



RESEARCH

INFORMATION

Understanding the health of people experiencing homelessness, justice involvement, substance use, sex work, and severe mental illness



AIMS

This project aimed to explore health inequalities among people affected by homelessness, involvement in the criminal justice system, substance use, sex work, and severe mental illness (hereafter referred to as the experiences of interest). A secondary aim was to investigate how administrative data – that is, data generated by organisations as part of their day-to-day activities rather than specifically for the purposes of research – can be used to understand and tackle these inequalities.



KEY FINDINGS

- Existing policy documents on health inequalities do feature the experiences of interest to some extent but don't often acknowledge that they tend to overlap, or the additional challenges this brings.
- People affected by the overlap of homelessness, justice involvement, substance use, sex work, and severe mental illness have a much higher risk of ill health, premature death, and reduced quality of life compared to people with one or none of these experiences. However, there are important gaps in the evidence, especially on common long-term conditions like heart and lung disease, cancer, and diabetes.
- By combining data from homelessness services, the justice system, drug treatment, and mental health services, we estimated the overlap between these experiences in Glasgow City (except sex work, for which no data were available). Between 2010-2014, 5% of adults resident in Glasgow City had at least one of these experiences and 1% had more than one, with men aged 30-50 years living in the most deprived areas most at risk.
- When we followed this population up over time, the risk of early death was much higher among people with more than one of these experience compared to one or none. A high proportion of these deaths were due to preventable or treatable conditions such as heart disease or cancer.
- As an example of how administrative data can be used to evaluate interventions in this area, we studied the introduction of a comprehensive smoke-free policy in Scottish prisons in 2018 using medications data. The policy resulted in reduced use of medications for smoking-related health conditions by people in prison, with no change in the use of medications for mental health.



WHAT DID THE STUDY INVOLVE?

We used a variety of methods in this project, including:

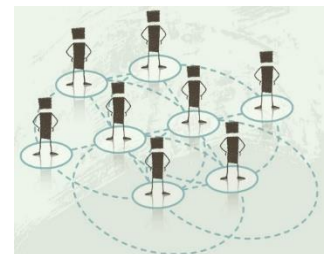
- Analysing the language used in published documents on health inequalities policy (discourse analysis)
- Finding and synthesising existing research published on the topic (systematic review & meta-analysis)
- Combining individual-level data from different organisations in a secure way (record linkage) to create a novel database; as approved by relevant governance committees from NHS, local council, and prisons
- Using this database to investigate how many people were affected by one or more experiences of interest and what their risk of early death was over time (cohort study)
- Examining pharmacy data over time to identify changes in medication dispensing coinciding with changes in prison smoking policy (interrupted time series analysis).

We held two public engagement workshops and four stakeholder advisory group meetings, and plan to hold further events to disseminate our results.



WHAT WERE THE RESULTS AND WHAT DO THEY MEAN?

- By analysing the language used in policy documents, we can better understand how our findings might be received and acted upon. We found a real need for frameworks able to describe how these issues intersect with each other and other forms of disadvantage (such as socioeconomic status).
- Our systematic review found that existing evidence often didn't reflect the combinations of experiences that were most common, or the conditions that caused the greatest burden of ill-health. We found a need for studies on the overlap between the experiences of interest in UK settings, that follow people up over time, and on outcomes other than infections, overdoses, accidents, and violence.
- We found that bringing together administrative data from multiple organisations and sectors is feasible and useful, albeit challenging. The linked database suggested that across different services seeking to address these issues, many of the same people will be involved.
- Those most affected by the overlap of these experiences were men aged 30-50 years living in the most deprived areas. The most common combinations involved homelessness, opioid dependence, and justice involvement; psychosis was less likely to occur alongside the other experiences.
- Through our analysis of the database, we found that people affected by the overlap between these experiences were much more likely to die early. This included high rates of death from non-communicable diseases (such as heart disease or cancer) and from conditions that should be preventable or treatable.
- Smoke-free prisons appeared to provide positive health benefits, at least in the short-term, demonstrating the opportunities available through interventions in relevant settings and services.





WHAT IMPACT COULD THE FINDINGS HAVE?

To more effectively meet people's health and social needs, we may need new approaches to services and policy which recognise and accommodate the overlap between these experiences.

The high burden of avoidable early deaths among people affected by one or more of these experiences indicates a need for wide-ranging policy and service efforts to prevent these experiences and mitigate their negative impacts on health.

Redressing the gaps we identified in the systematic review through future research funding and activity should be a priority. We have demonstrated that administrative data linkage can be useful in understanding the health of people whose life circumstances often make it difficult to participate in traditional models of research. However, realising this potential requires well-resourced and responsive infrastructure and governance.

In future studies, we hope to use similar methods to evaluate how changes in social policy (such as homelessness prevention or sentencing reform) might influence the health of people affected by these experiences.



HOW WILL THE OUTCOMES BE DISSEMINATED?

So far, we have published three peer-reviewed journal articles and two plain-language briefings (links below). We plan to produce two further journal articles and briefings, as well as a blog post and podcast episode. We will hold a knowledge exchange event in early 2022 to discuss the findings with key stakeholders from policy, practice, and research, and people with lived experience.



CONCLUSION

It's not uncommon for experiences of profound social disadvantage – such as homelessness, justice involvement, substance use, sex work, and severe mental illness – to co-occur. People affected by one or more of these experience profound health inequalities, with much of the increased risk of death accounted for by avoidable causes. New approaches are required, involving co-ordinated action across multiple sectors including healthcare, criminal justice, housing, social security, and drug policy.



RESEARCH TEAM & CONTACT

Dr Emily J. Tweed

**MRC/CSO Social and Public Health Sciences Unit
University of Glasgow**



emily.tweed@glasgow.ac.uk



0141 353 7500

Additional Information: The project was completed in December 2021 and received £186,201 in funding. Briefings can be found here: [smoke-free prisons](#) and [evidence review](#). Journal publications can be found here and are free to access: [discourse analysis](#); [evidence review](#); [smoke-free prisons](#).