

Background and Aims. Associations between damp/mouldy homes and depression among adults were described for the first time in the European LARES Study. As they were found in a cross-sectional epidemiological study, causal relationship could not be established though clear dose-response relationships were observed between size of the mouldy areas and the prevalence of depression. It was not clear either whether people suffering from depression neglected their home which became damp and mouldy or damp/mouldy homes had some kind of direct or indirect (e.g. through asthma) impact on the mental health of the inhabitants. These associations were further explored using the database of our country-wide survey among 9-10 year old children.

Methods. Out of the 62,711 questionnaires completed by the parents 57,362 contained data on the children's behaviour. Fatigue, sleeping disorders and reservedness were the three symptoms considered to be characteristic for depression. Associations between the number of symptoms and the size of the mouldy areas (no; some cm²; some dm²; >1m²) were analysed by logistic regression adjusted for age, gender, smoking during pregnancy, the parents' respiratory or allergic diseases, the mother's education and busy traffic nearby.

Results. At least one of the three depression symptoms was found in 20.35%, and all the three ones were present in 1.29% of the children. Significant dose-response relationships were found (independently of the presence of asthmatic symptoms) between the prevalence of depression symptoms and the presence of damp/mouldy areas in the homes (adjusted OR=1.47; 95% C.I.: 1.39-1.56) for at least one symptom and aOR=1.83; 95% C.I.: 1.49-2.26) for all three symptoms present, respectively.

Conclusion: The possible significant association between damp/mouldy homes and depression was confirmed in our study involving large number of children, though the biological mechanism is still not clear.