	34.5	22.9	36.2	31.6
4-12	34.3	34.4	36.2	34.6
> 12	31.3	42.7	27.7	33.8
On mission during 1998 (%)				
Yes	43.1	47.7	34.5	42.9
No	56.9	52.3	65.5	57.1
Type of workspace (%)				
Private office	43.9	55.0	34.5	45.2
Shared office	51.1	37.2	57.2	48.4
Other	5.0	7.8	8.3	6.3
Number of colleagues working in the workspace (%)				
1-5	44.9	43.2	42.8	44.0
6-10	10.5	11.7	6.9	10.2
>10	44.6	45.1	50.3	45.8

The awareness level of the smoke-free policy at the time of the survey was high, as almost 80% of the employees answered that smoking was not permitted inside the building but was tolerated outside. The vast majority agreed with the current smoke-free policy. However, current smokers were less likely to be completely satisfied with this policy. 72% of respondents preferred a "no indoor smoking" policy whereas 21% thought that the organization should provide one or several areas per building or per floor for smoking. Similar responses were given for questions regarding the level of smoking control preferred at the workplace and during meetings. As compared to never or former smokers, current smokers were less likely to agree with the current smoking control policy ($p < 0.001$) and less likely to be in favor of a total ban either in the WHO building ($p < 0.001$) or at their workplace ($p < 0.001$).

Table 2 Knowledge and opinions on level of smoking control, overall and according to smoking status

	Never smokers (n=444)	Former smokers (n=220)	Current smokers (n=147)	Total (n=811)
Is smoking permitted in WHO ?(%)				
No	35.1	35.2	26.9	33.7
Yes, outside the building	44.8	47.9	43.4	45.4
Yes, in marked smoking area only	16.0	13.7	24.1	16.8
Other	4.1	3.2	5.5	4.1
Agreement with current smoking control policy (%)				
Completely agree	83.8	85.7	54.8	79.0
Partially agree	12.6	11.1	34.2	16.1
Partially disagree	1.8	2.8	8.2	3.2
Completely disagree	0.9	0.0	0.7	0.6
No opinion	0.9	0.5	2.1	1.0
Smoking control preferred at WHO building (%)				
No restriction	0.5	0.5	0.0	0.4
Separate smoking areas	14.3	17.3	47.0	20.8
Total ban	78.2	75.7	46.3	71.6
No opinion	1.6	2.8	2.7	2.1
Other	5.5	4.7	4.1	5.0
Smoking control at the workplace (%)				
No restriction	0.2	0.5	0.7	0.4
Separate smoking areas	4.6	4.6	16.0	6.6
Total ban in working area	91.7	91.2	76.4	88.8
No opinion	1.6	2.3	2.8	2.0
Other	1.8	1.4	4.2	2.1

Respondents were instructed to answer this portion of the questionnaire only if they felt concerned about exposure to environmental tobacco smoke. Interestingly, the only place where employees either mentioned being exposed to or complained of the environmental tobacco smoke was the main entrance to the building (Tables 3 and 4). Only 3% of the respondents either mentioned or complained of exposure to smoke from colleagues working in their vicinity. Furthermore, 4% of employees had to move temporarily at least once from their workplace because of other people's smoke. Again, the only place where never or former smokers reported being more bothered by tobacco smoke as compared to current smokers was the main entrance (21%-24% vs 5%, $p < 0.001$).

Table 3 Exposure to environmental tobacco smoke at work, overall and according to smoking status

	Never smokers	Former smokers	Current smokers	Total
In the cafeteria (%)	5.9	6.6	3.8	5.8
Number of people concerned *	371	181	105	657
In the corridors (%)	5.0	3.4	0.0	3.7
Number of people concerned *	362	178	103	643
In the main entrance (%)	24.7	30.3	17.3	25.0
Number of people concerned *	389	188	110	687
In the offices (%)	1.4	1.1	1.0	1.2
Number of people concerned *	363	179	102	644
By colleagues working in our vicinity (%)	3.6	2.8	3.9	3.4
Number of people concerned *	366	178	102	646

Tobacco smoke was considered to be a source of conflict at the workplace by a minority (22% of subjects either completely or partially agreed with this statement) and less than half (41%) reported that cohabitation between smokers and non-smokers might be possible. Half agreed with the statement that smokers were frequently criticized by non-smokers. Notably, many respondents, regardless of their smoking status, expressed no matter by not answering the questions (Table 4).

