AWARENESS OF BUILDING-RELATED HEALTH CONCERNS IN THE ITALIAN POPULATION

Results from a questionnaire on general population and surveyors

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THE NEOLITHIC REVOLUTION
USER’S MANUAL DISCREPANCY

on the phone
off the phone

secluded areas
open spaces

THE GREATER THE IGNORANCE, THE GREATER THE RISK

How much do we know about the health problems generated by buildings?
Of the 84,000 chemicals in commercial use in the United States -- from flame retardants in furniture to household cleaners -- nearly 20 percent are secret, according to the Environmental Protection Agency, their names and physical properties guarded from consumers and virtually all public officials under a little-known federal provision.

Although a number of the roughly 17,000 secret chemicals may be harmless, manufacturers have reported in mandatory notices to the government that many pose a "substantial risk" to public health or the environment. In March, for example, more than half of the 65 "substantial risk" reports filed with the Environmental Protection Agency involved secret chemicals.

AIM OF THE STUDY

Assess the level of awareness on Building-Related Illnesses (BRI) and Sick Building Syndrome (SBS) within a sample of adult Italian population;

Compare the knowledge in the aspects of BRI/SBS between surveyors and general population.
**METHODS**

Questionnaire on BRI/SBS submitted to a group of Italian adults

20 questions on technical, general (economical, social) or medical aspects of BRI/SBS;

Estimated time to fill-in: <20';

Multiple choice with 1 right answer (score: 1) and another(s) partly correct (score: 0,5). Total, technical, general and medical final scores for each participant have been expressed as percentage of the maximum theoretical score;

Population: $n= 109$, 61% male, age range: 19-72, living in North, Center or South of Italy, tuition: 90% high school or degree;

Non parametric statistics after standardization for possible confounders, and multinomial analysis.

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**RESULTS**

![Graph showing results for General Population and Surveyors](Image)
Results by geographic area

Multinominal analysis

Independent variables: age, schooling, gender, geographical area, being a surveyor.

<table>
<thead>
<tr>
<th>Dependent</th>
<th>Independent var.</th>
<th>Independent var.</th>
<th>R</th>
<th>R²</th>
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<tr>
<td>Total</td>
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<td>//</td>
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<td>0.095</td>
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<td>Geographical area</td>
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<td>0.090</td>
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</table>
DISCUSSION

Knowledge about building-related health problems is independent of age and gender among Italian citizens;

**Italians** are more informed about medical issues than about technical or building maintenance aspects;

Geographical area is the main determinant of awareness on **BRI-SBS**;

**Surveyors** show a good knowledge on how to handle technical aspects of building-related health issues.

CONCLUSIONS AND FUTURE PROSPECTIVES

Many actions could be taken to improve the knowledge on **BRI-SBS**. Although information, assessed with this questionnaire, is fair, it should be further implemented among surveyors and general population by **courses** focusing on healthy designing and renovation, as well as on choice of the building materials. An informed and scrupulous surveyor is **as effective as a doctor** in preventing the building-related conditions leading to many serious, sometimes deadly, conditions.
Thank you for your attention!