

Title Using systems thinking concepts to guide obesity prevention practice and policy development.

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Abstract

Introduction: A growing appreciation of the complex nature of public health is driving calls for an increased use of systems thinking and methods. Our presentation is about describing one such method – a Group Model Building (GMB) workshop for developing capacity to apply systems thinking within local government, which has been developed for use in the prevention of non-communicable diseases (NCD). Our pilot study has been funded by Johns Hopkins Global Center for Childhood Obesity under the Rapid Response Pilot Projects.

Methods: The workshop we delivered is based on a scripts approach from Dr Peter Hovmand (Founding Director, Social System Design Lab, George Warren Brown School of Social Work, Washington University) aimed to enable participants to map their local system and identify leverage points in order to ascertain what policy and environmental changes are worth pursuing to address childhood obesity.

Preliminary Results: Quantitative evaluation of workshops in two local government settings has shown progression in understanding and familiarity with systems concepts against a taxonomy of systems thinking. Qualitative evaluation has demonstrated that the aims and objectives of the two workshops were met and exceeded and that this training can develop capacity to use systems thinking in prevention. Specifically, participants are now able to identify a dynamic problem, develop causal loop diagrams, identify feedback loops and leverage points in the system, and see how these skills will help the design, implementation and evaluation of systems intervention.

Discussion: The approach described here does develop capacity in local government to use systems thinking in the design of interventions to prevent non-communicable diseases. The techniques used build on previous international studies that, although they did not have a specific focus on NCD prevention, are applicable to this area.