Table 4 Opinions on relationships between smokers and non-smokers at work, overall and according to smoking status

	Never smokers (n=444)	Former smokers (n=220)	Current smokers (n=147)	Total (n=811)
"Tobacco smoke is a source of conflict" (%)				
Completely agree	11.1	8.2	9.7	10.1
Partially agree	13.7	10.1	11.1	12.3
Partially disagree	10.8	11.1	6.9	10.2
Completely disagree	41.5	55.1	50.7	46.8
No opinion/no answer	22.9	15.5	21.5	20.6
"Cohabitation between smokers and non smokers is possible" (%)				
Completely agree	22.0	25.6	25.4	23.6
Partially agree	17.6	18.8	17.6	17.9
Partially disagree	14.3	8.2	12.0	12.2
Completely disagree	22.5	21.3	17.6	21.3
No opinion/no answer	23.7	26.1	27.5	25.0
"Smokers are frequently criticized by non smokers" (%)				
Completely agree	19.9	20.7	34.8	22.8
Partially agree	30.0	32.5	32.6	31.1
Partially disagree	15.5	9.9	7.1	12.5
Completely disagree	13.1	17.7	11.3	14.0
No opinion/no answer	21.5	19.2	14.2	19.6

The current daily smokers consumed on average 12 cigarettes a day for a mean duration of 22 years. A third of them could be classified as nicotine dependent, as they smoked more than 10 cigarettes per day and their first cigarette in the first 30 minutes after waking up. Twenty-one and twelve percent reported smoking every day and occasionally at the workplace, respectively, meaning that only a minority of the smokers did not strictly comply with the policy. None of these variables differed according to gender.

The majority of smokers wanted to quit and half of them had made an attempt sometime during the last 12 months (i.e., stopped for at least 24 hours) (Table 5). However, when the smokers were classified according to their stage of change, 72.2% were in the precontemplation stage, whereas only 22.1% and 5.8% were in the contemplation and preparation stages, respectively. The majority reported an interest in using support offered by the WHO for helping them to quit. The most frequently pretended supports were nicotine replacement therapy (NRT) and physician's counseling, two interventions that have been proven effective¹⁶, as well as hypnosis and

acupuncture, interventions for which there is no clear evidence of efficacy for smoking cessation^{17,18}. A non-significant trend was noted according to the distribution of the stages of change: smokers in preparation or contemplation were more likely (82%) to be interested in NRT and physician support than those in precontemplation (63%). Interestingly, a third reported "none" and only a few showed interest in "collective counseling sessions". None of these proportions vary significantly with gender.

Table 5 Smokers' attitudes and expectations regarding quitting, overall and according to gender

	Men (n=34)	Women (n=73)	Total (n=107)
Desire to quit smoking (%)			
Yes	78.8	66.2	70.2
No	21.2	33.8	29.8
Intention to quit smoking (%)			
In the next 30 days	3.0	7.0	5.8
In the next 6 months	24.2	21.1	22.1
In a time interval longer than 6 months	51.5	38.0	42.3
No intention	21.2	33.8	29.8
Interest in help offered by organization			
Yes / maybe yes	59.4	50.8	53.6
Maybe no / no	28.2	46.3	40.4
No opinion	12.5	3.0	6.1
Desired support to quit smoking (%)			
Physician support	26.5	17.8	20.6
Nicotine replacement therapy	38.2	32.9	34.6
Collective counseling sessions	8.8	8.2	8.4
Hypnosis	11.8	21.9	18.7
Acupuncture	17.6	24.7	22.4
None	32.4	30.1	30.8
Other support	.0	6.8	4.7

Forty and seventeen percent would smoke less or stop smoking respectively in the case of a total ban on smoking . It would be difficult to adhere to this type of policy for 26%. None of these proportions vary significantly by gender.

The answers to the different statements on smoking showed that most smokers were conscious of the deleterious effects of active smoking on health (91%) (Table 6), whereas passive smoking was viewed as a health issue by only 71% of respondents. The concept of nicotine dependence (expressed by the irritability when quitting and the inability to

stop) was well perceived by around 60%. The only statistically significant difference between men and women was the agreement with the statement on smoking giving wrinkles (57% in women vs. 31% in men, $p=0.02$), which is not surprising since women may be more sensitive to this type of smoking consequence.

Table 6 Proportions of current regular smokers agreeing with various statements on smoking, overall and according to gender

	Men (n=34)	Women (n=73)	Total (n=107)
« Smoking is a pleasure »	78.8	78.9	78.8
« I am relaxed when I smoke »	63.6	61.4	62.1
« I like a smoker's image »	18.2	8.7	11.8
« Cigarette smoking is uncomfortable for others »	81.8	72.9	75.7
« Cigarette smoking can affect the health of others »	75.8	68.1	70.6
« If I didn't smoke I would have more energy right now »	54.5	54.3	54.4
« If I tried to quit, I'd probably become irritable and unbearable »	57.6	65.7	63.1
« Smoking is dangerous for my health »	93.8	89.7	91.0
« It bothers me not be able to stop smoking »	63.6	56.5	58.8
« By continuing to smoke, I have the feeling of making decisions for myself »	25.0	28.6	27.5
« If I stop, I will probably put on weight »	39.4	55.7	50.5
« Smoking gives wrinkles »	33.3	57.1	49.5

FORMER SMOKERS

Among the former smokers, the mean duration since quitting was 8 years, and 92% mentioned having stopped without any assistance. The major reasons for quitting were concern about health (39%) and « because it was time to quit » (data not shown).

