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# Tobacco smoking in HIV-infected persons.

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# Tobacco smoking in HIV-infected persons.

I. Medical & epidemiological background.

II. Cigarette smoking: a sociological approach.

III. Why do HIV-infected people smoke?

# I. Medical & epidemiological background.

- **Today, PLWHAs live longer…**
  Thanks to antiretroviral treatments (ART) since 1996;
- **but many of them smoke tobacco…**
  Smoking prevalence: 40-70% >> general population
  + higher levels of nicotine dependence;
- **…and smoking is especially harmful to PLWHAs**

→ **CVDs and (lung) cancers became major causes of mortality in this population.**

HIV-infected smokers lose more life-years to smoking than to HIV (Helleberg et al., 2013, Clin Infect Dis)

# I.1. Many PLWHAs smoke tobacco… (1/7)

- **PLWHAs smoke much more than the general population**


comparing smoking prevalence according to serostatus requires first (at least) gender & age standardisation.


'HIV-infected people' is a very heterogeneous category, merging very contrasted profiles, including for smoking prevalence.

→ Health Barometer survey, general population aged 18-85, 2010, N=25,034 (INPES);

→ VESPA2 survey, national & representative survey, PLWHAs living in France, 18-88, 2011, N=3,022 (ANRS).

# I.1. Many PLWHAs smoke tobacco… (2/7)

Health Barometer: **31%** of smokers, mean age 48, 49% of men.

VESPA2 survey: **38%** of smokers, mean age 47, 67% of men.

Among VESPA2 participants:

-people infected through homosexual intercourse (36%):

**42%** of smokers, mean age 48, 100% of men.

-people infected through intravenous drug use (10%):

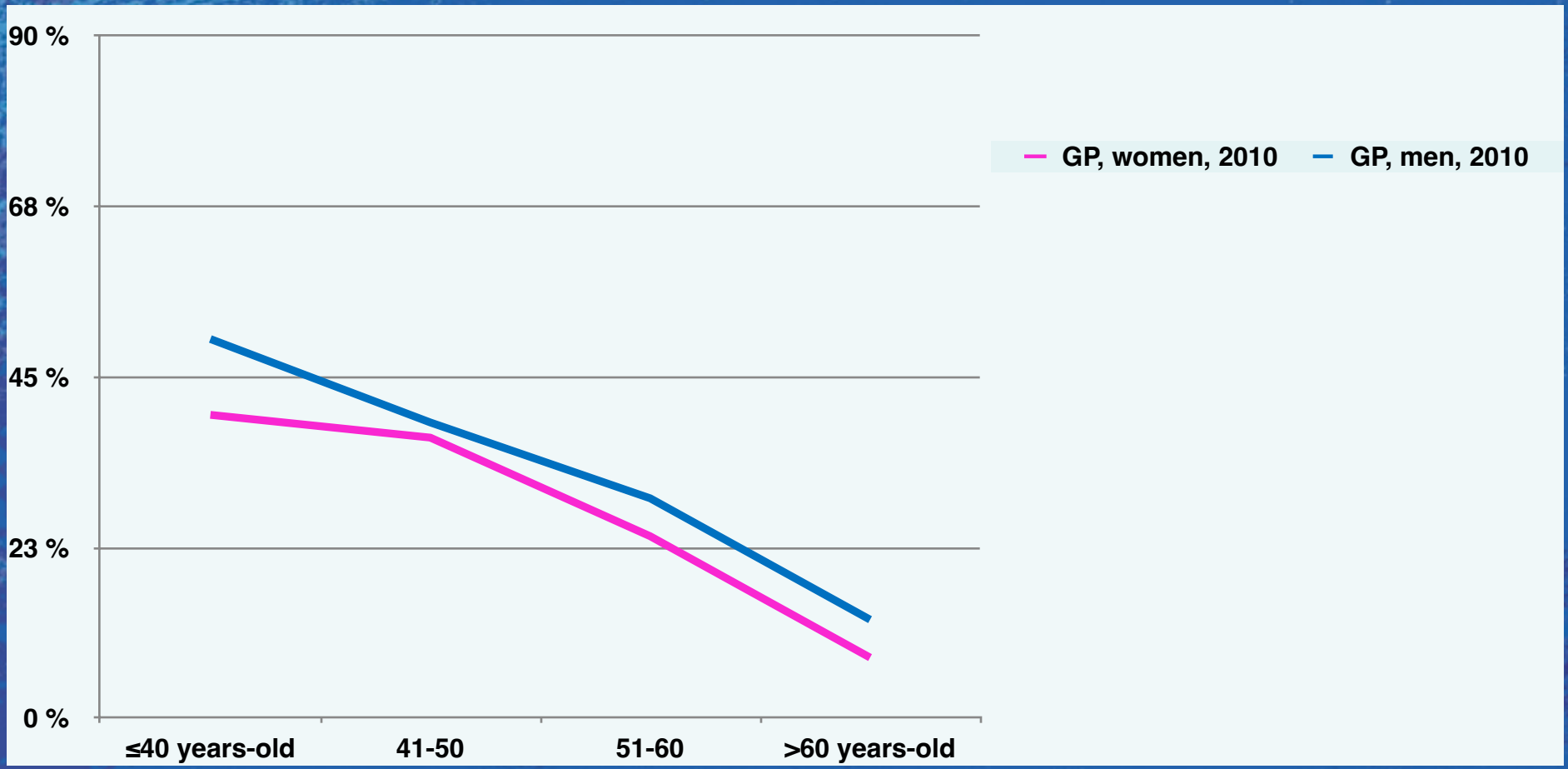
**78%** of smokers, mean age 49, 70% of men.

-people infected through heterosexual intercourse (47%):

**26%** of smokers, mean age 46, 41% of men.

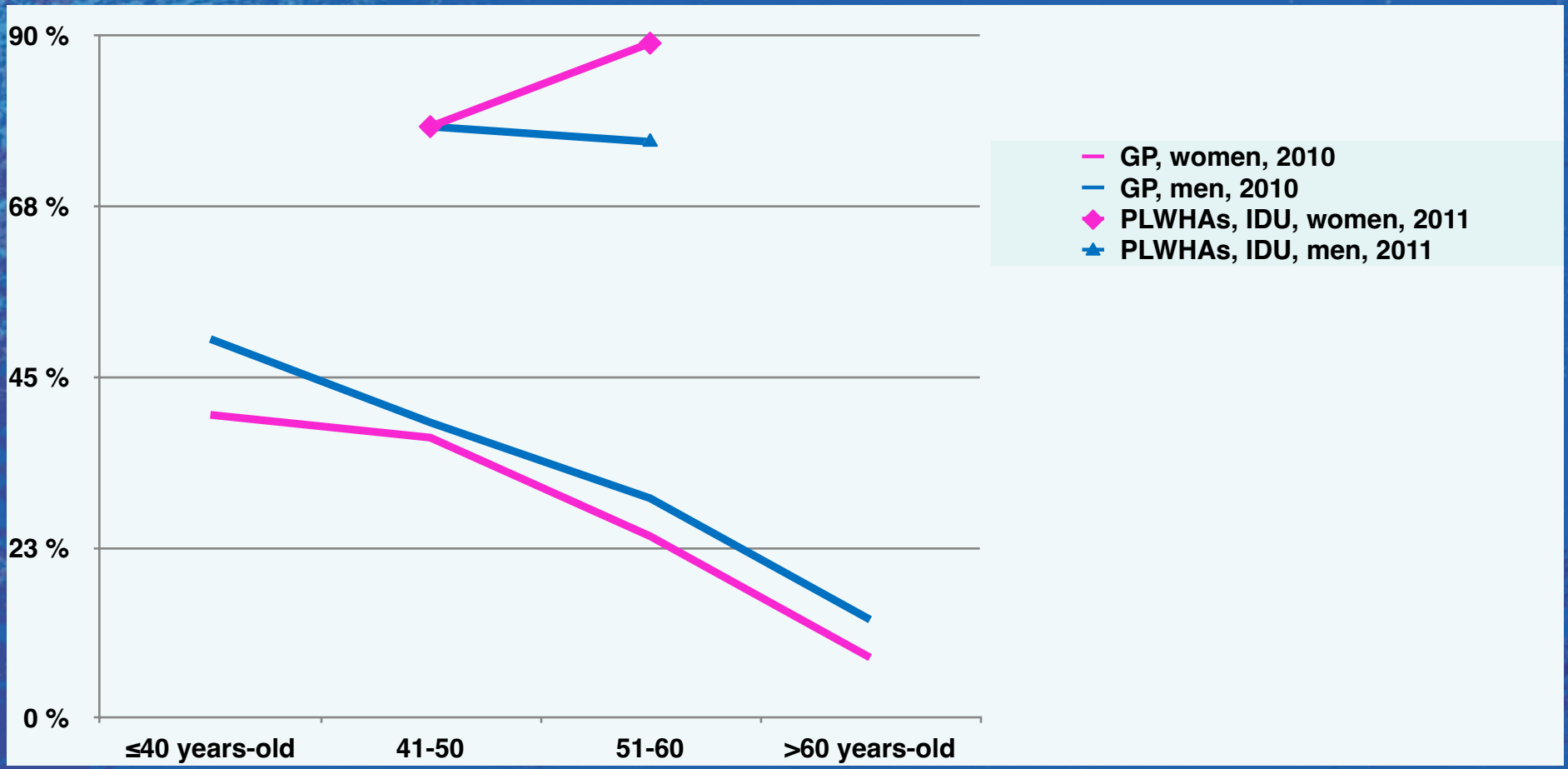
# I.1. Many PLWHAs smoke tobacco… (3/7)

## Smoking prevalence by gender and age for HIV-infected people and the general population, France, INPES 2010-ANRS 2011.



