Tackling Health Inequalities in Low-Income Communities: The Importance of Thorough Stakeholders’ Engagement in Voluntary Intervention with Takeaway Outlets

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Abstract

A collaborative voluntary intervention between a local government authority and a higher education institution, in three takeaway outlets in a low income northern English community is examined. The intervention aimed to increase the availability, promotion and ultimately sale of healthier products in the takeaway outlets. The collaboration between stakeholders led to the successful use of semi-structured interviews and nutrient content determination to increase the sale of healthier products at all three participating takeaway outlets. The research has uncovered the potential of diligent collaborations between stakeholders for the implementation and success of health promotion interventions.

Keywords: Local government; Healthier products; Takeaway outlets; Low-income communities

Intervention

The aim of this intervention was to increase the availability and sale of healthier items within takeaway outlets in a low-income northern English community. Objectives were to gain participation of at least two hot food takeaway outlets within the low-income community, increase the number of healthy menu choices in those hot food takeaways, to increase the proportion of healthy meals sold through those hot food takeaways and finally, to influence hot food takeaways in reducing overall calories and levels of fat, salt and sugar across their menus.

Place and time

The intervention was conducted with hot food takeaway outlets based within one of the deprived communities, of a low-income town, in the north of England in the United Kingdom. Recruitment of takeaway outlets began in November 2015 by the local government authority (LGA). Collaboration with the higher education institution (HEI) began in March 2016. The semi structured interviews which informed the measures to be implemented by the takeaway outlets as part of the intervention were conducted between March and May 2016. Nutrient content determination which informed the strategies for the promotion of healthier products within the takeaway outlets were carried out between June 2016 and July 2016 by the HEI. Measures were implemented by takeaway outlets from August 2016 to September 2016. Outcomes of the intervention were reported in October 2016. The intervention was promoted through a local newspaper at the start of its implementation, and on the social media outlets, of which Facebook and Twitter, of the LGA throughout its duration.

Purpose

The consumption of takeaway food found to be energy-dense; higher in fat, saturated fatty acids, sugar and salt; and lower in vitamins and minerals than homemade meals is associated with weight gain and obesity [1]. Takeaway outlets have been reported to be 2.5 times more prevalent in areas of deprivation [2]. Numerous interventions have therefore been developed and implemented by LGAs, in the United Kingdom to increase the availability and sale of healthier products at takeaway outlets [3-5]. However, collaboration between a variety of stakeholders on the design, implementation and outcome of such interventions remains scarce [6].

Materials and Methods

The implementation of this intervention followed the steps identified in Figure 1. 35 food premises were identified in the selected low-income community by the LGA via an electronic database the LGA holds. Information was retrieved in line with the Data Protection Act 1998. Of the 35 food premises, 14 were hot food takeaway outlets selling products such as pizzas, kebabs, burgers, and fish and chips to be purchased on-site, online or over the phone and consumed customarily off-site. These hot food takeaway outlets were reviewed for their eligibility for the intervention based on their food hygiene rating score. The Food Hygiene Rating scheme (FHRS) in England, Wales and Northern Ireland, is a scheme which helps consumers choose where to eat out or shop for food by giving them information about the hygiene standards in these places [7]. A score of 3 or more achieved through the FHRS was the criterion for selection for this intervention. Such a rating demonstrates a high level of organization within the businesses and senior management commitment to the scheme [7].

Of the 14 hot food takeaway outlets identified, 11 were eligible for participation and approached via introductory letters through the post. Eight takeaway outlets registered interest for the scheme following an initial visit after the letters had been posted. Nonetheless, three of the eight takeaway outlets who registered interest were unavailable during the months the intervention was conducted. Semi-structured interviews were therefore conducted by the LGA with just five takeaway outlets. The semi structured interviews aimed to understand the current practices of the takeaway outlets to identify products and processes which could...
be modified to achieve the goal of the intervention. Prior to the analysis of the semi-structured interviews, two takeaway outlets opted to drop out of the scheme quoting time constraints as their reasons, resulting to only three takeaway outlets remaining for participation in the intervention.