MULTIVARIATE ANALYSIS ON THE SATISFACTION LEVEL WITH CURRENT NON-SMOKING POLICY AND OPINION ON PLANNED SMOKE-FREE POLICY (TABLES 7 AND 8)

Since this survey showed that the majority of smokers either were unsatisfied with the current situation or did not agree with some major smoke-free policy options, such as a total ban on smoking, we performed a multivariate analysis to know whether this result was confirmed after adjusting for potential cofounders such as gender, age and educational level. Tables 7 and 8 showed that being a current smoker, compared to never smokers, was still associated with a lower likelihood of being satisfied with the current policy (OR 0.26, 0.17 - 0.39) and agreeing with a total ban (OR 0.28, 0.18 - 0.42).

Table 7 Adjusted odds ratio for being satisfied with the current policy

Characteristics	Odds ratio	95% confidence intervals
Smoking status		
Never *	1.00	
Former	1.13	0.71 - 1.78
Current	0.26	0.17 - 0.39
Gender		
Male *	1.00	
Female	1.23	0.82 - 1.82
Age		
< 35 years *	1.00	
35 - 44	1.18	0.70 - 1.97
45 - 54	1.05	0.63 - 1.75
> 54	1.43	0.76 - 2.68
Educational level		
University degree *	1.00	
College degree	0.93	0.56 - 1.53
Other	0.78	0.47 - 1.31

* = Reference group.

Table 8 Adjusted odds ratio for agreeing with a total ban of smoking

Characteristics	Odds ratio	95% confidence intervals
Smoking status		
Never *	1.00	
Former	0.93	0.66 - 1.34
Current	0.28	0.18 - 0.42
Gender		
Male *	1.00	
Female	0.87	0.62 - 1.23
Age		
< 35 years *	1.00	
35 - 44	1.44	0.91 - 2.27
45 - 54	1.14	0.73 - 1.78
> 54	1.04	0.62 - 1.75
Educational level		
University degree *	1.00	
College degree	0.69	0.45 - 1.06
Other	0.72	0.46 - 1.13

* = Reference group.

5 DISCUSSION

This survey showed that the majority of WHO employees preferred a total ban on smoking in the Organization, i.e. a strong agreement with working in a healthy environment and the final aim of the Tobacco Free Initiative. However, this opinion was shared by only half of the smokers and the multivariate analysis further confirmed this discrepancy between non-smokers and current smokers. This result is not surprising, since the majority of smokers (72%) were in precontemplation stage, i.e. still far to modify their habit. This corroborates several studies which showed that most European smokers were not in advanced stages of change and did not want to quit smoking in the near future¹³. Only smokers who seriously wanted to quit would appreciate a total ban on smoking, namely as a way to support and help them to either reduce their amount of tobacco consumption or even to quit.

This survey also showed that the current policy appeared to be followed, since very few employees reported being either exposed or bothered by environmental tobacco smoke. A small number of employees complained of tobacco smoke disturbance, especially around the main entrance to the building. This is not surprising since the current smoke policy forbids indoor smoking, with the consequence that employees smoke just outside the building, especially in front of the main entrance. This result was in agreement with the fact that the average number of cigarettes smoked per day outside the building by a smoker was about 4. Tobacco was still viewed as a source of conflict by 22% of the employees, and a third of them believed that cohabitation was somehow not possible.

The level of knowledge of the policy is very good, as 95% of the employees knew the rules concerning smoking. Generally speaking, smoking was forbidden inside the building and the vast majority of respondents noted this restriction. However, a room has been unofficially designated for employees to smoke inside the building. This fact might explain why 17% answered that smoking was permitted in « marked smoking area only ». These employees probably referred to this room in which smoking was informally permitted. It also should be noted that a third of smokers mentioned smoking either regularly or occasionally at the work place.

The prevalence of smoking among WHO employees was lower than in the Swiss and French general populations and in agreement with figures found in other health-profession settings in Switzerland^{19,20} and France²¹. As a health-oriented organization, WHO hires people who are more health conscious than the general population. Moreover, WHO has been involved for more than ten years in a workplace tobacco control, which was probably the beginning of a change in smokers' attitudes and may have helped some of them to move through their stages of change and finally to quit. As early as 1974, several recommendations of WHO expert committees and resolutions of the Executive Board and World Health Assemblies raised the issue of protecting the fundamental right of non-smokers to breathe unpolluted air at the place of work. In

1987 WHO was the first UN organization in Geneva to implement a Tobacco-free policy, a policy that has been known and followed by a majority of employees¹².

One-third of the smokers believed that a totally smoke-free environment would help them to stop smoking, and 84% thought it could help them decrease their tobacco consumption. These encouraging data suggest that a smoke-free policy can help move smokers through the stages of change that ultimately lead to cessation.