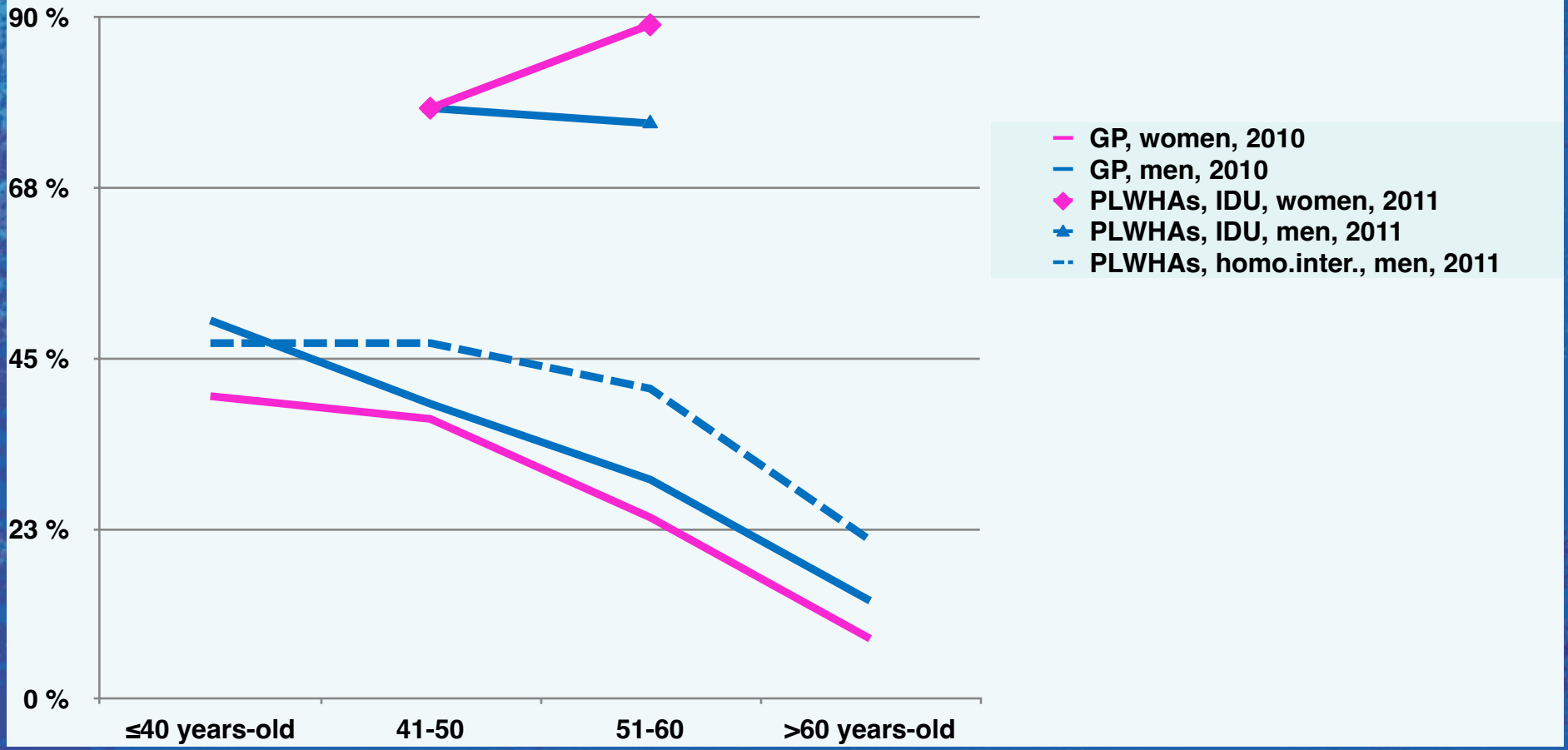
# I.1. Many PLWHAs smoke tobacco… (4/7)

## Smoking prevalence by gender and age for HIV-infected people and the general population, France, INPES 2010-ANRS 2011.



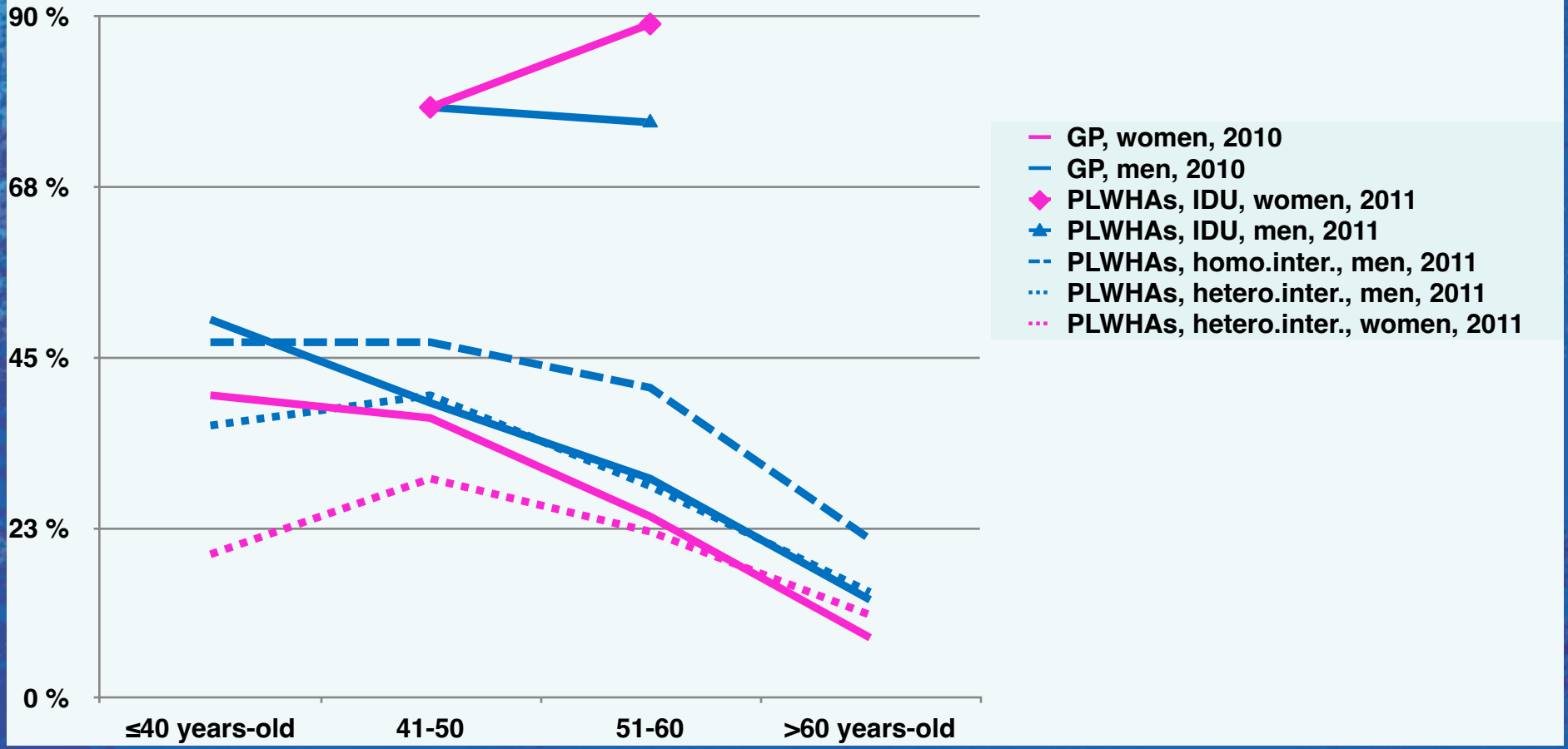
# I.1. Many PLWHAs smoke tobacco… (5/7)

## Smoking prevalence by gender and age for HIV-infected people and the general population, France, INPES 2010-ANRS 2011.



# I.1. Many PLWHAs smoke tobacco… (6/7)

## Smoking prevalence by gender and age for HIV-infected people and the general population, France, INPES 2010-ANRS 2011.