Analysis of the semi-structured interviews identified that takeaway outlets were willing to adopt minimally intrusive recommendations to increase the sale of healthier items within their outlets. This led to the nutrient content of their existing menus being determined by the researchers from the higher education institution to create healthier meal deals. An example of a meal deal created can be found in Figure 2. Healthier practices created through the collaboration of stakeholders were also suggested for implementation to takeaway outlets, and to their customers (Figure 3) to influence the overall calories and levels of fat, salt and sugar consumed through these outlets. Recommendation to outlets included avoiding double-frying, not sprinkling salt on chips unless requested, switching from 11-holes salt shakers to 5-holes salt shakers, and favoring products with relatively low amounts of salt, sugar and fat when ordering products from their suppliers.

**Results and Discussions**

Unlike previously conducted interventions by LGAs with takeaway outlets, this intervention through collaborative actions aimed to engage with takeaway outlets on an entirely voluntary basis with no substantial rewards such as awards [5]. Collaboration although only enforced at later stages, implementation and evaluation, of the intervention still proved critical in understanding the different ways takeaway outlets could promote the sale of healthier products, as evidenced by the creation of healthier meals which was made possible through the nutrient content determination facilitated by the expertise of the HEI.

This intervention was originally designed to empower participating takeaway outlets to implement the identified strategies for the promotion and sale of healthier products within their stores. Nevertheless, although much enthusiasm was observed from the takeaway outlets for the intervention, the ownership of initiatives implemented as a result of the intervention was more reserved. As such, implementation of the interventions was heavily reliable on actions from both the LGAs and the stakeholders.

- Go small: Have a smaller portion for less calories, fat, saturated fat, salt and less money.
- Bin the batter: peel off the batter from your fried fish or sausage and eat up to 25% less fat and calories.
- Enjoy your burgers with nothing on: a bun without butter has up to 20% less fat and calories.
- Go sugar free: Water and sugar free drinks contain zero calories (That’s right – none at all!)

![Figure 1: Intervention implementation flowchart.](image1)

![Figure 2: Healthier meal deals promoted through the intervention at participating takeaway outlets.](image2)

![Figure 3: Healthier practices recommended for customers of takeaway outlets.](image3)
HEI, hence the benefit of a collaborative approach to health promotion interventions. Previous interventions of this nature have shifted the burden of implementation to the takeaway outlets by awarding and recognizing their involvement [3-5]. However, the cost of awards needs to be carefully considered and measured against the benefits of the intervention. The semi-structured interview process was crucial in informing the actions takeaway outlets will easily implemented for the success of the intervention. Rapport was also built during the interview process and this is the key to retaining the participation of all the three takeaway outlets.

Overall, as per its objectives, this intervention successfully gained participation of three, not only two, hot food takeaway outlets within the low-income community; it increased the number of healthy menu choices in those hot food takeaway outlets facilitated by a nutrient content determination of the takeaway outlets' existing menus; the proportion of healthy meals sold in the participating hot food takeaway outlets was also increased, although only verbally reported by the takeaway owners, in the participating hot food takeaway outlets. Verbal reports although limiting the credibility of the findings, are still valuable for this pilot intervention, due to the limited facilities these outlets may have. Finally, the intervention successfully influenced all three takeaway outlets in reducing overall calories and levels of fat, salt and sugar across their menus, through the recommendation made to takeaway outlets owners, and through the recommendations made, and displayed in their outlets for their customers.

Adverse effects

No adverse effects or other unintended consequences were observed.

Sustainability

Although successful, the resource intensive nature of this intervention questions its sustainability. Although takeaway outlets expressed a willingness to engage with healthier eating messages provided their existing client base was not alienated, this willingness was not reflected through their engagement. This led to a continuous involvement of the LGAs and HEI to implement all the steps of the intervention. Such a persistent involvement suggests a limitation to the intervention's ability to be implemented beyond a pilot stage.

Conclusion

To our knowledge, this pilot intervention is the first of its type to explore the value of collaboration between stakeholders in interventions with takeaway outlets in low-income communities. Previous interventions have solely relied on the knowledge and expertise available within the LGA. The results of this intervention allude to the benefits of collaboration between LGA and other stakeholders in public health intervention, especially where limited funding is available.

References

4. Lincolnshire County Council (2011) Supporting businesses to supply healthier food. UK.
5. South Norfolk Council (2016) Healthier Options Norfolk Award (HONOR). UK.
7. Food Standards Agency (2015) Frequently asked questions about the food hygiene rating scheme.