The vast majority of smokers felt relaxed and experienced pleasure when smoking. A third of the smokers still did not believe that their smoking can affect the health of others, even in light of numerous well designed studies that have shown the adverse effects of environmental tobacco smoke²². These perceptions should be addressed when explaining to them the aims of the smoke-free policy. The fear of weight gain upon quitting should also be taken into account by health professionals involved in smoking cessation programs.

This survey has two limitations. Firstly, the response rate (50%) might be considered to be low. However, social, demographic, professional and lifestyle characteristics were similar to those found in the source population, which ensures good representativeness of the study population. Moreover, this participation rate of WHO employees should be considered as a success. Fifty-percent participation rate is much higher than that achieved in a previous e-mail survey, conducted several months earlier, on a less controversial and sensitive topic, "the use of computer tools within the organization" (participation rate of around 20%). Furthermore, other studies using similar settings (i.e., survey performed in health sciences institutions) showed equivalent or lower response rates. The reason for this 50% participation might be explained by two survey characteristics: 1) Fear of break in the anonymity of data analysis, even though we explicitly ensured it through a specific message; this might be related to the electronic administration of the questionnaire, unusual for some participants. Interestingly, a certain number of employees reported a fear that confidentiality could not be guaranteed in this type of survey. 2) Survey's schedule, as the survey was performed during a transitional period characterized by fear of change and uncertainty concerning professional future, which may have incited a certain number of employees not to participate in our study. This feeling has been reinforced after several meetings with the Joint Medical Service. Although an e-mail survey offers certain advantages (accessibility, ease of transmission to response and information collection, speed of the process and low cost), a recent comparison between postal and e-mail survey showed that the former achieved a significantly higher response rate²³. The major reason proposed by the authors was the more tangible form of the paper format, which is more likely to remain within view in the recipients' work area -- as new e-mail is received, older mails scroll off the screen and out of view!

Secondly, a validation procedure for the self-reported smoking status could not be measured for technical and financial reasons. However, it has been demonstrated that self-reported smoking status rates are reliable in such surveys when compared to objective smoking status²⁴.

6 CONCLUSION AND RECOMMENDATIONS

- The simple and comprehensive current WHO smoke-free policy (total ban inside WHO building) is satisfactory to the vast majority of non-smoker WHO employees. General information on the policy should be given to all newly hired WHO employees. Although current smokers appear to be reluctant to comply with a total ban on smoking inside the WHO building, efforts should not be made to find a complex solution that would accommodate all employees - smokers and non smokers.
- The smoke-free policy must be reinforced by launching an information campaign since a substantial minority of employees still are not aware of the current policy, and because many smokers are reluctant to comply. This campaign should contain information about the health hazards of both active and passive smoking, explain that 1) the final aim is to control smoking, not the smokers, 2) the policy benefits both smokers and non-smokers, 3) the policy helps recent former smokers in their efforts to stay quit, 4) the issue is not about whether employees smoke, but where they smoke, 5) no one is forcing smokers to quit, 6) WHO employees will be regularly informed of effective smoking cessation interventions (e.g., new pharmacological agents to treat nicotine craving).
- A variety of educational and motivational strategies should be provided for smokers who are not seriously thinking of quitting, such as simple brochures, posters to capture the attention of the smokers in the precontemplation stage, as well as to provide incentives such as awards or free initial smoking cessation intervention (for example, free treatment for one week)
- Support for helping the many smokers who expressed a desire to quit should be provided, as offering cessation assistance is an integral part of implementing a successful control policy. Such supports should include individual counseling sessions and pharmacological treatment (for such development, a health professional network could be set up). They should be available on organization time and free of charge, whenever possible, and provide information on the current lack of effectiveness of some expected smoking cessation interventions (i.e., acupuncture, hypnosis).
- Employees should be regularly monitored on this policy. Given the fear that anonymity is at risk during data analysis when electronic administration is used for such survey, all precautions should be taken to ensure the confidentiality.
- Feedback on this policy should be encouraged, for instance from one of the WHO departments. Joint Medical Services might be a good choice for such a duty.

7 APPENDIX

APPENDIX 1

Survey on tobacco use and attitudes towards smoke-free policy in Geneva-based international organizations

Its aim is to ascertain the opinions and attitudes of workers in Geneva-based international organizations on smoking in the workplace.

This questionnaire was prepared by the Unit for Prevention of the Institute of Social and Preventive Medicine of Lausanne University on behalf of the WHO Tobacco Free Initiative.

It is also the first step of a global action designated to reinforce tobacco control policies and to lower the proportion of smokers amongst international organizations workers, particularly by giving those who want to stop practical means of doing so.

Read this first:

- * **This questionnaire will take approximately 7 to 10 minutes.**
- * **Check the item that seems the most appropriate.**
- * **Unless indicated otherwise, please check only one answer.**
- * **Sincere replies will reinforce the validity of this effort.**
- * **Answers will be kept strictly confidential.**
- * **A short written summary will be provided to all employees after the completion of the survey.**

Questions 1 to 17 and question 33 concern everyone, i.e. those who have never smoked, as well as former smokers and current smokers.