# I.1. Many PLWHAs smoke tobacco… (7/7)

**When compared to the general population, the smoking prevalence is higher among PLWHAs infected through homosexual intercourse, and much more higher among those infected through intravenous drug use.**

*See also:*

September 2014 | Volume 9 | Issue 9 | e107451

PLOS ONE

## Tobacco Smoking in HIV-Infected versus General Population in France: Heterogeneity across the Various Groups of People Living with HIV

Laure Tron[1,2]*, France Lert[3,4], Bruno Spire[5,6,7], Rosemary Dray-Spira[1,2] and the ANRS-Vespa2 study group[¶]

# I.2. Smoking is especially harmful to PLWHAS… (1/4)

- Among PLWHAs, smoking increases the risk of:

  CVDs, non-AIDS cancer, but also pneumocystis pneumonia, bacterial pneumonia, chronic obstructive pulmonary disease, oral candidiasis, emphysema, hairy leukoplakia... +ART side-effects / CVDs & cancer.

- ART & AIDS: smoking → immune system impairment, increase in HIV replication, decreasing response to ART → virologic failure and disease progression.

- Behavioural & attitudinal outcomes: HIV-infected smokers report lower medical adherence, attend fewer medical visits, and rank “health” as less important to their quality of life...

# I.2. Smoking is especially harmful to PLWHAS… (2/4)

- Behavioural & attitudinal outcomes: a focus on adherence to treatment & drug use.

Measuring independent effects for each drug use on adherence led to mixed and contradictory results.

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Drug and Alcohol Dependence 82 Suppl. 1 (2006) S71–S79
DRUG and ALCOHOL DEPENDENCE
www.elsevier.com/locate/drugalcdep

Drug use patterns and adherence to treatment among HIV-positive patients: evidence from a large sample of French outpatients (ANRS-EN12-VESPA 2003)

Patrick Peretti-Watel[a,b,*], Bruno Spire[b], France Lert[c], Yolande Obadia[a,b], and the VESPA Group[1]

# I.2. Smoking is especially harmful to PLWHAS… (3/4)

→ VESPA survey 2003 (n=2484): investigating the relationships between drug use (cigarette, alcohol, cannabis, cocaine, heroin, drug maintenance treatment…) & adherence to HAART.

Two strategies:

#1: assessing independent effects for each drug use separately;

#2: first identifying patterns of drug uses with a cluster analysis, and assessing independent effects for each pattern separately.

#1→ cigarette smoking predictive of low adherence, no significant effect for cocaine or heroin use.

#2 → among other patterns, we found a “multiple addictions” profile (heroin+cocaine+DMT+tobacco) strongly associated to low adherence.

# I.2. Smoking is especially harmful to PLWHAS… (4/4)

**Cigarette smoking should not be considered as an independent risk factor, it is usually embedded in a lifestyle and connected with other behaviours/habits.**

→ First step toward a sociological approach of cigarette smoking.

## II. Cigarette smoking: a sociological approach.

### II.1. Three basic principles of sociology.

### II.2. Cigarette smoking as a social practice.

### II.3. Smokers' motives and justifications.

### II.4. The social differentiation of smoking.

# II.1. Three basic principles of sociology.

- **Situated/limited rationality:** people pursue objectives, under specific circumstances, constraints, that must be understood.
- **Reflexivity:** people are able/prone to stand back from their own experience to engage in reflexive thinking, in order to describe/explain/justify what they do → in-depth interviews…
- **Social groups:** people are not isolated atoms in a vacuum. Their behaviours, attitudes and beliefs are constructed collectively, are influenced by their social environment → peers/colleagues/relatives with similar living conditions and values.

# II.2. Cigarette smoking as a social practice. (1/3)

- Not (only) a chronic, addictive and contagious disease: "tobacco pandemic", "behavioural epidemic" through peer pressure/imitation & nicotine addiction →medicalization of smoking.

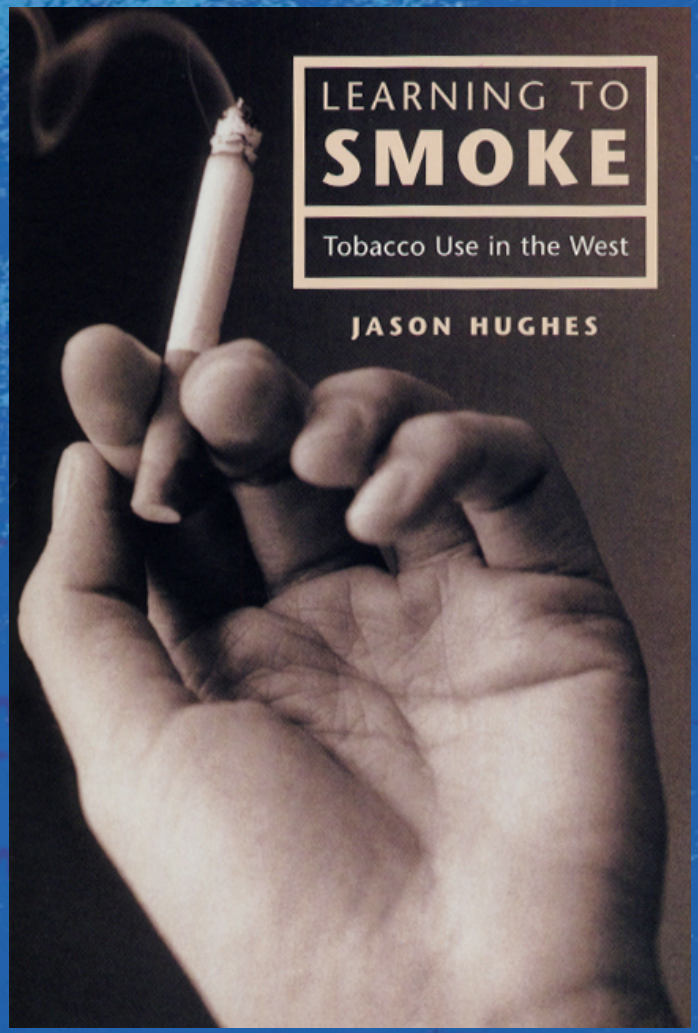
  Considering cigarette smoking as a social practice implies a radical departure from this perspective.
- We have to consider various aspects of cigarette smoking: implicit rules, know-how, meanings and motives...
- These aspects are not personal attributes: they are shared with and learned from other smokers, and they change across time and space...

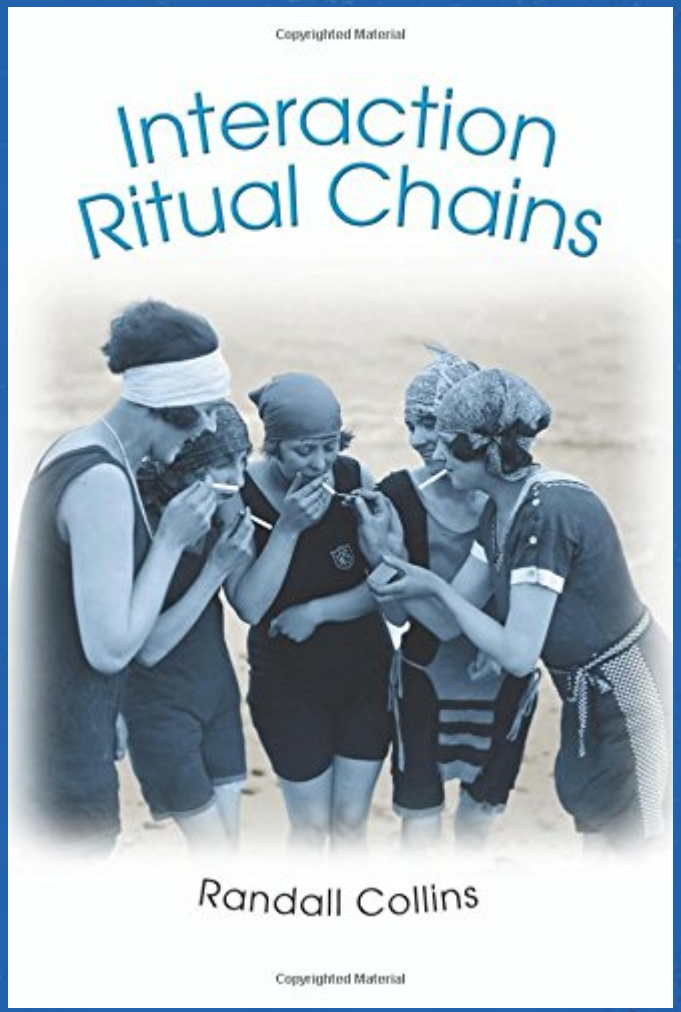
# II.2. Cigarette smoking as a social practice. (2/3)

➢ Social practice → learning process.

- how to hold the cigarette correctly,
- how to inhale/exhale properly,
- how to use tobacco as a psychological tool (as a sedative to alleviate stress, as a stimulant to counter boredom),
- implicit rules: in which circumstances, in which places, with which people, it is acceptable or not to smoke, or to ask for a cigarette...

