



CoPanFlu International Project Round Table 5

Module 5 : Risk perception and
risk-related behaviour



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The inter-national/disciplinary challenge

- Pandemic swine-flu in CoPanFlu project as a trans-national object of researches in real time
- CoPanFlu as an interdisciplinary opportunity
- Observations and analyses on a followed sample of the population
- Disciplinary approaches aiming to be inter-connected

The role of risk perception and its impact on health behaviour

- Whatever the quality and preparedness of the planned measures in response to pandemic flu, success or failure of the response rests, to a large extent, on the behaviours adopted by exposed populations
- Risk perception (RP) of populations facing a threat as pandemic flu represents one of the best indicators predicting protective behaviour
- So, longitudinal collection of all factors known as possibly associated with RP and behaviour would produce knowledge directly usable to adapt programs and risk communication

Module 5 main objectives

- The main objectives are:
- To identify the psycho-social determinants of the risk of infection by A H1N1 virus
- To identify the socio-cognitive factors moderating or facilitating the adoption of protective behaviours.
- To measure and model the relationships between perceptions and the protective behaviours, using a dynamic perspective
- To follow the relationships between perceptions and behavioural intentions/actions with health status
- To draw international comparisons

Inclusion of module 5 in CoPanFlu surveys

- A questionnaire has to be filled face to face
- Affecting the totality of the households of the sample representing the cohort
- It will be implemented using a series of quasi-identical questionnaires to be filled out at least three times (first year) during the duration of the cohort

The socio-behavioural questionnaire

- The questionnaire will be administered to each household member over the age of 16
- For those younger aged from 8 to 16 years, a simplified questionnaire will be filled out with the aid of the head of the household.
- The process of filling out the questionnaire, requiring 30 minutes on average, will be carried out either by the nurse in charge of collecting blood samples or a trained interviewer, depending on budgetary allowances.

Groups of items

The main sections of the questionnaire are:

1. Level of information and knowledge.
2. Perception of the illness (Illness Perception Questionnaire for Healthy People).
3. Perception of infectious risk (Conventional Model of Risk Perception).
4. Protective behaviours intentional and actual
5. Lifestyle and schedule (Day Reconstruction Method)
6. Social support (Social Support Questionnaire)
7. Socio-political values and attitudes (notably the Social Value Survey)
8. The illness experience (for those infected during the course of the survey)