Questions 18 to 20 are for former smokers.

Questions 21 to 32 are for current smokers.

1. For which organization do you work?

2. Which of the following best describes where you currently work(workplace)?

- Private office
- Shared office
- Open-plan office

Workshop

Other, please specify:

3.a Is smoking permitted in your organization?

Yes No I don't know

3.b If yes, where is smoking allowed?

At work station or desk

In marked smoking area(s) only

Outside the buildings only

Other, please specify:

3.c. How many employees are there in your immediate work area?

1 to 5 6 to 10 more than 10

4. In your organization, which level of smoking control do you prefer?

No restriction on smoking

1 or 2 smoking area(s) on each floor

1 or 2 smoking area(s) per building

No indoor smoking

No opinion

Other, please specify:

5. In your workplace, which level of smoking control do you prefer?

No restriction on smoking

Separate smoking and non-smoking working areas

Total ban on smoking in working areas

No opinion

Other , please specify:

6. During meetings, which level of smoking control do you prefer?

No restriction on smoking

Smoking breaks

No smoking unless everyone agree

Total ban on smoking

No opinion

Other, please specify:

7. At work are you exposed to others people's smoke?

Very often Often Sometimes Rarely Never Not appropriate

a- In the cafeteria

b- In the corridor

c- In the Main entrance

d- In your office

e- By colleagues working - in your vicinity

8.a At work are you bothered by tobacco smoke?

Very often Often Sometimes Rarely Never Not appropriate

- a- In the cafeteria
- b- In the corridor
- c- In the main entrance
- d- In your office
- e- By colleagues working in your vicinity

8.b Do you agree with the current smoke-free policy rules in your organization?

Completely agree Somewhat disagree Somewhat agree Completely disagree No opinion

9. In your present organization, have you ever to move away temporarily from your workplace because of other people's smoke?

Very often (more than once a week) Often (less than once a week) Never

10. If there are any rules in your organization concerning tobacco free policy, are they enforced in the area where you work?

Yes Maybe yes Maybe no No No opinion

11. At my workplace:

a. Tobacco smoke is a source of conflict

Completely agree Somewhat agree Somewhat disagree Completely disagree No opinion

b. Cohabitation between smokers and non smokers is excellent

Completely agree Somewhat agree Somewhat disagree Completely disagree No opinion

c. Smokers are frequently criticized by non-smokers

Completely agree Somewhat agree Somewhat disagree Completely disagree No opinion

12.a Have you smoked more than 100 cigarettes in your life?

Yes No

12.b Have you smoked at least one cigarette during the last 6 months?

Yes No

12.c Have you smoked at least one cigarette during the last 7 days?

Yes No

12.d Do you smoke now?

Never Occasionally (not every day) Every day

12.e If you smoke, what do you smoke? (select one or more item(s))

Cigarettes

Cigars

Pipe

Other, please specify:

PERSONAL INFORMATION:

13. Are you?

Male female

14. Date of birth?

19..

15. What is your highest level of education?

Primary school

Secondary school

Technical School

Apprenticeship

College / High school

University

16.a What type of contract do you have in the organization?

Fixed term contract Short term contract Contract without limit of time

16.b When did you start to work for your organization?

year(s) ago month(s) ago

17.a What is your work category?

* Professional

Administration / Education

Economist / Jurist / Translator

Medical / Scientist / Engineer / Statistician

* Support work

Secretarial / Clerical

Technician / Aid

* Production / Service / Transport

Physical Plant / Maintenance

Security

Machine Operation / Repair

17.b Were you away from Geneva on missions during 1998?

Yes No

17.c If yes, how many times?

For those who have never smoker, please go to question 33 to complete the questionnaire.

Current smokers (at least one cigarette a day) and Former smokers, please answer a few more questions.

QUESTIONS FOR FORMER SMOKERS:

18. When did you quit smoking?

year(s) ago month(s) ago

19. How did you quit smoking?

I stopped all by myself, without any help

I used the following help(s), select one or more item(s) :

Physician support:

Nicotine replacement therapy (gum, patch)

Individual support (for example: partner, friend, family)

Collective counseling sessions

Hypnosis

Acupuncture

Other, please specify:

20. Why did you to quit smoking? (select one or more item(s))

A physician recommended it

I was concerned about my health

It was the moment to stop

Because of professional restrictions (for example smoke-free policy rules at my work place)

Because someone close to me insisted (partner, family, friend)

Because my colleagues insisted

Other, please specify:

For former smokers, please go to question 33 to complete the questionnaire.

Current smokers (at least one cigarette a day), please answer a few more questions.

QUESTIONS FOR CURRENT SMOKERS:

21.a About how many cigarettes do you smoke per day?

cigarette(s) a day

21.b How soon after you wake up do you smoke your first cigarette?