# II.2. Cigarette smoking as a social practice. (3/3)



# II.3. Smokers' motives and justifications. (1/4)

## ❖ Smokers' motives and justifications.

- ➢ Multiple benefits from smoking: feeling of membership, social bonding, relaxation, pleasure, dealing with periods of boredom/stress/sadness, regulating one's weight...
- ➢ These motives depend on personal smoking history, gender, age, socioeconomic status...

Health Policy 106 (2012) 169–176

Contents lists available at SciVerse ScienceDirect

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journal homepage: www.elsevier.com/locate/healthpol


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# II.3. Smokers' motives and justifications. (2/4)

**Most common motives:**

Reported reasons for smoking, from 1 (never) to 10 (always).

Smoking behavior, reasons for smoking and personal time perspective, column percentages (France, 2008, $N = 621$).

| | |
|---|---|
| Smoking reasons (9–10 ratings: almost always) | |
| Habitual smoking ($N = 140$) | 23% |
| Aid to socialization ($N = 94$) | 15% |
| For enjoyment ($N = 153$) | 25% |
| To relief stress ($N = 150$) | 24% |
| To improve in concentration ($N = 31$) | 5% |
| To take one's mind off cares and worries ($N = 63$) | 10% |
| To keep weight control ($N = 46$) | 7% |

# II.3. Smokers' motives and justifications. (3/4)

## Examples of justifications:

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Preventive Medicine 39 (2004) 776–782

Preventive Medicine

www.elsevier.com/locate/ypmed

"Bulletproof skeptics in life's jungle": which self-exempting beliefs about smoking most predict lack of progression towards quitting?

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- You can overcome the harms of smoking by doing things like eating healthy food and exercising regularly
- I think I must have the sort of good health or genes that means I can smoke without getting any of the harms
- I think I would have to smoke a lot more than I do to put my health at risk

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- Lots of doctors and nurses smoke, so it cannot be all that harmful
- The medical evidence that smoking is harmful is exaggerated
- Smoking cannot be all that bad for you because many people who smoke live long lives

# II.3. Smokers' motives and justifications. (3/4)

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- Smoking cannot be all that bad for you because many people who smoke live long lives

- It is dangerous to walk across the street
- Smoking is no more risky than lots of other things that people do
- Everything causes cancer these days

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It is dangerous to walk across the street

Smoking is no more risky than lots of other things that people do

Everything causes cancer these days

**"Worth it" beliefs**

I would rather live a shorter life and enjoy it than a longer one where I will be deprived of the pleasure of smoking

# II.3. Smokers' motives and justifications. (4/4)

❖ **Main risk denial beliefs among French smokers:**

(Cancer Barometer survey, 2010, N=1,106 smokers, INPES)

| *Personal control:* | agree: |
|---|---|
| smoking causes cancer only if one smokes a lot and for a long time | 35% |
| a smoker can avoid cancer if she/he quits in time | 62% |
| doing sport cleans the lungs | 73% |
| | |
| *Relativizing risk:* | |
| smoking is no more dangerous than breathing polluted air | 66% |
| some people smoke their whole life and never get cancer | 83% |
| a former smoker can have a tobacco-related cancer even a long time after quitting | 73% |

- Human beings are argumentative rather than strictly rational. They are prone to 'convincing' self-delusion.
- Most smokers are neither ignorant of risk nor seeking it purposely. But they find 'good reasons' to deny/minimize it. Of course, they can be wrong. But taking this risk denial into consideration is necessary to improve prevention.

# II.4. The social differentiation of smoking. (1/5)

- Cigarette smoking, considered as a social practice, involves a whole set of beliefs, attitudes & behaviours, acquired through a learning process embedded in social context.

One important corollary:

→ social differentiation of smoking-related beliefs, attitudes and behaviours, & social differentiation of sensitivity to prevention.

Example: trends in smoking prevalence in France during the 2000s ( ↗ anti-tobacco policies & ↗ social differentiation of smoking prevalence).

# II.4. The social differentiation of smoking. (2/5)

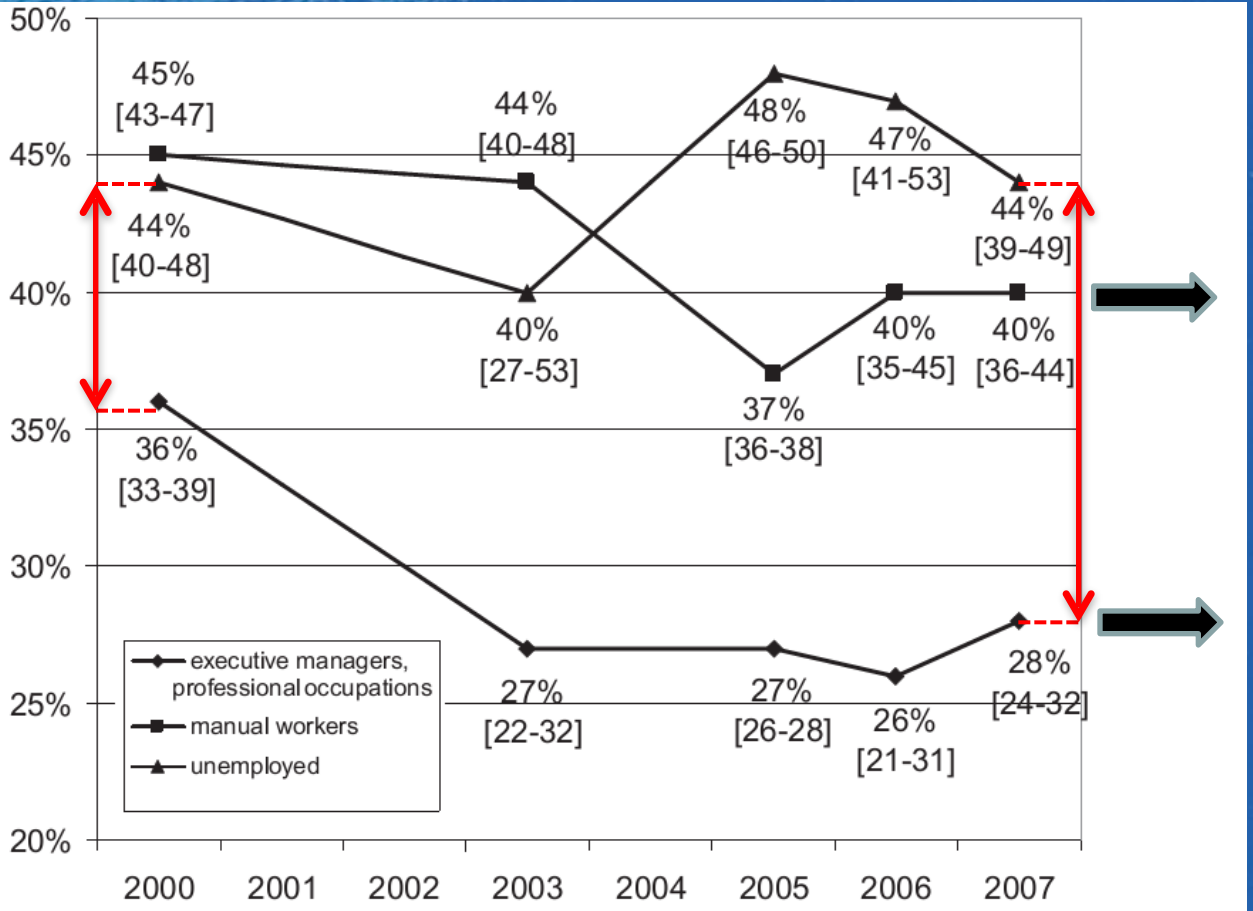


**Figure 1** Smoking prevalence for executive and professional occupations, manual workers and the unemployed, 2000–07, France [National Institute for Health Prevention and Education (INPES) surveys].

(40-45)/45= -11%

(28-36)/36= -22%

# II.4. The social differentiation of smoking. (3/5)

## Why are low-SES people more prone to smoke/less likely to quit?

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Low-SES smokers are more prone to use cigarette as a coping mechanism (to relieve stress, to take their mind off their cares and worries)

➔ they regard cigarettes as a basic essential /one of their last few pleasure

➔ Facing increasing cigarettes prices, they try to reduce the cost of their smoking habit, not to quit or to reduce their consumption.

# II.4. The social differentiation of smoking. (3/5)

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➔ they regard cigarettes as a basic essential /one of their last few pleasure

➔ Facing increasing cigarettes prices, they try to reduce the cost of their smoking habit, not to quit or to reduce their consumption.

… because they "need" cigarettes more than other smokers (specific motives), as economic hardship induces stress/distress.

