Addressing obesity in Roma communities: a community readiness approach

Shahid Islam, Neil Small, Maria Bryant, Tiffany Yang, Anna Cronin de Chavez, Fiona Saville and Josie Dickerson

Abstract

Purpose – Participation in community programmes by the Roma community is low, whilst this community presents with high risk of poor health and low levels of wellbeing. To improve rates of participation in programmes, compatibility must be achieved between implementation efforts and levels of readiness in the community. The Community Readiness Model (CRM) is a widely used toolkit which provides an indication of how prepared and willing a community is to take action on specific issues. The purpose of this paper is to present findings from a CRM assessment for the Eastern European Roma community in Bradford, UK, on issues related to nutrition and obesity.

Design/methodology/approach – The authors interviewed key respondents identified as knowledgeable about the Roma community using the CRM. This approach applies a mixed methodology incorporating readiness scores and qualitative data. A mean community readiness score was calculated enabling researchers to place the community in one of nine possible stages of readiness. Interview transcripts were analysed using a qualitative framework analysis to generate the contextual information.

Findings – An overall score consistent with vague awareness was achieved, which indicates a low level of community readiness. This score suggests that there will be a low likelihood of participation in currently available nutrition and obesity programmes.

Originality/value – To our knowledge, this is the first study to apply the CRM in the Roma community for any issue. The authors present the findings for each of the six dimensions that make up the CRM together with salient qualitative findings.

Keywords Obesity, Nutrition, Roma, Community readiness model

Paper type Research paper

The authors affiliations can be found at the end of this article.

Introduction

UK Government guidance promotes the use of tailored approaches to improve health and wellbeing and to identify approaches "which work best for local people and for specific population groups facing the greatest challenges" (Department of Health, 2011, p. 6). Children from the Roma community are at a high risk of nutrition-related illness and obesity. Research has shown that Roma families living in the UK consume unhealthy meals, often to save time and money, and are unlikely to take part in any exercise activity (Richards et al., 2014). A key finding noted by Richards et al. (2014) described cultural practices regarding food as a contributory factor for high levels of obesity. Loring and Robertson (2014) highlighted causal factors for high levels of obesity in Roma children to include budgeting problems and lack of cooking and storage facilities which impede healthy meal preparation. Issues concerning nutrition and obesity have been reported in Roma communities outside the UK. A study carried out in Czech Republic in 1997 found that nutritional intake of Roma children was insufficient when compared to non-Roma Czech children (Ringold et al., 2005). An EU commissioned report documenting various aspects of life in countries with large Roma populations identified nearly one-third of Roma children in Slovakia as obese, and in Hungary, physical activities amongst the Roma population was found to be less than that of those in the lowest income quartile of the general population (European Commission, 2014).

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Obesity in childhood is a predictor of adult obesity and both have adverse consequences, short and long term. Chief among the many risks associated with obesity are higher levels of morbidity and mortality, including diabetes, cardiovascular disease and cancer (WHO, 2003). The World Health Organisation (WHO) has described obesity as one of the most serious global health challenges for the twenty-first century and has identified prevention and early intervention approaches as being the most effective way to address this challenge (WHO, 2004). While there are some data showing that overall rates of childhood obesity are levelling in the UK (Baker, 2018), levels remain high and there are inequalities in risk with greater prevalence in childhood for those living in deprived neighbourhoods and in ethnic minority groups (Goisis et al., 2016; WHO, 2016). The prevalence of obesity-related issues affecting Roma populations in Europe has been well documented in the aforementioned 2014 European Commission report. Several UK-based studies are mentioned in the report, for example, one study in Sheffield found "Slovak Roma [...] to have high rates of type two diabetes mellitus, cardiovascular disease, premature myocardial infarction. obesity and asthma" (p. 68). When collectively discussing a number of UK-based research projects the same European Commission report states - "these studies have also concluded there is an overall poor awareness of how to maintain a healthy lifestyle amongst Slovak Roma residing in the UK" (European Commission, 2014, p. 55).