Within 5 minutes

6-30 minutes

31-60 minutes

After 60 minutes

22. How long ago did you start smoking regularly? (at least one cigarette a day)

year(s) ago month(s) ago

23. How many cigarettes do you smoke?

a. In the buildings of your organization cigarette(s) a day

b. Outside the buildings of your organization cigarette(s) a day

c. When not at work cigarette(s) a day

24. Do you smoke in your workplace?

Every day Occasionally Never

25. During the last 12 months how many times have you tried to quit, and succeeded for at least 24 hours?

Times

26. Would you like to quit smoking?

Yes No

27. If yes, when are you seriously expecting to quit smoking?

In the the next 6 months

In the next 30 days

I don't know

28. If you decide to quit smoking, which kind of support would you like to have? (select one or more item(s))

Physician support

Nicotine replacement therapy (gum, patch)

Collective counseling sessions

Hypnosis

Acupuncture

None

Other, please specify:

29.a If you could not smoke in your work area, would you smoke less?

Yes Maybe yes Maybe no No No opinion

29.b. If you could not smoke in your work area, would you stop smoking?

Yes Maybe yes Maybe no No No opinion

30. If smoking were not allowed at all in your workplace, respect of this policy for you would be?

Very easy Easy I don't kow Difficult Very difficult

31.a If your organization offered to help you stop smoking, would you be interested?

Yes Maybe yes Maybe no No No opinion

31.b If yes, which kind of support would you prefer? (select one or more item(s))

Physician support

Nicotine replacement therapy (gum, patch)

Collective counseling sessions

Hypnosis

Acupuncture

Other, please specify:

32 Do you agree with the following statements?

To questions 32a to 32l, the following answers were proposed:

Completely agree Somewhat agree Somewhat disagree Completely disagree No opinion

- a. **Smoking is a pleasure**
- b. **I am more relaxed and pleasant when I smoke**
- c. **I like the smoker's image**
- d. **My cigarette smoking is uncomfortable for others**
- e. **My smoking can affect the health of others**
- f. **If I didn't smoke, I would have more energy right now**
- g. **If I tried to quit, I'd probably become irritable and unbearable**
- h. **Smoking is dangerous for my health**
- i. **It bothers me not being able to stop smoking**
- j. **By continuing to smoke, I have the feeling of making decisions for myself**
- k. **If I stop smoking, I will probably put on weight**
- l. **Smoking gives me wrinkles**

APPENDIX 2

Madame, Monsieur,

Ce document contient un questionnaire conçu par l'Institut de médecine sociale et préventive de l'Université de Lausanne dans le cadre du programme « **Tobacco Free Initiative** » de l'O.M.S.

L'objectif est de connaître l'opinion, les attitudes et les comportements des employés des différentes organisations internationales de Genève par rapport à la consommation de tabac sur leur lieu de travail.

Nous sollicitons cette opinion par l'intermédiaire du questionnaire E-mail que vous trouverez en annexe.

Nous vous remercions d'ores et déjà de votre collaboration.

Questionnaire version française :<http://adresse en attente>

Questionnaire version anglaise :<http://adresse en attente>

Madam, Sir,

You will find enclosed a questionnaire prepared by the Unit for Prevention of the University Institute of Social and Preventive Medicine of Lausanne on behalf of the WHO **Tobacco Free Initiative**.

The aim of this research is to ascertain the opinions and attitudes of workers in international organizations in Geneva on smoking at the workplace.

We would appreciate your collaboration and invite you to complete the attached E-mail questionnaire.

Thanking you in advance for your help.

