Plain English Research Summary

Multiple Long-Term Conditions and the Environment: A Scoping Review

Background

Worldwide, one in four people live with two or more long-term health conditions, which is known as multiple long-term conditions (MLTC).

In England about 70% of health and social care spending is on care for MLTC, and nearly half of GP appointments are with this group of patients.

What was the purpose of the research?

Although MLTC is a major global health issue, there is little information about how the local environment and community in which people live, can impact health and wellbeing.

To fill this gap, researchers reviewed previous studies which looked at the relationship between these factors and MLTC.

What did we do?

We used five electronic databases to search for relevant studies.

In total 9,079 papers were found. 134 papers initially matched our research criteria.

We carefully examined these papers and 12 exactly matched our study's aims.

We collected key information from each paper (e.g., study setting, country or region, the study participants, research method and the findings).

Finally, we organised the information we gathered and wrote up our findings.

What did we find?

A number of key findings emerged from our research.

The evidence shows that the condition of the local environment and neighbourhood area does have impacts on people's health and wellbeing.

People in neighbourhoods with high levels of air pollution were at increased risk, as were those living in property with damp, mould, pests, and poor ventilation.

Living in an area of low crime, with a close-knit community or a neighbourhood with access to the countryside, parks or other green spaces, had positive impacts on health and wellbeing.

We found little evidence on how living in a 'good' environment and neighbourhood contributed to positive health outcomes for those with MLTC.

What next?

While these papers suggest environmental factors impact on the health and wellbeing of those with MLTC, the limited evidence available makes it difficult to draw firm conclusions.

Further research is needed to investigate how people with MLTC are affected by the quality and condition of the environment and local community where they live.

Where can you read the full paper?

What is the Cluster AI-M study?

The study has two main aims:

(i) To explore the potential of AI to improve care in MLTC through 'clustering' or grouping people together based on similarities in their medical and social care needs.

(ii) To use this information to develop personalised care approaches for these clusters, which will join-up health and social care services, and in doing so, improve care of people with MLTC.

For further information on the study, visit: https://www.southampton.ac.uk/research/projects/the-development-validation-of-population-clusters-for-integrating-health-social

Who was involved?

- Firoza Davies (Patient and Public Representative).
- Dr Hajira Dambha-Miller (Study Co-Principal Investigator).
- Dr Glenn Simpson (Study Co-ordinator, University of Southampton).
- Sukhmani Cheema (University of Southampton).
- Nile Saunders (University of Swansea).

Acknowledgements and disclaimer

Further reading

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5) Hernandez-Garcia E, Chrysikou, E. Research capacity strengthening in health and care delivery through housing for chronic diseases, *European Journal of Public Health*, Volume 31, Issue Supplement 3, October 2021, https://doi.org/10.1093/eurpub/ ckab164.721.

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