Efforts to follow guidance to tailor programmes specifically to engage with Roma communities to prevent obesity are likely to face problems of recruitment and data collection. The Roma can be reluctant to record their ethnicity on official forms because of fears about how data may be used. This reluctance presents researchers and service providers with data validity issues (Ringold et al., 2005; Cools et al., 2017). Mistrust of authorities appears endemic originating in community perceptions of injustices, both historic and recent, perpetrated against the Romani people. These injustices include a history of being enslaved, persecuted, victimised and socially excluded for centuries. Even today, the Roma are reported as experiencing extremely high levels of discrimination in many Central and Eastern European countries (Cools et al., 2017; Gehring, 2013; Matras, 2000). It appears that neither the size of population nor the length of time in Europe has altered this political and ontological position. Roma constitute one of the largest ethnic minorities in Europe with an estimated population of 10-12m people. Roma first arrived in Europe from India approximately 700 years ago and have maintained their distinct identity through culture, traditions and language, and have resisted assimilation into the dominant culture wherever they have lived (FRA, 2012; World Bank, 2005). There is much scholarly debate around the starting point for when exactly the Roma first moved to Europe. There is a degree of certainty and consensus, however, that expulsion and persecution at different times in recent centuries has played a major part in why the Roma have migrated (Matras, 2000; Taylor, 2014). The historical picture, however, is incomplete. For example, the genocide of the Roma at the hands of Nazi Germany and some of its allies, known in Romani as the Porrajmos, has not been thoroughly researched and has not attracted a great deal of media or public discussion (Stauber and Vago, 2007).

Health inequalities, much like histories, are shaped by a range of events and experiences, and various published reviews and guidelines demonstrate that inequalities in health are rarely confined to a single domain but instead have a tendency to appear in clusters (Marmot, 2012; Wilkinson and Marmot, 2003). For example, children who are born into difficult circumstances due to social deprivation are more likely to experience problems with nutrition and obesity, achieve fewer qualifications, experience disadvantages in the labour market and be more likely to access mental health services and/or the criminal justice system (Goisis *et al.*, 2016; Pearson, 2016; Pilgrim and Rogers, 1999). Because these things are intricately connected, addressing any one of them is likely to impact positively on the others, thus improving the life course (Pearson, 2016).

Considering the historical, structural and attitudinal challenges described above, we identified the Community Readiness Model (CRM) as the tool of choice to explore levels of readiness to address nutrition and obesity issues. The CRM is predicated on the argument that, for policy makers, simply knowing that there is a problem does not guarantee that a proposed solution will be embraced by the target community (Edwards *et al.*, 2000). Macintyre (2003) sheds light on the unpredictability that bedevils policy makers and funders when planning new initiatives:

Unfortunately, knowing the prevalence and causes of a health problem does not always tell us the most effective way to reduce it. For example, knowing the links between smoking and lung cancer,

child labour and poor health, or HIV and AIDS may help provide goals such as reducing smoking, child labour, or risky sex, but does not necessarily tell us how to achieve these goals. As is apparent from several fields, the plausibility of proposed interventions is no guarantee of their actual efficacy. Thus anyone wanting to reduce inequalities in health is faced with a lack of information about what actions would be most successful. (p. 5)

The purpose of this paper is to identify the level of readiness in the Roma community to address issues related to nutrition and obesity, and to examine the specific dimensions from within the CRM in some depth. We start with the premise that alignment between implementation efforts for new programmes and the level of readiness within a community is crucial, and programmes which fail to create a symbiosis between community readiness and implementation efforts risk failure (Edwards *et al.*, 2000).