French questionnaire:<http://adresse en attente>

English questionnaire:<http://adresse en attente>

8 REFERENCES

- ¹ Peto R, Lopez AD, Boreham J, Thun M, Heath CJ. Mortality from tobacco developed countries: indirect estimation from national vital statistics. *Lancet* 1992;339:1268-78.
- ² Respiratory health effects of passive smoking: lung cancer and other disorders. The report of the US environment Protection Agency. Bethesda, MD, National Institutes of Health, 1993 (NIH Publication No. 93-3605).
- ³ Rich-Edwards JW, Manson JE, Hennekens CH, Buring JE. The primary prevention of coronary heart disease in women. *N Eng J Med* 1995;332:1758-66.
- ⁴ Doll R, Peto R, Wheatley K, Gray R, Sutherland I. Mortality in relation to smoking: 40 years' observations on male British doctors. *BMJ* 1994;309:901-11.
- ⁵ Action for Tobacco Control. In: World Health Organization, ed. *Guidelines for Controlling and Monitoring the Tobacco Epidemic*. World Health Organization, Geneva, 1998, pp 18-9.
- ⁶ WHO Tobacco-free Initiative, Geneva 1999 (www.WHO.int).
- ⁷ Chollat-Traquet C. Evaluating tobacco control activities: experiences and guiding principles. World Health Organization. Geneva. 1996.
- ⁸ Stillman FA, Becker DM, Swank RT et al. Ending smoking at the Johns Hopkins Medical Institutions. *JAMA* 1990;264 :1565-69.
- ⁹ Sorensen G, Rigotti N, Rosen A, Pinney J, Prible R. Effects of a worksite nonsmoking policy: evidence for increased cessation. *Am J Public Health* 1991;81 :107-114.
- ¹⁰ Pucci LG. Implementing Restrictive Smoking policy an Overview of worksite Intervention Studies *Eur J public health* 1991; 105-109.
- ¹¹ Woodruff TJ, Rosbrook B, Pierce J, Glantz SA Lower levels of cigarette consumption found in smoke-free workplaces in California. *Arch Intern Medicine* 1993;153(12):1485-93.
- ¹² WHO Information circular No 62, July 1988.
- ¹³ Etter JF, Perneger T, Ronchi A. Distributions of smokers by stage: international comparison and association with smoking prevalence. *Preventive Medicine* 1997;26:580-585.
- ¹⁴ Questionnaire available at: <http://www.hospvd.ch/iump/survey-en.htm>.
- ¹⁵ Di Clemente C, Prochaska JO, Fairhurst SK, Velicer WF, Velasquez MM, Rossi JS. The process of smoking cessation: an analysis of precontemplation, contemplation and preparation stages of change. *J Consult Clin Psychology* 1991;59:295-304.
- ¹⁶ Fiore MC, Bailey MC, Cohen SJ, Dorfman SF, Goldstein MG, Gritz ER, et al. Treating tobacco use and dependence. Clinical practice guideline. Rockville MD: Public Health Service, 2000 (AHRQ Publication No 00-0032).
- ¹⁷ White AR, Rampes H, Ernst E. Acupuncture for smoking cessation (Cochrane Review). In: *The Cochrane Library*, Issue 1, 2001. Oxford: Update Software.
- ¹⁸ Abbot NC, Stead LF, White AR, Barnes J, Ernst E. Hypnotherapy for smoking cessation (Cochrane Review). In: *The Cochrane Library*, Issue 1, 2001. Oxford: Update Software.
- ¹⁹ Junker Ch., Töny G, Abelin Th. Kenntnisse über die Raucherentwöhnung in der Schweiz. Bern: Institut für Sozial- und Präventivmedizin der Universität Bern, 1998.

- ²⁰ Witta A, Gutzwiller F, Largiader F, Frick T. Zur Problematik des Passivrauchens am Arbeitsplatz : eine Umfrage am Universitätsspital Zürich. *Schweiz Med Wochenschr* 1997;127:95-101.
- ²¹ Hours M, Ayzac L, Bonhomme I et al. Le tabac et l'entreprise : résultats d'une enquête en région lyonnaise sur les pratiques de contrôle du tabac au sein de l'entreprise. *Santé Publique* 1991;1:16-21.
- ²² He J, Vupputuri S, Allen K, Prerost MR, Hughes J, Whelton PK . Passive smoking and the risk of coronary heart diseases - a meta-analysis of epidemiologic studies. *N Engl J Med* 1999;340: 920-25.
- ²³ Mavis D, Brocata JJ. Postal surveys versus electronic mail surveys. The tortoise and the hare revisited. *Eval Health Prof* 1998;21:395-408.
- ²⁴ Velicer WF, Prochaska JO, Rossi JS, Snow MG. Assessing outcome in smoking cessation studies. *Psychol Bull.* 1992;111:23-41.

Liste des parutions

- N° 1 *Burnand B, Paccaud F, eds.* Maîtrise de la qualité dans les hôpitaux universitaires: satisfaction des patients. Lausanne : IUMSP, 1997. CHF 20.-
- N° 2 *Addor V, Fawer C-L, Santos-Eggimann B, Paccaud F, Calame A, Groupe Eden.* Naissances vaudoises 1993-1994 : caractéristiques et facteurs de risque pour une affection chronique. (Rapport EDEN, 1). Lausanne : IUMSP, 1996. CHF 18.-
- N° 3 *Yalcin T, Seker E, Beroud C, Eggli Y.* Planification des lits du CHUV: projections 1994-2005. Lausanne : Hospices cantonaux, 1997. CHF 10.-
- N° 4 *Narring F, Michaud P-A, Wydler H, Davatz F, Villaret M.* Sexualité des adolescents et sida : processus et négociations autour des relations sexuelles et du choix de la contraception. Lausanne : IUMSP, 1997. CHF 30.-
- N° 5 *Eggl Y, Yalcin T, Basterrechea L.* Le système d'information dirigeant des Hospices : conception générale. Lausanne : Hospices cantonaux, 1997. CHF 10.-
- N° 6 *Eggl Y, Basterrechea L, Beroud C, Halfon P, Nguyen N, Perret A, Seker E, Yalcin T.* Tableaux de bord et de suivi conception détaillée. Lausanne : Hospices cantonaux, 1997. CHF 10.-
- N° 7 *Nguyen N, Eggl Y, Ruchet T, Schenker L.* Prévision budgétaire . Instructions, méthode et manuel d'utilisation. Lausanne : Hospices cantonaux, 1997. CHF 20.-
- N° 8 Manuel du Programme « Qualité » des Hospices. Lausanne : Hospices cantonaux, 1997. CHF 15.-
- N° 9 *Meystre-Agustoni G, Jeannin A, Dubois-Arber F, Paccaud F.* Dépistage du cancer du sein par mammographie : évolution des conséquences psychologiques négatives chez les participantes. Lausanne : IUMSP, 1997. CHF 12.-
- N° 10 *Ferron C, Cordonier D, Schalbetter P, Delbios Piot I, Michaud P-A.* Santé des jeunes en rupture d'apprentissage : une recherche-action sur les modalités de soutien, les déterminants de la santé et les facteurs favorisant une réinsertion socio-professionnelle. Lausanne : IUMSP, 1997. CHF 20.-
- N° 11 *Narring F, Berthoud A, Cauderay M, Favre M, Michaud P-A.* Condition physique et pratiques sportives des jeunes dans le canton de Vaud. Lausanne : IUMSP, 1998. CHF 20.-
- N° 12 *Berthoud A, Michaud PA.* Accompagnement et prévention des ruptures d'apprentissage : une recherche menée dans les cantons romands. Lausanne : IUMSP, 1997. CHF 20.-
- N° 13 *Moreau-Gruet F, Cochand P, Vannotti M, Dubois-Arber F.* L'adaptation au risque VIH/sida chez les couples homosexuels : version abrégée. Lausanne : IUMSP, 1998. CHF 12.-