# II.4. The social differentiation of smoking. (4/5)

## Why are low-SES people more prone to smoke/less likely to quit?

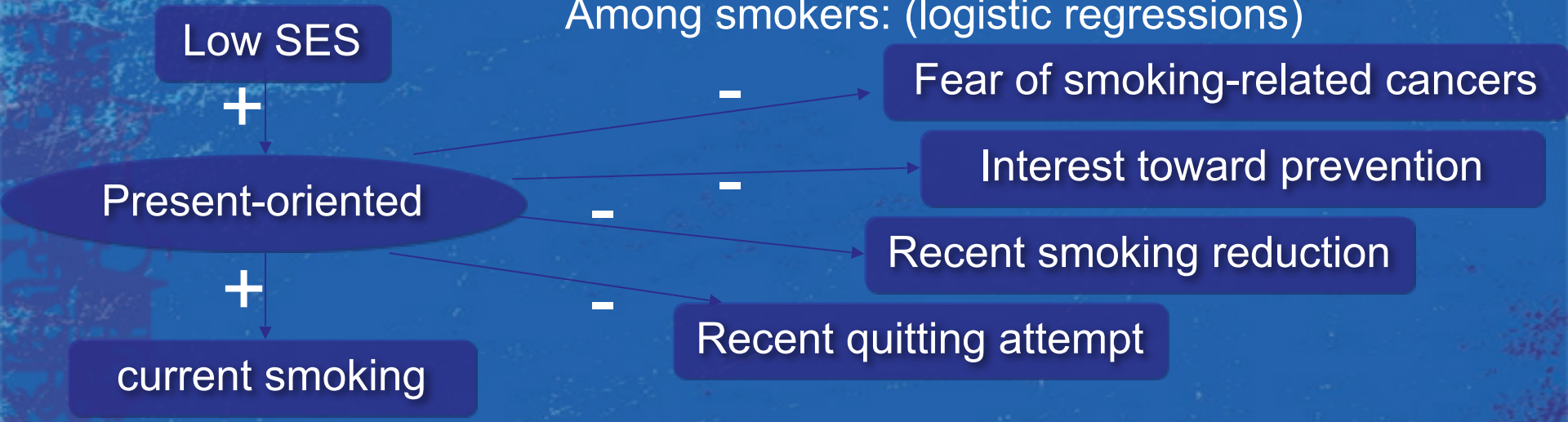
Prevention as an intertemporal choice → time preferences.

The European Journal of Public Health Advance Access published January 23, 2013
*European Journal of Public Health*, 1–6

**Time preferences, socioeconomic status and smokers' behaviour, attitudes and risk awareness**

Patrick Peretti-Watel[1,2,3], Olivier L'Haridon[4,5], Valerie Seror[1,2]

Among smokers: (logistic regressions)



# II.4. The social differentiation of smoking. (4/5)

**Why are low-SES people more prone to smoke/less likely to quit?**

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Patrick Peretti-Watel[1,2,3], Olivier L'Haridon[4,5], Valerie Seror[1,2]

Among smokers: (logistic regressions)

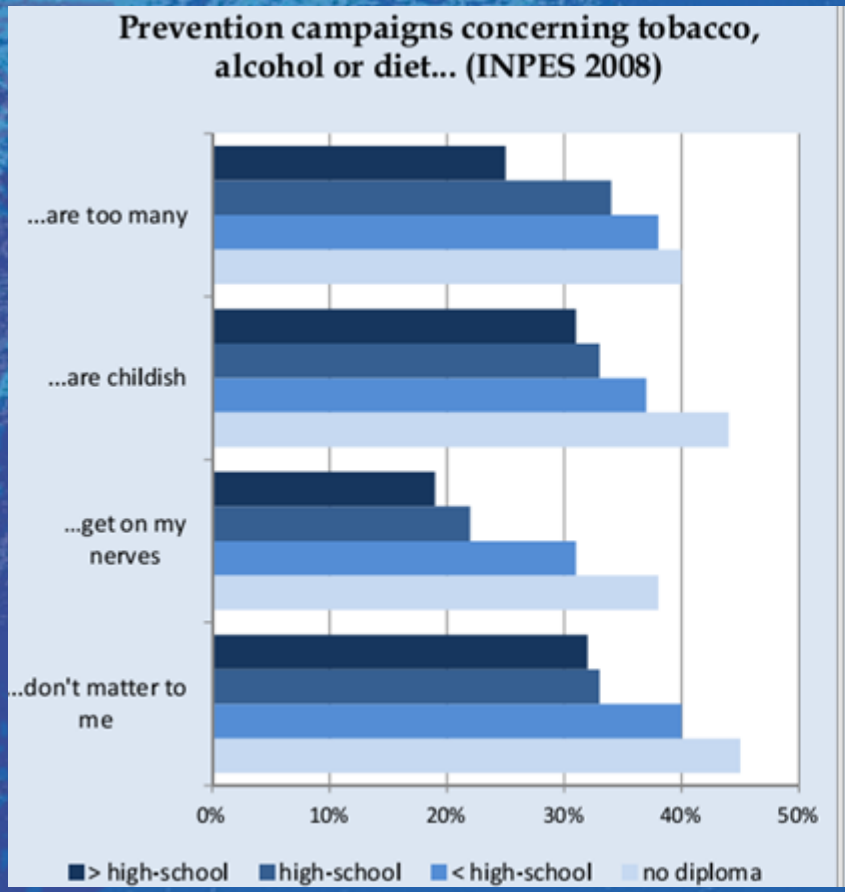
Low SES
+
Present-oriented
+
current smoking

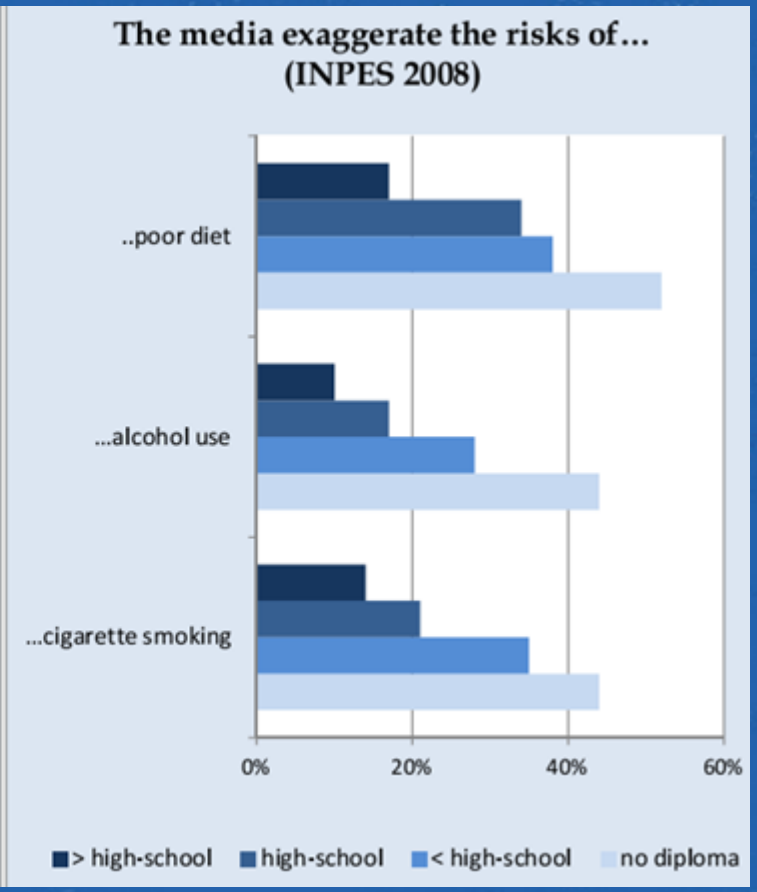
- Fear of smoking-related cancers
- Interest toward prevention
- Recent smoking reduction
- Recent quitting attempt

**…because they are more present-oriented: hardship shortens time horizon.**

# II.4. The social differentiation of smoking. (5/5)

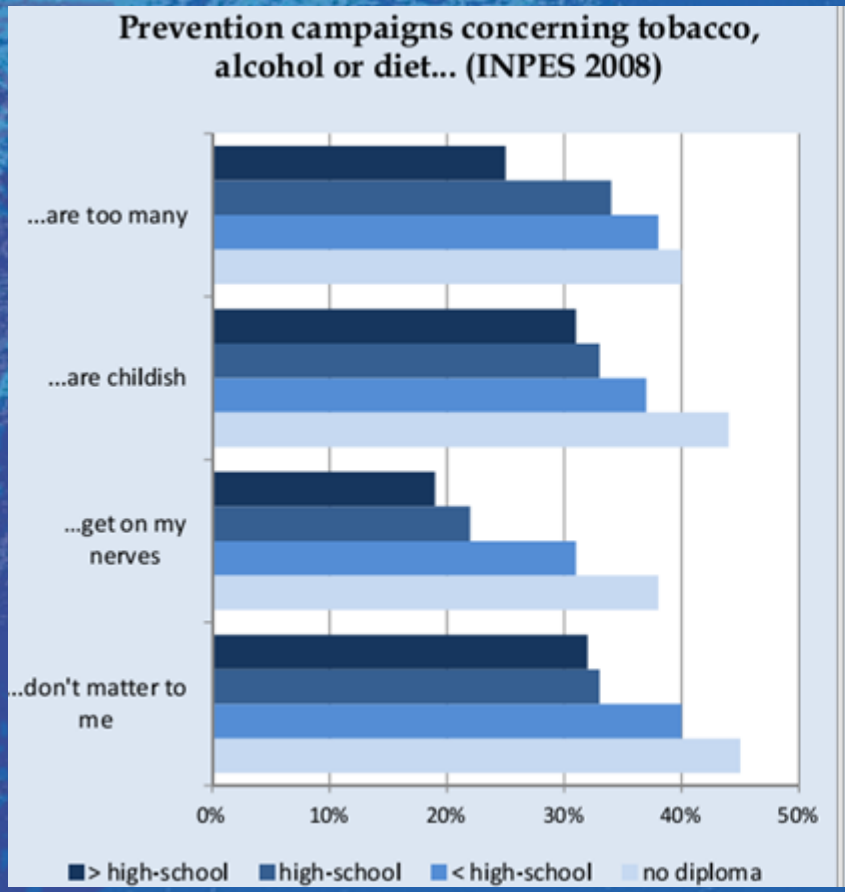
## Why are low-SES people more prone to smoke/less likely to quit?

