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ABSTRACT BOOKS

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**National Conference of Public Health Medical Residents
of the Italian Society of Hygiene, Preventive Medicine,
and Public Health (*S.It.I.*)**
4th Edition

New GenerActions for Public Health
Bologna, 25-27 May 2017

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Conclusions: Overall, adverse reactions were reported in about 25% of the cohort, but there were no serious reactions and no hospitalizations. Moreover, temporal association between vaccines and adverse reactions does not necessarily correspond with a causal association. There are no statistically significant differences for age, type of vaccine and health conditions. The survey confirms the safety of both Influenza vaccines.

Keywords: Pharmacovigilance, vaccines, influenza

C02. Frailty screening and assessment tools. A review of charactheristicsand use in Public Health

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Introduction: Improving the health of an ageing population is related to the prevention and managment of frailty at community level. Frailty is characterized by an increased risk of the occurrence of negative outcomes like death or a higher rate of institutionalization and/or hospitalizations and/or a worsening of Quality of Life. Therefore, the screening and the assessment of frailty are crucial in Public Health for planning both care services and prevention programs.
Methods: Through a review of the literature and employing the INSA Tool, this study aims to develop an up-to-date framework for the main procedures and measurement tools available to assess frailty in older adults, paying attention to their use in the primary care setting.
Results: The study selected 10 reviews published between January 2010 and December 2016 that define the characteristics of the main tools used to measure frailty. Within the selected reviews only 5 proposed a specific tool as the most appropriate to screen frailty in community-dwelling older adults. However,of the analyzed tools, only one of them covers all the criteria (multidimensionality, quick and easy administration, predictivity, high sensitivity and specificity) necessary for a screening tool.
Conclusions: Predictivity of negative outcomes could be the appropriate and sufficient criterion to assess a tool aimed to detect frailty in the community-dwelling elderly population. The multidimensionality of frailty needs a validated tool able to explore social, functional and health dimensions of individuals in order to address the planning of prevention and care services at community level.

Keywords: Frailty, older adults, aging of the population, screening and assessment tools of frail people

C03. Comparison of questionnaire exposure data and land cover map from geographical information system to assess passive exposure to pesticides: a methodological study.

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Background: Exposure assessment based on questionnaires is frequently implemented in case-control studies, but possible information and recall bias could lead to misclassification of exposure.
Methods: We evaluated passive exposure to pesticides as possible environmental risk factors for amyotrophic lateral sclerosis (ALS) using a questionnaire mailed

to participants in a case-control study in Emilia Romagna and Sicily. Results from questionnaire assessment were compared with a remote sensing methodology based on geographical information system, i.e. the land use within a circular 100-meter area around subjects' residence. Since land cover maps were made available only about once every ten years, we used the 2003 and 2009 maps for Emilia-Romagna and Sicily, respectively. Thus, we estimated the percentage of 'recent' total crop density close to each participant's home, setting positive exposure above 10% of land use.

Finally, we calculated the agreement between the two different methodologies using Cohen's kappa coefficients for all subjects, cases and controls.

Results and Conclusions: Cohen's kappa was 0.364 (95% CI 0.158-0.569) in total population, 0.378 (0.056-0.700) in cases and 0.354 (0.090-0.618) in controls using the most recent land use map available close to year of case diagnosis. Although a moderate-to-low agreement could be seen between two exposure methods, similar results were found in both cases and controls, suggesting that no recall bias occurred in the most recent period.

In the future, we plan to compare such agreement using historical residence over the 20-30 years prior to diagnosis, in order to validate the long-term exposure to pesticides in subjects.

Keywords: Exposure assessment, questionnaire, geographical information system, epidemiology, information bias, case-control study, Cohen's kappa coefficient

C04. Colon cancer: more fiber more protection. Systematic review and meta-analysis

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Introduction: Colorectal cancer is the 3rd most common cancer worldwide. It represents 10% of all cancers excluding non-melanoma skin cancer. 54% of all cases occur in more developed countries, in particular Oceania and Europe. Growing evidence shows that about 47% of cases of colorectal cancer can be prevented by eating and drinking healthy, being physically active and maintaining an ideal weight. Although it is not easy to write about colon cancer alone, we performed a systematic review and meta-analysis aimed at evaluating the association between dietary fibre intake and incidence of colon cancer.

Methods: A structured computer search on PubMed was performed for epidemiological studies reporting results of primary research evaluating dietary fibre intake in women and men and risk of colon cancer. This meta-analysis followed PRISMA recommendations. We compared subjects exposed to the highest concentration with those exposed to the lowest one. To perform the meta-analysis we used the software Prometa3®.

Results: The search strategy identified 376 papers, after a screening, 25 studies were included in our meta-analysis. Results suggest a protective effect of the dietary fibre intake on colon cancer ES=0.74 (95% CI=0.67 -0.82), p-value=0.000, no statistical heterogeneity (Chi2=42.73, p-value=0.011) was found.

Conclusion: Colorectal cancer is still one of the leading causes of cancer mortality all over the world. Moreover, there are concurrent or sequential actions involved in the aetiology. These are the reasons why it is important to identify preventive efforts, especially following a healthy life style, such as a healthy diet.

Keywords: Fibre, dietary intake, cancer risk, colon cancer, meta-analysis

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