

Risk perception in four areas of Italy affected by arsenic pollution derived from natural or anthropic sources

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INTRODUCTION

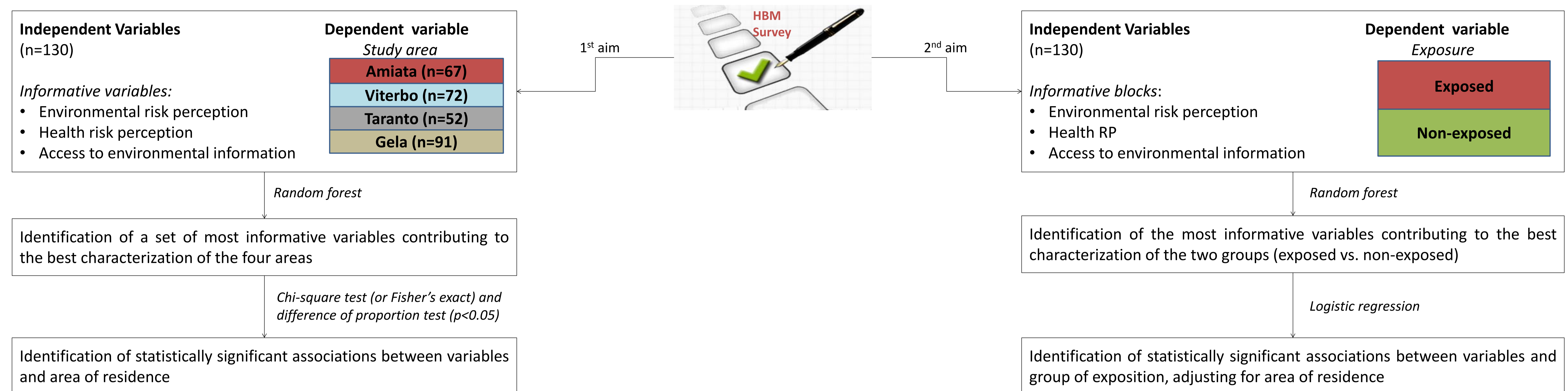
A Human Biomonitoring (HBM) Survey in four areas affected by arsenic (As) pollution was conducted in Italy (SEpiAs project). Source of As is natural in Viterbo and Amiata (soil and water), anthropogenic in Taranto and Gela (steel plant, refinery).

AIMS

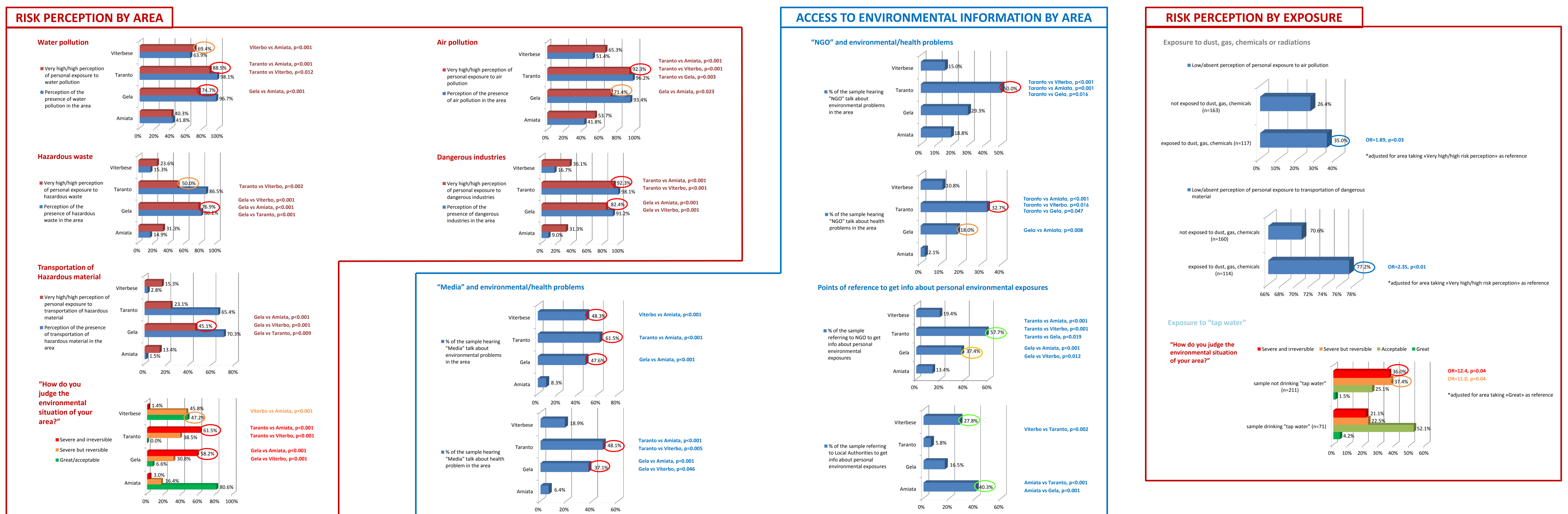
The study is aimed at: 1) characterizing environmental risk perception, health risk perception and access to information in the four areas
 2) characterizing environmental risk perception, health risk perception and access to information in groups of exposure

METHODS

A HBM survey, including questions related to environmental risk perception, health risk perception and access to information, was administered to 282 subjects randomly sampled stratifying by area, gender, and age classes. Variables defining groups of exposure were selected from SEpiAs results* as the ones showing significant statistical associations with urinary inorganic As (Occupational, water).



RESULTS



CONCLUSIONS

Random forest method and the combined approach with logistic regression is useful to characterize areas and exposure groups in terms of risk perception and access to environmental information. Citizens living in industrial areas appear to be more worried about environmental risks. Occupational exposure to dust, gas, chemicals, and radiations has an influence on risk perception which in turn affects voluntary exposure to "tap water" that is one of the main natural sources of inorganic As in the areas under study.