to develop kitchen skills, improve nutrition and diet diversity, and to reduce social isolation. FirstBite Café is a community kitchen based in Winchester, Hampshire founded in 2016 that has aimed to re-use food that would otherwise be destroyed, to produce high quality and affordable meals for its local community

Objectives We sought to evaluate the impact FirstBite has had on its customers, volunteers, and wider community. Concurrently we hoped to produce local data on the role of community kitchens and possible recommendations on the continued development of the Café.

Methods A questionnaire was developed to capture demographics, attitudes, and perceptions of customers towards the café, and the impact the café has had on them. Two volunteer focus groups were run, asking what values attracted them to the café, what prompted re-attendance, who benefits from the café, and where they see the café going forward.

Results Of the 67 respondents, the largest proportion of customers were aged between 55 and 75, and 41.7% lived alone; with the majority attending for over 12 months. The factors most appreciated were the food (87%), company (78%), affordability (75%) and core values of the kitchen (48%). The focus groups corroborated the greatest benefit came from developing social skills and confidence, giving a sense of purpose and community, and reduced social isolation in the elderly, those with mental health issues, and background of substance misuse.

Conclusions The results of this evaluation were overwhelmingly positive, with the impact of the café on reducing social isolation and providing nutritious and affordable food echoed throughout. The barriers that FirstBite is now facing revolve around infrastructure and accessibility, and a permanent location with greater space would continue to extend its effectiveness.

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## AN INNOVATIVE APPROACH TO THE DOUBLE-BURDEN OF MALNUTRITION IN KOLKATA, INDIA: MEDICAL COLLEGE WORKSHOPS AND THE PILOTING OF A 'MOBILE TEACHING KITCHEN'

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Background India suffers from significant undernourishment, alongside obesity at concerning levels. Both poor diet and health education contribute to this, we developed a pilot local capacity building research project to apply a novel intervention in line with the United Nations 'Sustainable Development Goals'.

Methods Following NNEdPro's key contributions to the '14th World Congress of Public Health' in Kolkata (2015), a capacity building exercise was launched for healthcare professionals and students. 10 selected attendees became 'NELICO (Nutrition Education and Leadership for Improved Clinical/Public Health Outcomes) Champions' leading action research projects.

Project 1: Utilising 'See one, Do one, Teach one' education models, dietitians and volunteers transformed 12 slum-dwelling women into educators, teaching to prepare and cook nutritionally balanced, affordable and tasty template menus using local ingredients. The research team measured baseline and

post-intervention nutritional status and knowledge, attitude and practice (KAP) of participants.

**Project 2:** Performed an interactive nutrition workshop at 2 Kolkata medical colleges, measuring KAP of students before and after.

Results Project 1: Increased nutritional KAP's (p<0.05), specifically for 'understanding healthy nutrition for children,' 'sources of protein'.

**Project 2:** Sub-analysis showed a significant increase (P<0.005) in participant Knowledge and Attitudes following the workshop (Pre-K+A (Mean  $\pm$  SD) = 29.0  $\pm$  6.1, Post-K+A = 29.5  $\pm$  5.5), however the change in total KAP scores pre/post were not shown to be significantly different (P=0.39) with 37.5  $\pm$  5.3 and 38.4  $\pm$  8.5 respectively.

Conclusions Through interdisciplinary capacity building in educational research, this initiative demonstrates that, with guidance, local professionals and volunteers can make meaningful professional and community impacts. The Mobile Teaching Kitchen (MTK) initiative combines education, empowerment and inter-disciplinary capacity building in nutrition education by empowering some of the most marginalised members of society, who now are using these skills for food microenterprise alongside nutritional health education for the local population.

Key acknowledgements to the 'Remedy clinic study group' and 'The Inner Wheel Club of Greater Calcutta'.

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## NNEDPRO GLOBAL CENTRE RESPONSE TO THE UK GOVERNMENT OBESITY STRATEGY

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Background Following considerable interest in the relationship between obesity and COVID-19, the UK Government have released a policy paper: 'Tackling obesity: empowering adults and children to live healthier lives'. This response may be focused on a limited and potentially historical view of overweight and obesity. We consider the complexity of the condition, its determinants, and co-existing conditions.<sup>2</sup>

Objectives We sought to gain consensus iteratively, using implementation framework thinking, to advocate for the appreciation of a wider, more complete understanding of the existing science behind obesity and the appropriate strategies needed to address it.