- N° 14 *Ferron C, Michaud PA, Dubois-Arber F, Chollet-Bornand A, Scheder P-A.* Evaluation des unités de prévention et de traitements pour jeunes suicidants à Genève. Lausanne : IUMSP, 1998. CHF 20.-
- N° 15 *Addor V, Fawer C-L, Santos-Eggimann B, Paccaud F, Calame A.* EDEN : Incidence et prévalence des affections chroniques à l'âge de 18 mois dans une cohorte d'enfants vaudois. (Rapport EDEN, 2). Lausanne : IUMSP, 1998. CHF 15.-
- N° 16 Les professions de la santé. Guide des formations. Lausanne : Hospices cantonaux, 1998. CHF 20.-
- N° 17 *Meystre-Agustoni G, Thomas R, Häusermann M, Chollet-Bornand A, Dubois-Arber F, Spencer B.* La sexualité des personnes vivant avec le VIH/sida. Lausanne : IUMSP, 1998. CHF 18.-
- N° 18 *Dubois-Arber F, Haour-Knipe M.* Identification des discriminations institutionnelles à l'encontre des personnes vivant avec le VIH en Suisse. Lausanne : IUMSP, 1998. CHF 20.-
- N° 19 *Vader JP, Porchet F, Larequi-Lauber T, Burnand B.* Indications à la laminectomie : adéquation et nécessité. Lausanne : IUMSP, 1998. CHF 20.-
- N° 20a *Huissoud T, Gervasoni JP, Benninghoff F, Dubois-Arber F.* Epidémiologie de la toxicomanie dans le canton de Vaud et évaluation des nouveaux projets financés par le canton de Vaud depuis 1996. Lausanne : IUMSP, 1998. CHF 20.-
- N° 20b *Huissoud T, Gervasoni JP, Benninghoff F, Dubois-Arber F.* Epidémiologie de la toxicomanie dans le canton de Vaud et évaluation des nouveaux projets financés par le canton de Vaud depuis 1996 : version abrégée du rapport d'août 1998. Lausanne : IUMSP, 1998. CHF 10.-
- N° 21 *Meystre-Agustoni G, Jeannin A, Dubois-Arber F.* Evaluation des effets induits de l'Opération Nez rouge. Lausanne : IUMSP, 1998. CHF 10.-
- N° 22 *Ernst M-L, Haour-Knipe M, Spencer B.* Evaluation des Aktions-programmes "Gesundheit von Frauen: Schwerpunkt HIV-Prävention 1994-1997". Evaluation of the "Women's Health: HIV Prevention Programme 1994-1997". Lausanne : IUMSP, 1998. CHF 15.-
- N° 23 *Livio F, Buclin T, Yersin B, Maghraoui A, Burnand B, Biollaz J.* Hospitalisations pour effet indésirable médicamenteux : recensement prospectif dans un service d'urgences médicales. Lausanne : IUMSP, 1998. CHF 35.-
- N° 24 *Narring F, Michaud PA.* Etude sur les attentes des élèves par rapport au médiateur scolaire. IUMSP, 1998. CHF 10.-
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Kellerhals C, Thomas R, Morency P, Zobel F, Dubois-Arber F. Les mesures de santé publique de la Confédération en matière de drogues illégales : monitoring 1999-2000. Etude menée dans le cadre de l'évaluation globale du ProMeDro 4ème phase 1999-2003. Lausanne : IUMSP, 2002. CHF 15.-



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