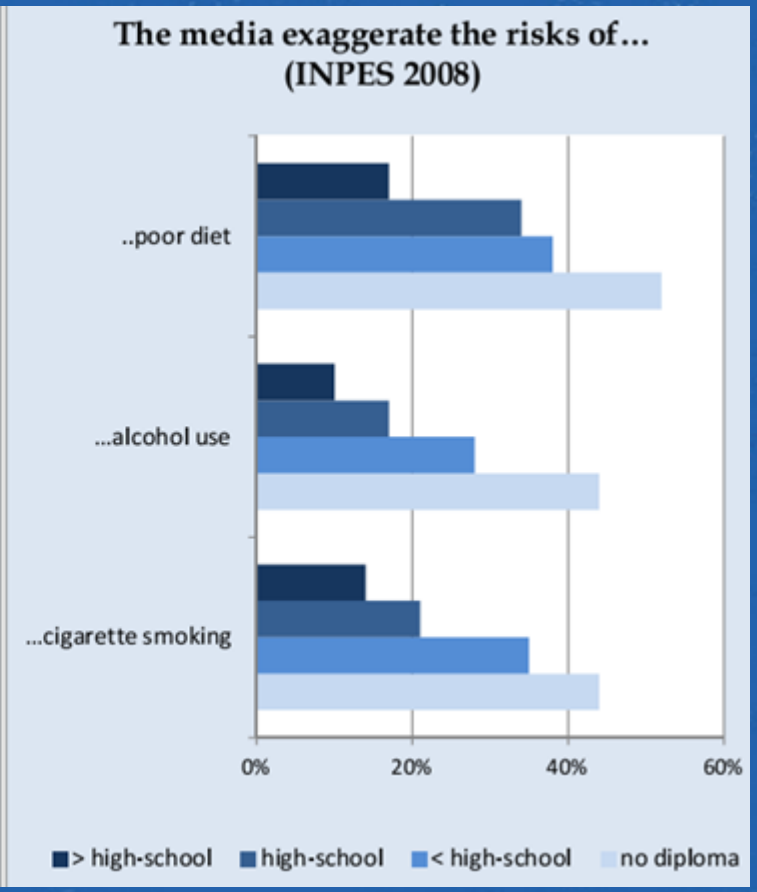


# II.4. The social differentiation of smoking. (5/5)

## Why are low-SES people more prone to smoke/less likely to quit?




…because they are less likely to trust health authorities,
and more likely to endorse risk denial beliefs.

# III. Why do HIV-infected people smoke?

## III.1. Because of a low SES…

## III.2. Motives, justifications & time horizon.

## III.3. Motives to smoke and willing to quit.

# III.1. …because of a low SES (1/3)

**Some indicators of SES among the general population (INPES, 2010) and PLWHAs (VESPA2, 2011)**

| | General population | HIV-infected people *(transmission group)* | | |
|---|---|---|---|---|
| | | total | *(homosexual)* | *(IDU)* | *(hetero.,other)* |
| Financial situation of the household: | | | | | |
| - in debt / difficult | 14% | 33% | *18%* | *46%* | *40%* |
| - tight | 70% | 54% | *63%* | *47%* | *50%* |
| - fine | 16% | 13% | *19%* | *7%* | *10%* |
| Educational level: | | | | | |
| - < High-school | 61% | 54% | *39%* | *76%* | *59%* |
| - High-school | 17% | 16% | *18%* | *9%* | *16%* |
| - > High-school | 22% | 30% | *43%* | *15%* | *25%* |
| Occupational status (age 25-55): | | | | | |
| - employed | 81% | 61% | *75%* | *34%* | *58%* |
| - unemployed, other | 19% | 39% | *25%* | *66%* | *42%* |

The average SES is lower among PLWHAs,
with a great heterogeneity according to transmission group
→ Homosexuals >> hetero.,other >> IDUs

# III.1. …because of a low SES (2/3)

*Current HIV Research*, 2009, 7, 462-467

## How Do HIV-Infected Smokers React to Cigarette Price Increases? Evidence from the Aproco-Copilote-ANRS CO8 Cohort

Patrick Peretti-Watel[*,1,2,3], Virginie Villes[1,2,3], Xavier Duval[4], Fidéline Collin[5], Jacques Reynes[6], Alain Sobel[7], Camelia Protopopescu[1,2,3], Geneviève Chêne[5], Bruno Spire[1,2,3], François Raffi[8] and the ANRS CO8 APROCO-COPILOTE study group

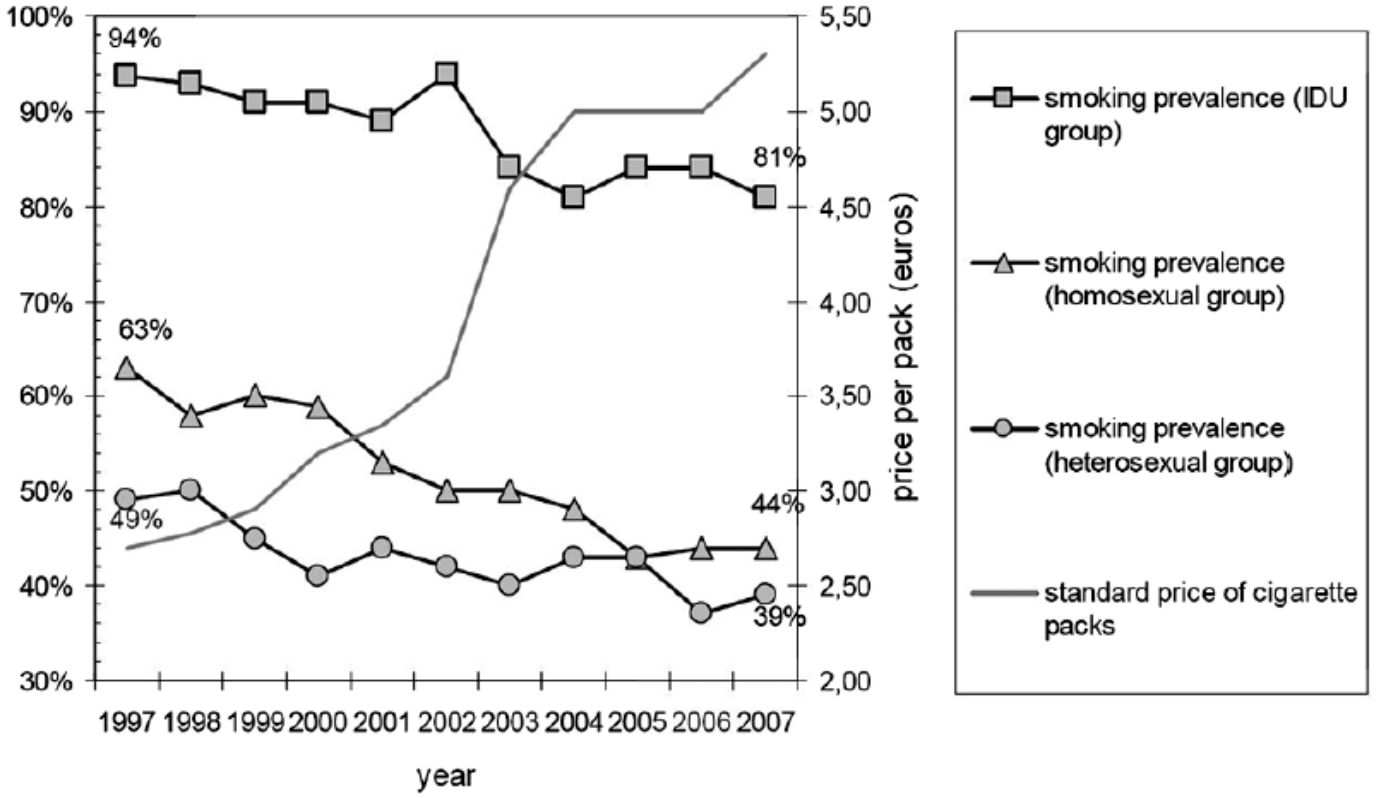



**Fig. (1).** Trends in cigarette price and smoking prevalence among HIV-infected people, according to transmission group, France, 1997-2007 (APROCO cohort).