Results We identified four strategic points and provided recommendations for more comprehensive coverage and greater impact: 1. Improving focus and messaging 2. Understanding drivers of food choice and nutritional status 3. Promoting healthy eating from early years 4. Addressing the complexity of obesity

Discussion 1. Effective messaging should be inclusive, collaborative and non-judgemental, promoting co-participation in the development of messages used in public national campaigns.<sup>3</sup> 2. Higher rates of obesity are observed in socioeconomically deprived groups who rely on food assistance programmes, in which nutritional quality could be improved through involvement of nutrition professionals.<sup>4</sup> In order to influence behaviour, basic food literacy and financial management skills could be developed, while subsidies for healthier alternatives may complement taxes on less healthy foods.<sup>5</sup> 3. Advocating for better education on food science and nutrition from early learning sectors will promote increased awareness early in life. 6 This could be augmented by reinstatement of initiatives like the healthy start programme. 4. Human health is multidimensional, therefore focussing on a single-metric risks oversimplifying this complexity and undervaluing the importance of healthy behaviours, even those not directly associated with weight. Instead, we should consider positive lifestyle habits, rather than a narrow focus on weight or BMI alone for the individual, informed by existing and accepted scientific findings.

Conclusion An integrated systems approach ought to be developed with a multipronged intervention strategy, targeting food production, supply and environments as well as marketing to improve availability of as well as accessibility to more nutrient-rich but less energy-dense foods. These combined with appropriate food education for consumers would enable more consistently healthy food choices.

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## PERSPECTIVES ON SUSTAINING, SPREADING AND SCALING-UP OF DIABETES QUALITY IMPROVEMENT INTERVENTIONS

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Background Quality Improvement (QI) evaluations rarely consider how a successful intervention can be sustained, nor how to spread or scale to other locations. A survey of authors of randomized trials of diabetes QI interventions included in an ongoing systematic review found that 78% of trials reported improved quality of care, but 40% of these trials were not sustained.

Objective To explore why and how the effective diabetes QI interventions were sustained, spread or scaled.

Methods A qualitative approach was used, focusing on case examples. Diabetes QI program trial authors were purposefully sampled and recruited for interviews. Authors were eligible if they had completed the survey, agreed to follow-up, and had a completed a diabetes QI trial they deemed 'effective' by improving care for people living with diabetes. Snowball sampling was used if the participant indicated someone could provide a different perspective on the same trial. Interviews were transcribed verbatim. Inductive thematic analysis was conducted to identify factors associated with spread, and/or scale of the QI program. Case examples were used to show trajectories across projects and people.

Results Eleven of 44 eligible trialist participated. Four reported that the diabetes intervention was 'sustained' and nine were 'spread,' however interviews highlighted that these terms were interpreted differently over time. Participant stories highlighted the trajectories of how projects evolved and how research careers adapted to increase impact. Three interacting themes were identified: i) understanding the *concepts* of implementation, sustainability, spread and scale; ii) having the appropriate *competencies*; and iii) the need for individual, organisational and system *capacity*.

Conclusions Trialists need to think beyond local effectiveness to achieve population-level impact, particularly in nutrition. Early consideration of whether an intervention is feasible and sustainable once research funding ends is necessary to plan for sustainability, spread and/or scale of effective QI programs.

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EFFECTIVENESS OF A HEALTH PROMOTION STAND AT A UK UNIVERSITY TO RAISE AWARENESS ON OBESITY-RELATED WEIGHT BIAS AND STIGMA: A PILOT STUDY

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**Introduction** Weight bias leads to the stigmatisation of individuals with obesity and has been associated with exacerbating psychological and physiological stress as well as further weight gain. <sup>1</sup> <sup>2</sup> As such, there is a need for interventions to effectively address weight bias and stigma-reduction. <sup>3</sup>

Aim The aim of this observational study was to evaluate the understanding of obesity-related weight bias and stigma amongst university students and staff.

Method A health promotion stand was set up in Ulster University on World Obesity Day 2020. Students and staff who engaged were presented with definitions of weight bias and stigma, associated consequences and the importance of person-first-language. Subsequently they were asked to translate the new knowledge into practical suggestions or advice to help combat weight bias/stigma. They were also given the option to sign a pledge to ameliorate weight bias/stigma. All

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