Built Environment Design, Cancer Prevention & Inequality

The built environment refers to the human-made spaces that people utilize in their day-to-day lives,[1] and there is a growing interest in the role of the built environment and cancer prevention beyond the individual-level,[2] as well as the relevance of the built environment in explaining cancer inequalities.

A recent interdisciplinary article* focused on links between the built environment and cancer prevention strategies within primary, secondary, and tertiary levels, and discussed the impact that the built environment may have on cancer inequalities.

BUILT ENVIRONMENT & CANCER PREVENTION

BUILT ENVIRONMENT

- BUILDINGS
- OPEN SPACES

- Exposure to urban carcinogenic sources
- Attributes associated with behavioural risk factors
- Spatial proximity to screening centres and healthcare facilities

CANCER PREVENTION CONTINUUM

- PRIMARY
- SECONDARY
- TERTIARY

PRIMARY PREVENTION

The built environment impacts cancer rates through:

- Modified exposure to urban carcinogenic sources
- Attributes that facilitate physical activity
- Proximity of amenities that encourage healthy lifestyles

Cost of living often prevents socially disadvantaged populations from living in health-supportive neighbourhoods.

SECONDARY PREVENTION

The built environment impacts cancer detection through:

- Geographic proximity to screening centres
- Transportation access to screening centres

The built environment can inhibit access to screening centres for vulnerable populations.

TERTIARY PREVENTION

Remission and survivorship outcomes can be impacted by:

- Availability of green space for activity and social interaction
- Proximity to healthcare facilities
- Exposure to stressors and barriers to movement

Cancer survivorship tends to be lower among those living in deprived areas compared to those living in affluent areas.

Future studies should consider to what extent socially disadvantaged populations can benefit from each type of environment change in relation to cancer risk.

*For more information:
Koohsari MJ, Nakaya T, McCormack GR, Oka K. Built environment design and cancer prevention through the lens of inequality. Cities. 2021 Dec;119:103385.

References:
1. Roof K, Oleru N. Public health: Seattle and King County's push for the built environment. Journal of Environmental Health. 2008;71(1):27-27.
2. Gomez SL, Shariff-Marco S, DeRouen M, Keegan TH, Yen IH, Muajhid M, Glaser SL. The impact of neighborhood social and built environment factors across the cancer continuum: Current research, methodological considerations, and future directions. Cancer. 2015;121:2314-2330.

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