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Association for the Study of Obesity

Member led Symposium

Lancaster 07th – 08th September 2022

TITLE: A co-produced, multidisciplinary and multistakeholder complex system framework to address obesity at the local level

RATIONALE: Obesity is a national cross-government priority, yet current actions, including the updated national strategy for tackling obesity, are insufficient to reduce national prevalence. There is consequently an urgent need for innovative approaches to identify and implement evidence-informed policy and practice. This urgency has been accelerated by the COVID-19 pandemic, which has most severely impacted lives of people living with obesity, widened disparities, and highlighted the importance of a complex systems approach.

Although the underlying reason for obesity is simple (more energy consumed than expended), it is now well accepted that obesity results from many interconnected policy, environmental, social, economic, cultural, behavioural, and biological causes. Consequently, obesity is now described as a 'wicked' public health problem driven by numerous influences where causal links are not clearly defined and mechanisms that influence them are unknown. Such problems are complex, unstable, a challenge to define, and difficult to resolve. Tackling wicked problems requires holistic, innovative, and flexible approaches, the ability to work across boundaries to effectively engage diverse stakeholders and communities to understand the problem and identify solutions.

The failure of obesity programmes / approaches to date reflects, to some degree, a misunderstanding of the relative importance of each of these factors and a poor understanding of how the complex multilevel nature of the problem influences the way that research, policy, and practice must approach it. There is now consensus from researchers, policy makers, and politicians that a systems approach is a realistic and promising approach to obesity prevention and treatment.

A shift in thinking is therefore required, away from simple, linear causal models, to consideration of the ways in which processes and outcomes at all points within a system drive change. In addition to asking whether an intervention works to fix the problem (i.e., obesity), we need to identify if and how actions contribute to reshaping the system in favourable ways. There is now consensus that no one solution to tackle obesity exists, and although we know a lot about the individual drivers of obesity, we do not yet know where the greatest leverage points are for changing how the system works.

We will provide an overview of research, projects and guidelines (UK specific and International) that have started to address the paradigm shift in addressing obesity acknowledging the strengths and limitations. The complex system framework proposed here, compliments and extends this work by bringing together the active ingredients in a single highly interdisciplinary, ambitious framework to implement and evaluate (in a real-world setting) a complex system approach at the local level to address obesity.

Aim: to stimulate discussion on the opportunities and challenges in implementing and evaluating a complex system approach to obesity at the local level

Objectives:

- Introduce a multidisciplinary, multistakeholder and coproduced complex system framework to address obesity at the local level

- Highlight opportunities and challenges to implementation and evaluation of a complex system to address obesity at the local level
- Realise that the tension between local impact and [national] generalizability is inherent in community-based research and to realise the shift in thinking required
- To discuss the sphere of influence and scope of a complex system approach to address obesity at the local level
- Understand the complex system framework from the perspective of academics, people living with obesity, Local Authorities and National policy / decision makers.

SPEAKERS:

1. Dr Claire Griffiths, Obesity Institute, Leeds Beckett University. **Title:** A co-produced, multidisciplinary and multistakeholder complex system framework to address obesity at the local level; Context overview
2. Dr Duncan Radley, Obesity Institute, Leeds Beckett University. **Title:** System thinking; what is it and what role does it play in a complex system framework
3. Professor Mark Gilthorpe, Leeds Institute for Data Analytics, University of Leeds. **Title:** System modelling; what is it and what role does it play in a complex system framework
4. Professor Louisa Ells, Obesity Institute, Leeds Beckett University. **Title:** Implementation, Evaluation & Co-production within a complex system framework
5. TBC. **Title:** The role of digital tools and data visualisation with a complex system framework.
6. Mr Ken Claire, Patient and Public Involvement/Engagement Lead Obesity Institute at Leeds Beckett University; Director of Bariatric and Metabolic Surgery Support Services, Obesity UK; Chair, European Coalition of People Living with Obesity; Trustee, Association for the Study of Obesity. **Title:** A complex system framework to address obesity from the perspective of individuals living with obesity
7. Mr Adrian Coggins, Head of Wellbeing and Public Health, Essex County Council. **Title:** A complex system framework to address obesity, Local Authority perspective
8. Mr Jim McManus, Executive Director of Public Health, Hertfordshire County Council; President, Association for the Directors of Public Health, UK. **Title:** A complex system framework to address obesity, National perspective

SESSION OUTLINE:

The first five presentations (according to the order listed above) will be aligned to the complex system framework introduced by Griffiths, covering the specific components of the framework (i.e., system thinking, system modelling, implementation, evaluation, co-production and digital tools). The final three presentations will place the complex system framework in the context of people living with obesity, Local Authorities and National perspectives. Our intention is to highlight the opportunities and challenges, and promote discussion, rather than provide answers. All presentations will be delivered within one hour allowing time (where appropriate) for presentation specific questions.

All speakers will then come together for a panel discussion, for the final 30 minutes, chaired by Griffiths. The panel will be joined by representatives from two other Local Authorities (details TBC) who represent different stages of the “systems journey” to acknowledge that the tension between local impact and [national] generalizability is inherent in community-based research and to also emphasise the shift in thinking; the objective is to provide a complex system implementation and evaluation framework for **LOCAL** coproduced change rather than attempting to produce generalised recommendations (acknowledging that the methods are transferable). The panel discussion will provide a unique opportunity for delegates to

understand the complex framework from a co-produced, multi-disciplinary, and multi-stakeholder perspective.