# III.1. …because of a low SES (3/3)

**Table 2. Factors Associated with Smoking Among HIV-Infected Patients, France, 1997-2007, GEE Logit Model (APROCO-COPILOTE Cohort)**

| | Baseline Smoking Prevalence (M0) | Factors Associated with Current Smoking |
|---|---|---|
| | Row Percent | aOR [CI95%] |
| Transmission group & gender: | | |
| - IDU, men (n=143) | 94% | -1- |
| -IDU, women (n=55) | 93% | 1.16 [0.43; 3.10] |
| - homosexual (n=465) | 60% | 0.08 [0.01; 0.83] |
| - heterosexual, men (n=280) | 49% | 0.06 [0.01; 0.61] |
| - heterosexual, women (n=203) | 46% *** | 0.03 [0.01; 0.35] |
| Educational level: | | |
| - ≤ secondary school (n=918) | 62% | -1- |
| - > secondary school (n=228) | 55% * | 0.71 [0.53; 0.95] |
| Unemployed/income support at M0, M28 or M52: | | |
| - no (n=724) | 57% | -1- |
| - yes (n=422) | 68% *** | 1.47 [1.13; 1.90] |
| Age: | | |
| IDU x age | — | 1.04 [0.96; 1.12] |
| homosexual x age | | 0.95 [0.94; 0.97] |
| heterosexual x age | | 0.96 [0.94; 0.98] |
| Cigarette price: | | |
| IDU x price | — | 1.20[0.90; 1.64] |
| homosexual x price | | 0.91 [0.85; 0.97] |
| heterosexual x price | | 1.03 [0.96; 1.10] |

aOR: adjusted odds ratio.
[CI95%]: 95% confidence interval.
ref.: reference category in logistic regression.
***, *, ns: statistically significant at p<0.001, p<0.05, non significant.
With regard to age and cigarette price, the adjusted odds ratios measured the net effect of one additional year (for age) and one additional € (for cigarette price).

# III.2. Motives, justifications & time horizon. (1/7)

❖ **Common and specific motives & justifications**

Qualitative insight:

***Listening to Those Who are Living With HIV and Tobacco Dependence and Exploring Their Health Care Context***

Annette S. H. Schultz, PhD, RN
Beverley Temple, PhD, RN
Caitlan Gibbons
Jocelyn Preston, RN
Gillian Ronson, MOT

Vol. 25, No. 1, January/February 2014, 46-59

JOURNAL OF THE ASSOCIATION OF NURSES IN AIDS CARE
JANAC

+quantitative data...

***Illness Representation and Smoking Behavior: A Focus Group Study of HIV-Positive Men***

Nancy R. Reynolds, PhD, RN, CNP
Judith L. Neidig, PhD, RN
Mary Ellen Wewers, PhD, MPH

Vol. 15, No. 4, July/August 2004, 37-47

→ Motives to smoke, disadvantages of smoking, obstacles to quitting...

# III.2. Motives, justifications & time horizon. (2/7)

➢ **Benefits of smoking**

✓a means of easing social bonding;

✓A psychological incentive……..

✓a pleasurable activity providing

> You're nauseated, you feel really tired, but you want your cigarette. . . . It gets you out the door and through the garage and gets you home.
>
> I saw it as a reward when I finished something difficult . . . always something to look forward to.

✓ comfort, relief, distraction from unpleasant sensation…….

> It's like Linus's blanket . . . you're there, you're content, you're calmed.

✓…including relief from illness- or treatment-related symptoms:

*(some people think that smoking raises T-cell counts and help fighting infection)*

> When you feel this lousy or you have diarrhea or shingles, [cigarettes] could be the best friend you ever had; food is not going to do it; music's not going to do it.

…or coping with the diagnosis:

> I started smoking again about a month after I found I had HIV…sort of a stress reliever

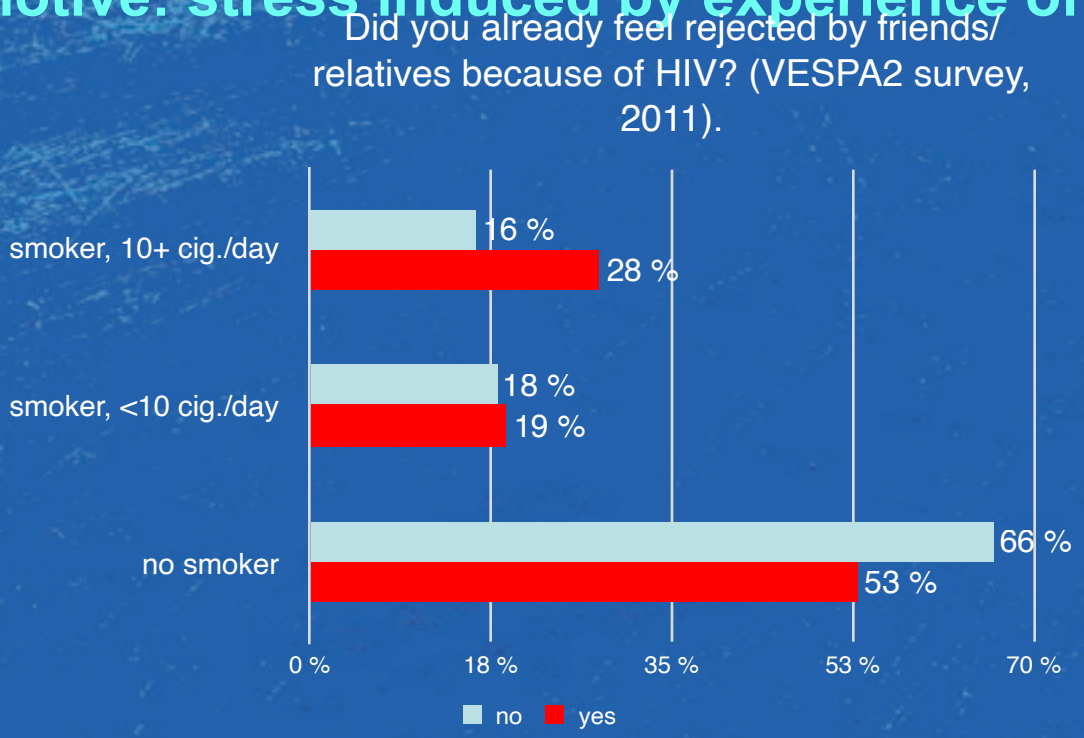
✓mixing smoking with illicit drug use and drinking alcohol;

*(// quantitative studies)*

→ *common and specific motives.*

# III.2. Motives, justifications & time horizon. (3/7)

## A specific motive: stress induced by experience of stigma.




// 'race-related' stigma and smoking among African Americans, King G, *Soc Sci Med* 1997.

# III.2. Motives, justifications & time horizon. (4/7)

## A specific motive: stress induced by experience of stigma

Antiviral Therapy 13:389–397

### Living with HIV, antiretroviral treatment experience and tobacco smoking: results from a multisite cross-sectional study

*Xavier Duval[1]*, Gabriel Baron[2,3], Daniel Garelik[4], Virginie Villes[5], Thierry Dupré[6], Catherine Leport[7,8], France Lert[9], Patrick Peretti-Watel[5], Philippe Ravaud[2,3] and Bruno Spire[5] on behalf of the EVIT Study Group*

**Table 2.** Bivariate and multivariate analyses of factors associated with smoking, former smoking and non-smoking status in the 593 HIV-infected patients who participated in the study

| | Bivariate analysis | | | | Multipartite analysis | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Active smokers versus non-smokers | | | Former smokers versus non-smokers | | |
| Variables | Active smokers *n*=254 | Former smokers *n*=103 | Non-smokers *n*=236 | *P*-value | OR | 95% CI | *P*-value | OR | 95% CI | *P*-value |
| Mean age, years (±SD) | 43.1 (±7.6) | 47.1 (±10.0) | 46.1 (±11.3) | 0.0002 | 0.98 | 0.96–1.01 | 0.1124 | 1.02 | 0.99–1.05 | 0.1017 |
| Sex (male), % | 79 | 72 | 60 | <0.0001 | 2.38 | 1.43–4.00 | 0.0008 | 1.56 | 0.89–2.70 | 0.1187 |
| Disclosure of HIV status (yes versus no) | | | | | | | | | | |
| Disclosure to family, % | 77 | 63 | 56 | <0.0001 | 1.81 | 1.16–2.85 | 0.0097 | 1.08 | 0.66–1.77 | 0.7622 |
| Disclosure to friends, % | 80 | 70 | 55 | <0.0001 | – | – | – | – | – | – |
| Experience of rejection due to disclosure, % | 38 | 20 | 20 | <0.0001 | 1.90 | 1.14–3.17 | 0.0134 | 1.08 | 0.59–2.00 | 0.8051 |

# III.2. Motives, justifications & time horizon. (5/7)

## ➢ Disadvantages of smoking and risk denial/relativization

✓an expensive habit;

✓ a source of disgust: People tend to look at you like it's a dirty habit

✓discounting health risk:

- risk denial beliefs: I think after you smoke long enough, your lung capacity decreases, so I do aerobics.
- relativization & time horizon: If I live long enough to get cancer that's great!

