



TOWARDS INTEGRATION OF EPIDEMIOLOGICAL AND SOCIAL SCIENCES APPROACHES IN THE STUDY OF COMMUNITIES AFFECTED BY ASBESTOS EXPOSURE

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Preface

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The present issue of *Annali dell'Istituto Superiore di Sanità* contains a monographic section dedicated to address the challenging integration of epidemiological, sociological and anthropological studies concerning the communities affected by asbestos exposure in Italy.

This monograph is dealing with the asbestos issue as previous monographic sections and specific articles published by the *Annali dell'Istituto Superiore di Sanità*, because of its relevance as a national and a global public health issue [1-6].

In Italy, numerous municipalities have been facing localized excesses of pleural mesothelioma incidence and mortality due to asbestos exposure in occupational settings and diffuse environmental exposure in the neighborhood of industrial settings. In some of these areas, the increase in mesothelioma incidence and mortality has only recently been identified [7, 8].

The aim of the monograph is to investigate how in different Italian regions communities have been facing the health impact of asbestos related diseases in order to foster a better understanding of the social implications through a multidisciplinary research approach [9]. In this perspective, the four papers composing this monograph highlight the connections among social, anthropological and epidemiological aspects in different asbestos contaminated areas, selected because representative of a large number of asbestos affected communities in Italy. The papers focuses on stakeholder's engagement and the capacity of affected communities to react collectively through social capacity building and social networks [10].

The paper by Marsili *et al.* provides an integrated description and analysis of the epidemiological studies, communication processes and health education initiatives in several municipalities in Italy affected by occupational and environmental exposures to asbestos and asbestiform fibres: the asbestos-cement industrial area of Casale Monferrato in Piedmont, the asbestos-cement

industrial area of Emilia Romagna, the area of Mount Pollino in Basilicata and Biancavilla in Sicily affected by the natural occurrence of tremolite and chrysotile containing outcrops and of fluoro-edenite fibres, respectively. The paper sheds light on social aspects concerning communication processes and their implementation depending on the evidence of asbestos health impact and the engagement of local institutional and social actors, scientists, students and teachers, and media. It points out experiences of their capacity to react collectively.

The paper by Parolari describes the outbreak of cancer and asbestosis among former asbestos-amosite exposed subjects affected in the Ledro Valley, Trento Province, since the first occupational health reports in the '70s until the last updating in 2009 including the pioneering and successful environmental clean that took place in the eighties. The paper emphasizes the participation of exposed workers, their families and residents in collecting useful information for the investigations, as well as the role played by local public administrators in response to the asbestos health impact. The paper also reports the efforts dedicated to hold the memory of these events alive for the next generations as an integral part of the community heritage.

Fedrigotti *et al.* also deals with the Ledro Valley community, addressing the asbestos issue from a historical perspective. In particular, the paper summarizes the results of a research project focusing on the asbestos impact on the community from the socio-economic point of view, including the history, the entrepreneurship, the characteristics of industrialization in the Trento Province, individual life stories and women's role in the community, in other words the past, the present and the future of the community.

The paper by Mazzeo illustrates an anthropological research project based on ethnographic fieldwork conducted in Italy (Bari, Casale Monferrato, and Bologna) and in Brazil (Osasco). It discusses the practices by



which the survivors of the impact of asbestos-related disaster on their lives make sense of their suffering experience and engage in a grassroots health-based movement. In particular, attention is given to the capacity of the affected communities to elaborate their own paths of care by remembering and communicating the asbestos disaster, and underlines many analogies between the Italian and Brazilian settings.

The case studies described in this monograph can be useful to other asbestos affected communities, especially in countries that did not yet ban asbestos [11], in particular in those communities that only recently became aware of experiencing asbestos-related health impacts.

An integrated reading of the different case studies, taking into account epidemiological, public health aspects, anthropological perspectives, historical, socio-economic setting, and communication processes, can help in defining the major steps along the path from scientific knowledge to environmental remediation, victims' support and pursuit of equity. Scientific knowledge starts from observation of adverse health effects deriving from existing epidemiological surveillance sys-

tems, by observations of alert physicians or by a direct input coming from the affected communities through their reporting of cases of asbestos-related disease. Workers' unions, victims' associations and local administrators can also contribute to this process.

Formal epidemiological studies are then required in order to provide estimates of the burden of disease and to address its causal attribution with respect to occupational and environmental (both household and outdoor) asbestos exposure. This process is particularly needing in order to define the priorities of environmental cleanup process in terms of health benefits, and it also contributes to orienting compensation activities, and, where appropriate, judicial actions.

While equity-inspired processes of restoration require a major commitment of administrative and political authorities, the communities themselves appear to be the real drivers of the response to the asbestos-related health challenges, by increasing collective awareness, autonomy fostering and development of a strong stakeholder role in all decision making circumstances concerning their present and their future.

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