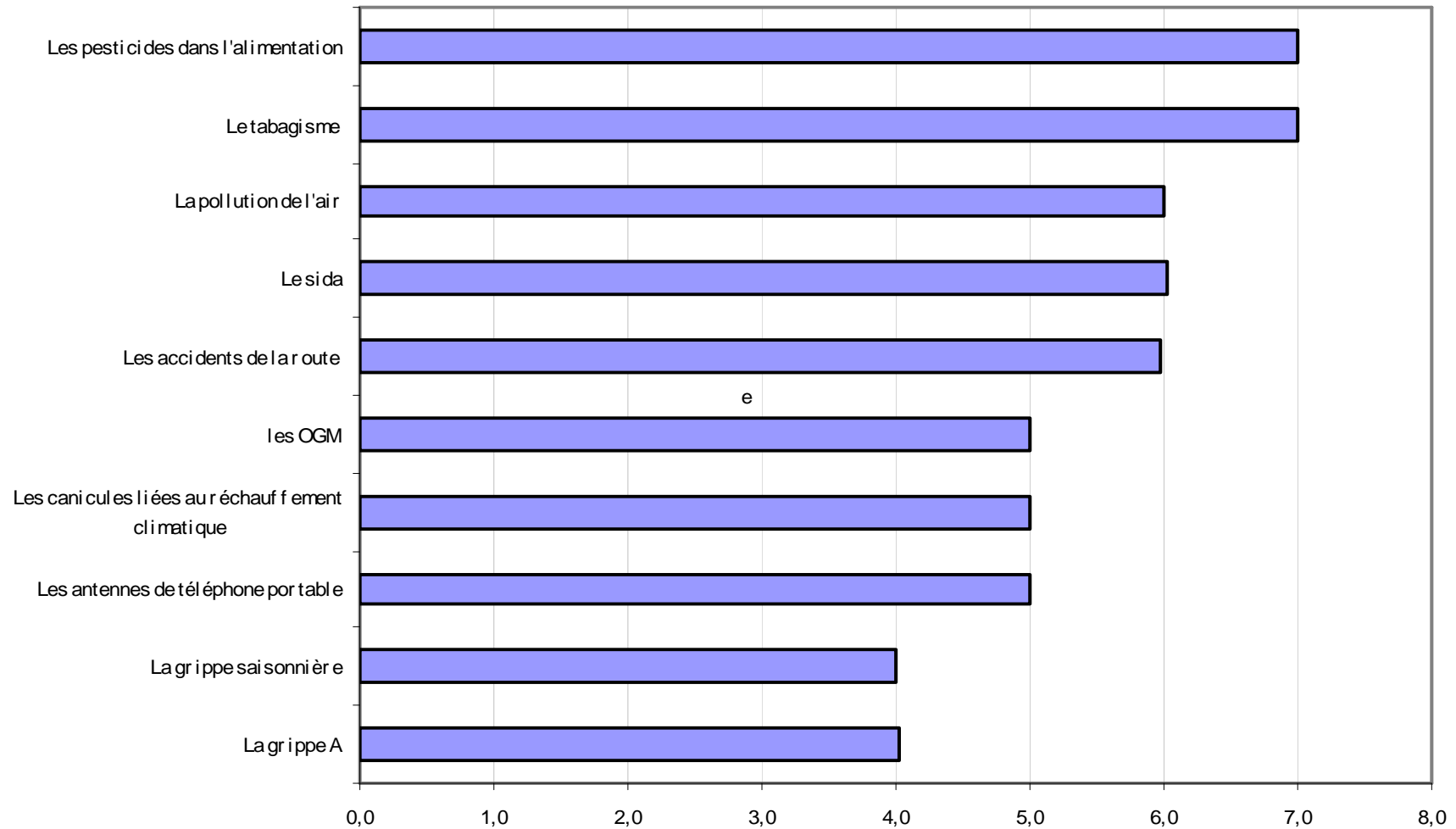
Planning

- In western developed countries the first survey in CoPanFlu would be made before October 2009 (in July in South hemisphere)
- The second some weeks after the national epidemic of swine-flu would be declared and mobilization implemented (it depends on country criteria/situation)
- The third survey when the epidemiological curve is decreasing and the epidemic perceived as ending

Preliminary results

- A survey was realized on June 2009 on the basis of described questionnaire « Risk perception and behaviours » (a random sample, geographically representative, n = 1000)
- Two main objectives
 - To identify factors associated with protective behaviours
 - To predict the vaccination intention against swine-flu

Risk perception (worry) ranking



Vaccination intentions

- Willingness to get the vaccine (against the swine-flu (June 2009):
- In response to the question “Do you consider to get the new vaccine against the swine-flu when it will be available?”
 - 61.7 % considered positively to get it
 - 35.6 % no and 2.8% “don’t know”.
- This rate is evolving (rather lower now)

Vaccination intention as the dependent variable

- In order to predict vaccination intentions, significant correlations were seeking through bivariate and multivariate analyses
- Two models were developed, the second introducing the variables « seasonal flu and flu vaccination »

Flu and vaccination experiences

- In response to the question « Did you got a seasonal flu in the past five years »
 - 27.7% declared yes (16.8% one time, 10.9% several times)
 - 72.1% answered no
- In response to the question “Did you got the vaccine against the seasonal flu?”,
 - 8.3% declared one time,
 - 29.1 several times,
 - 62.5 never.

	Personal immunization intention		Children immunization intention	
Variables	Model 1	Model 2	Model 1	Model 2
Worry	1.71***	1.72***	1.86***	1.89***
Vulnerability	1.32**	1.33**	1.24	1.20
Probability	1.09	1.13	1.04	1.11
Severity	1.11	1.10	1.27	1.27
Perceived risk	1.84	2.45	2.62	3.46
Previous influenza vaccination		3.26***		2.56**
Gender: male	0.92	0.87	0.90	0.86
Education:medium	0.98	1.01	1.03	1.04
Education:high	0.80	0.80	1.36	1.33
Occupation: student	0.76	0.80	0.85	0.93
Occupation: unemployed	0.84	0.83	0.17	0.15
Occupation: retired	0.94	0.77	0.19	0.22
Age: <30 years	1.64	1.54	1.15	1.13
Age: 30-44 years	1.08	1.14	1.38	1.58
Age:>60 years	1.91*	1.01	4.02	3.09
Constant	0.21***	0.15***	0.14**	0.09**
Nagelkerke's Pseudo-R ²	15.0	21.4	20.6	23.8

Discussion

- The two main significant factors associated with vaccination intention (for oneself and children):
 - Worrying to get the swine-flu
 - Experiencing seasonal influenza vaccination
- Of the 62% who never vaccinated, 70% were aged less than 60, compared to 35% more than 60
- And 40% of aged less than 25 and 18% of aged more than 60 had experienced the seasonal flu during the last five years
- Making the group aged more than 60 the more likely to get the swine-flu vaccine, although he is the less experienced on seasonal flu

Conclusion

- Modelling the psycho-social factors of vaccination intention is of great interest for predicting who and why would get the swine-flu vaccine
- Even if the rate of those willing to get the vaccine would vary according to new events, the two factors found (determinants) would be assumed as robust
- The main barrier to vaccination is a low level of worry
- The experience of seasonal flu vaccine is the best predictor of swine-flu vaccination and is age-related
- Making us pessimistic to forecast a large actual vaccination in general and particularly in younger age groups

Research team

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Thank you