Methodology

The CRM seeks to provide some approximation on the plausibility of acceptance and uptake of an issue based initiative by a community and thus reduces the uncertainty Macintyre (2003) mentions above. The model was originally developed in the USA for assessing a community's readiness to address alcohol and drug abuse and has, subsequently, been applied to cover a diverse range of issues including domestic violence in Korea (Han, 2003), childhood obesity in the UK (Kesten *et al.*, 2015) and HIV/AIDs in Bangladesh (Aboud *et al.*, 2010). The CRM can be tailored to a particular issue and relies on interviewing between four and six local experts as key respondents, defined as people who understand the community in an intimate way.

The CRM tool

The CRM is a mixed method approach which incorporates a qualitative component (Kesten et al., 2015; Sliwa et al., 2011) and a numerical score. In order to score a community's stage of readiness, information is collected through the heuristic device of a community readiness tool (CRT). The CRT is comprised of 36 questions spread across six dimensions of readiness, these are: community efforts, community knowledge of the efforts, leadership, community climate, community knowledge of the issue and resources for prevention.

The model identifies nine stages of readiness that range from "no awareness" of the issue to "high level of community ownership" (see Table I). Once a community's stage of readiness is identified, plans can be formulated to raise levels of community readiness through engagement and communication exercises appropriate at each level and barriers that may impede community participation can be addressed.

Setting

The geographic area chosen for this study includes three electoral wards within the city of Bradford in the north of England. It is an area in which the Better Start Bradford programme operates. This programme is funded through a Big Lottery grant. Amongst its aims is to facilitate improvements in nutrition and reductions in obesity for pregnant women and for their children under the age of four. The three wards are considered among some of the most deprived in England and they have a settled and growing Roma population (Dickerson *et al.*, 2016; Ingold, 2014).

Ethics

Ethical approval for this study was granted by the University of Bradford Ethics Committee on 22 December 2016 (EC2435).

Participants

Potential respondents were identified through discussions with staff members from the Better Start Bradford team. The list of key respondents identified was further refined with the advice of the Better Start Community Research Advisory Group which is comprised of members of the public who are trained in considering research issues from the vantage-point of communities.

Table I Nine point readiness scale for Community Readiness Model					
Stage	Description				
1. No Awareness	Issue is not generally recognised by the community or leaders as a problem (or it may truly not be an issue)				
2. Denial/resistance	At least some community members recognise that it is a concern, but there is little recognition that it might be occurring locally				
3. Vague awareness	Most feel that there is a local concern, but there is no immediate motivation to do anything about it				
4. Pre-planning	There is clear recognition that something must be done, and there may even be a group addressing it. However, efforts are not focussed or detailed				
5. Preparation	Active leaders begin planning in earnest. Community offers modest support of efforts				
6. Initiation	Enough information is available to justify efforts. Activities are underway				
7. Stabilisation	Activities are supported by administrators or community decision makers. Staff are trained and experienced				
8. Confirmation/expansion	Efforts are in place. Community members feel comfortable using services, and they support expansions. Local data are regularly obtained				
High level of community ownership	Detailed and sophisticated knowledge exists about prevalence, causes and consequences. Effective evaluation guides new directions. Model is applied to other issues				
Source: Plested et al. (2006	6, p. 9)				

Key considerations of this group include appropriateness and acceptability of research methods and ways to improve recruitment. Subsequently, through purposive sampling, we identified and interviewed six key respondents who were considered to have extensive experience of working with the Roma community and therefore could confidently answer questions relating to community readiness. We were able to identify key respondents who matched this criterion through recruiting two community centre managers representing different organisations (Tamara and Grainne), a community mentor (Sam) and a volunteer who provides a liaison function between statutory services and the Roma community (Freddie). Some of the key respondents were migrants from Central and Eastern European countries employed by statutory organisations in the city to work with the newly settled communities (Agata and Lucyna). All of the last four were able to converse in languages familiar to the Roma. All names used in this paper are pseudonyms.

