

FRENCH REPRESENTATIONS ON TOBACCO CONSUMPTION AND CANCER RISK: AN EXPLORATORY STUDY

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CONTEXT

Tobacco use is the leading cause of cancer worldwide with around 33% of cancer cases per year linked to tobacco smoke exposure [1]. In 2017, 27% of the French population smoke tobacco on a daily basis [2], which is almost the double of the proportion of smokers in the world in 2015 (15%) [3].

Public representations of tobacco use, their impact on the risks associated with smoking cessation and the benefits associated with it, can influence behavior [4], as well as tobacco control measures, prevention policies and the industry's marketing strategies. Furthermore, cigarettes contain more than 7 000 chemicals, of which 70 are carcinogenic. Tobacco control is thus at the heart of health policies and prevention campaigns. In 2005, a national study [5] showed that 72% of French people were certain that tobacco use is a cancer risk factor. **What about 2015? Who are the people who do not perceive this risk?**

The French National Cancer Institute and Santé Publique France (the French national public health agency) has thus conducted a study (the "Baromètre Cancer" ®) on knowledge, opinions, attitudes, behaviors and social representations of the French population on the risk factors attributed to cancer, including tobacco use.

OBJECTIVES

- ▶ To investigate **French people representations on cancer risk and tobacco use in 2015**
- ▶ To study **the factors associated to these representations**

RESULTS

4139 participants

- ▶ 32% are smokers
- ▶ 74% believe tobacco use increase cancer risk

Who are the participants who believe tobacco use does not increase cancer risk or who are not sure tobacco use increase cancer risk? (n = 3474)

	%	OR [95% CI]
SEX		
Women (ref.)	26,3	1
Men	23,7	0,90 [0,75-1,06]
Age		
15 - 24 years old (ref.)	19,2	1
25 - 34 years old	21,2	1,29 [0,89-1,86]
35 - 44 years old	20,1	1,18 [0,82-1,71]
45 - 54 years old	23,3	1,32 [0,92-1,90]
55 - 64 years old	32,2	2,22 [1,56-3,19]***
65 - 74 years old	31,6	2,13 [1,37-3,31]***
75 - 85 years old	33,3	2,13 [1,28-3,55]**
Smoking status		
Regular smoker (ref.)	25,2	1
Occasional smoker	22,7	0,78 [0,53-1,12]
Ex-smoker	25,2	0,70 [0,56-0,88]**
Has never smoked	25,4	0,76 [0,60-0,95]*
Professional category		
Employees (ref.)	27,7	1
Farmers	30,3	0,87 [0,37-1,91]
Craftsmen, traders, business leaders and farmer-operators	23,6	0,96 [0,58-1,57]
Working class	26,9	0,98 [0,73-1,32]
Intermediate professions (e.g. school teachers)	24	0,89 [0,68-1,17]
Executives and higher intellectual professions	17,2	0,59 [0,43-0,80]***
Retirees	31,8	0,83 [0,60-1,14]
Other inactive	21,6	0,78 [0,56-1,08]
Do you feel well informed about the health effects of smoking?		
Very or rather poorly informed (ref.)	42,4	1
Very or somewhat well informed	24	0,41 [0,31-0,56]***
Do you personally fear that, one day, you will have cancer from tobacco?		
No (ref.)	27,7	1
Yes	21,2	0,63 [0,52-0,76]***
Do you believe smoking can only cause cancer if you smoke a lot and for a long time?		
Strongly or rather disagree (ref.)	22,3	1
Strongly or somewhat agree	30,9	1,31 [1,11-1,55]**

Legend: CI = Confidence interval; ref = reference level; OR = odds ratio; **Significance codes:** * = $p < .05$; ** = $p < .01$; *** = $p < .05$

NB: The level of diploma did not contribute significantly to the model. Thus, this variable has been removed and is not presented in the table.

The income and the level of agreement to the question « Do you believe breathing city air is as unhealthy as smoking cigarettes? » contribute significantly to the model but are not presented in the table for readability reasons. Odds ratio were not significant for these two variables.

METHODS

▶ The "Baromètre Cancer" ® is a national phone call survey with closed and multiple-choice questions. In 2015, participants were randomly called from a file of twenty-one million eligible telephone numbers in France.

▶ Example of questions asked [6] :

- Do you smoke tobacco?
- Do you think smoking increase the risk of cancer?
- Do you personally fear that, one day, you will have cancer from tobacco?
- Do you feel that you are very well, somewhat well, somewhat poorly or very poorly informed about the health effects of smoking?

▶ Inclusion criteria were:

- 15-85 years old,
- reside in France,
- speak fluent French and be equipped with at least one telephone number.

The representativeness of the sample, with regard to the French population, was ensured by taking into account different criteria (i.e. sex, age, place of residence, diploma and marital status).

▶ Analyses

Descriptive analyses and logistic regressions were realized to identify the sociodemographic characteristics associated to participants' representations.

Data from participants who answered « I don't know » were not included in the logistic regression models. A p-value lower than .05 has been considered as significant.

CONCLUSION

In 2015, people who believe tobacco use does not increase cancer risk or who are not sure tobacco use increase cancer risk are **regular smokers, elders, employees, people who do not fear to have a cancer linked to tobacco use and who are less informed about the health effects of smoking.**

▶ Possible action strategies to continue or to promote

- State and community interventions (e.g., for youngsters)
- Mass-reach health communication interventions
- Screening by family doctors and systematically advise smokers to stop smoking

In order to raise awareness on the health effects of tobacco use, prevent initiation of tobacco use and promote tobacco cessation.

▶ In the future: evaluate the effectiveness of ongoing strategies implemented in France

- Plain packaging
- Price increase
- Social marketing: « Me, one month, no tobacco »
- Increase in reimbursement of nicotine replacement therapy

CONFLICT OF INTEREST: None.

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