## ➢Obstacles to smoking cessation

✓reluctance to giving up a key coping mechanism;

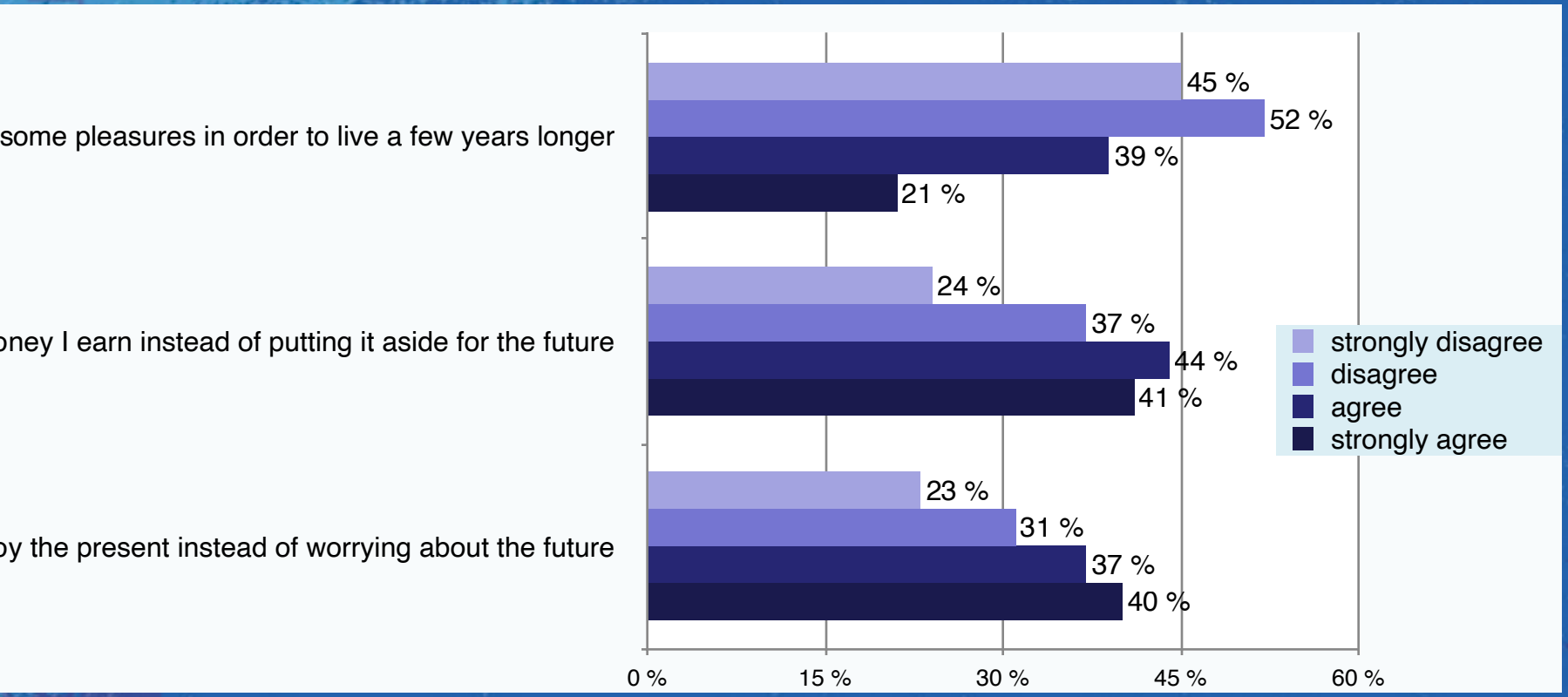
✓concerns about the potential for weight gain;

✓ relationships with care providers:

I don't like people controlling, telling me to quit—lectures make you want to smoke!

# III.2. Motives, justifications & time horizon. (6/7)

-Time horizon→present-orientation and smoking in VESPA2:




In multivariate analysis present-orientation remained a significant risk factor for current smoking (after adjustment on sociodemographic profile, transmission group…).

# III.2. Motives, justifications & time horizon. (7/7)

## HIV-infected smokers' motives and justifications:

-as other smokers, they frequently portray themselves as rational beings assessing the costs and benefits of smoking;

-regarding other smokers, they also share the same motives (facilitating social interaction, stress relief) and justifications (compensatory measures: exercise…),

-but some motives and risk denial beliefs are more specific to HIV (stress due to HIV, lack of confidence toward physicians, dealing with symptoms or side-effects of treatment, relativization because of HIV, shortened time-horizon due to HIV);

→ their priority is HIV now and they think that smoking helps them to cope with stress and to stay mentally positive now.

# III.3. Motives to smoke and willing to quit (1/2)

Antiviral Therapy 2009 14:781–787 (doi: 10.3851/IMP1292)

## Smoking motivations and quitting motivations among HIV-infected smokers

*Patrick Peretti-Watel[1,2]*, Daniel Garelik[3], Gabriel Baron[4,5], Bruno Spire[1,2], Philippe Ravaud[4,5], Xavier Duval[6,7] and the EVIT Study Group†*

| Smoking motives (0–10 scale) | |
|---|---|
| Automatic smoking, | 5.1 (5.2) |
| Aid to socialization, | 3.5 (4.7) |
| Enjoyment, | 5.3 (6.4) |
| Stress relief, | 5.3 (5.3) |
| Improvement in concentration, | 2.8 (2.5) |
| To take one's mind off cares and worries, | 3.7 (3.4) |
| Weight control, | 0.8 (1.6) |

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Smoking motivations typology

- Cluster 1: intellectual/emotional support (22%)
- Cluster 2: automatic/stress relief
- Cluster 3: weight control
- Cluster 4: pleasure/conviviality

| Smoking motives (0–10 scale) | |
|---|---|
| Automatic smoking, | 5.1 (5.2) |
| Aid to socialization, | 3.5 (4.7) |
| Enjoyment, | 5.3 (6.4) |
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*Patrick Peretti-Watel[1,2]*, Daniel Garelik[3], Gabriel Baron[4,5], Bruno Spire[1,2], Philippe Ravaud[4,5], Xavier Duval[6,7] and the EVIT Study Group†*

| Smoking motivations typology | |
|---|---|
| Cluster 1: intellectual/emotional support | |
| Cluster 2: automatic/stress relief | |
| Cluster 3: weight control | |
| Cluster 4: pleasure/conviviality | (29%) |

| Smoking motives (0–10 scale) | |
|---|---|
| Automatic smoking, | 5.1 (5.2) |
| Aid to socialization, | 3.5 (4.7) |
| Enjoyment, | 5.3 (6.4) |
| Stress relief, | 5.3 (5.3) |
| Improvement in concentration, | 2.8 (2.5) |
| To take one's mind off cares and worries, | 3.7 (3.4) |
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Smoking motivations typology

- Cluster 1: intellectual/emotional support
- Cluster 2: automatic/stress relief
- Cluster 3: weight control
- Cluster 4: pleasure/conviviality (27%)

Smoking motives (0–10 scale)

| | |
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| Automatic smoking, | 5.1 (5.2) |
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| Improvement in concentration, | 2.8 (2.5) |
| To take one's mind off cares and worries, | 3.7 (3.4) |
| Weight control, | 0.8 (1.6) |

# III.3. Motives to smoke and willing to quit (2/2)

## Motives to smoke and willing to quit:

- **Intellectual/emotional support** (22%).

**-Automatic/stress relief** (22%): women, ≥20 cig./day; strong nicotine dependence, anxiety, recent opiate use, past experience of discrimination due to HIV…

**-Weight control** (29%): age>50, depressive symptoms, fat accumulation due to treatment side-effects…

**Pleasure/conviviality** (27%): men, age<40, mild dependence.

Table 2. Factors associated with motivation to stop smoking among 254 French HIV-infected smokers

| Factor | Motivation to quit smoking (moderate or strong versus insufficient) | |
|---|---|---|
| | Bivariate analysis, % | Multivariate logistic regression, OR (95% CI) |
| Smoking motivations typology | | |
| Cluster 1: intellectual/emotional support | 35 | 1 |
| Cluster 2: automatic/stress relief | 18 | 0.39 (0.16–0.96)[c] |
| Cluster 3: weight control | 59 | 2.87 (1.33–6.19)[c] |
| Cluster 4: pleasure/conviviality | 24[a] | 0.53 (0.23–1.22)[a] |

# Conclusion.

- Smoking is a social practice that involves a whole set of beliefs, attitudes and behaviours, embedded in social context.
- Social differentiation of smoking and prevention efficacy, including among HIV-infected smokers.
- HIV-infected smokers have both common and specific motives & justifications.
- To make them quit, it is necessary to convince them that it's worth it.

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