Recruitment and consent

Key respondents were contacted via telephone or e-mail, and if they were interested and willing to participate, then a date and venue was arranged. All participants were taken through an informed consent process before the interview.

Topic guide

Interviews proceeded by using the topic guide found in the Handbook of CRM (Plested *et al.*, 2006). This included 36 questions which related to the six dimensions of the tool. By way of an example, the questions include the following:

- What type of information is available in your community regarding this issue?
- What does the community know about these efforts or activities?
- How are these leaders involved in efforts regarding this issue? Please explain.

Analysis

Interviews were conducted by the first author in locations which were most convenient for respondents and took place during a three-month period from March to May 2017.

Interviews lasted between 38 and 64 min and were audio-recorded and transcribed verbatim. Respondent's transcripts were given a pseudonym to ensure confidentiality and their job roles removed to reduce the risk of identification. Interview transcripts were independently scored by two authors (TY and FS) using the anchored rating scales of the CRT to assign scores ranging from one through to nine for each of the six dimensions. Following the guidance offered by Plested et al. (2006), both scorers independently rated each of the six interviews and then agreed a consensus score for each interview after discussing and resolving differences in scores they had independently reached. The consensus scores were then summed across each dimension and divided by the number of interviews to generate a mean stage score for each of the six dimensions. This score indicates the stage of readiness for that dimension. The dimension scores and the overall mean community score are rounded down, as per the guidance (Plested et al., 2006).

Following the critical discussion and guidance offered by Kesten *et al.* (2015) on the CRM, we analysed the qualitative data through NVIVO 11 software, using framework analysis (Ritchie and Spencer, 1994; Srivastava and Thomson, 2009). Since the purpose of this study was to produce a useful categorisation scheme for community readiness using questions organised around the six dimensions, we then arranged these *a priori* dimensions into analytical themes. These were indexed systematically, a process which entailed comparison within and between the themes. At this stage, it became necessary to chart and rearrange segments of the data to ensure contents were placed under the heading of the theme that most appropriately suited them. For example, when issues discussed under the theme of knowledge about efforts seamlessly evolved into discussions about knowledge about issues, then these were appropriately relocated. These proceedings were validated through discussion with members of the team familiar with the transcripts (TY and FS). Data interpretations were also discussed within the wider research team who were able to provide supervision and guidance about the emergent findings.

Results

In presenting the findings, we start with the overall community readiness score along with the individual scores for the six dimensions. We then draw upon the qualitative analysis to provide context and saliency to the numerical scores.

CRM score

The mean overall CRM score for the Roma community was 3 (SD = 1.02), corresponding with the vague awareness stage of readiness. Such a stage of community readiness is described by the authors of the CRM as being when:

There is a general feeling among some in the community that there is a local problem and that something ought to be done about it, but there is no immediate motivation to do anything. There may be stories and anecdotes about the problem, but ideas about why the problem occurs and who has the problem tend to be stereotyped and/or vague. No identifiable leadership exists or leadership lacks energy or motivation for dealing with this problem. Community climate does not serve to motivate leaders. (Edwards *et al.*, 2000, p. 297)

Table II provides the data in full, showing the overall dimension score alongside individual interview scores for each dimension. This table is then followed by a commentary relating to the qualitative findings which provide context for the numerical scores.

Qualitative findings

Community efforts. Most respondents acknowledged that a variety of services, both targeted and universal, had been made available to tackle obesity and nutrition issues. Comments were broadly congruent with a score showing efforts were either planned or initiated (mean = 5, SD = 1.79). One respondent described a proactive approach taken by school staff who offered firm advice about which foods were considered unsuitable for lunch breaks and encouraged

	Interviews						
Dimension	1	2	3	4	5	6	Mean (SD) stage score
Community efforts	3.50	3.00	7.00	7.00	6.50	6.00	5 (1.79)
Community knowledge of the efforts	3.75	4.00	3.50	5.00	4.50	3.75	4 (0.56)
Leadership	3.50	3.75	5.50	0.50	3.00	6.00	3 (1.96)
Community climate	3.00	4.50	1.25	3.00	1.75	1.00	2 (1.33)
Community knowledge about the issues	3.00	4.00	3.25	4.25	3.50	1.50	3 (0.97)
Resources related to the issue	3.00	3.75	6.00	3.00	2.75	3.00	3 (1.23)
Overall CRM Score							3 (1.02)

parents to provide healthier snacks. As a result of these efforts, Freddie described how he has seen progress in the Roma community:

You know, 7 or 8 years ago when I started it was a problem, you know, because the Roma children used to bring all sorts to school [...] this is how it works, first we had trouble, kids were bringing all sorts of sugary things and other things to school for their packed lunch but now it's much better, improved 80% or 90% improved. (Freddie)

In line with the evidence, which suggests multiple approaches work better than a single one to tackle the complex issue of obesity (Huang et al., 2009), Tamara described the approach her community centre had taken to augment the above:

We've gone into school and strengthened what the school was doing by doing it in their mother tongue and by taking in foods that the Roma community know and that the young people knew, and did it around not just health, we did it around beauty, about looking good. So when we did a message around how this will help improve the way that you look, that was a real plus.

Whilst school settings provide a platform for cascading messages about diet and nutrition to families, they do not always offer engagement with parents who have very young children (i.e. under four years) and so an overreliance on schools may lead to missed opportunities. In recognition of this possibility, respondents described efforts outside of the school setting which included engaging families through Children centres and community centres. One example, from Grainne, highlights the degree of cultural competence and contrivance needed to make a programme work:

About three years ago we tried to do "cook and eat" in the formal way that Public Health do them, so we tried to bring (Roma) families into the centre where there was cooking facilities and it was a nightmare. Because as soon as you brought them into here, you'd get mum, dad, and grandmas and granddads and all the extended family would come and all the children and it was just bedlam. So we went back to Public Health and said, you know "we've tried it, we've really tried to deliver the cook and eat in the way that you designed them, it's not working, please can we redesign them?" And that's when we went into the families' homes and that just works so much better because it's contained.

Community knowledge of efforts. Community knowledge about past and existing efforts to improve nutrition and obesity, received a score of 4 (SD = 0.56) consistent with the pre-planning stage. Respondents offered insight about the "postcode lottery" affect which meant accessible services for people of Romani heritage were available in some areas but not others, and living in a neighbourhood where services were designed to be inclusive of the Roma community (i.e. through employing people with relevant language skills, welcoming of the Roma and outreach workers who understand the culture) correlated with higher levels of awareness. Conversely residing in an area where no such services were available resulted in lower levels of awareness and consequently reduced levels of engagement. Grainne explained that the services targeted at the Roma community through the centre she was based in were almost exclusively attended by local Romani residents and rarely attended by Roma who lived in other areas. This connection between local proximity, levels of awareness and levels of participation suggests these three variables work in concert and have a positive bearing for this dimension. But these aspects were themselves bounded by capacity and reach issues. Even if existing locally based

community services were able to work at their maximum ability, their ability to improving knowledge about resources available in the community could only achieve a modest impact due to the resources available to engage families. One respondent summed up the problem in the following way:

As much as we can talk to 200 families in a year that we work with – There's about 20,000 out there, you know, tip of the iceberg stuff, you know. (Tamara)

Leadership. The leadership discussion generated a higher rate of variability in scores than any other dimension (mean = 3, SD = 1.96). A key problem witnessed in nearly all of the interviews was the difficulty experienced in identifying leaders. Consider the following responses to the question we asked: "who are the leaders specific to the issue in your community?":

I have no knowledge here in Bradford, or in this local area, that there is any leader. (Agata)

I would have thought their GP really, their local GP, they'll signpost them to different eating clinics or dieticians. (Lucyna)

At the moment I don't think there's a leader, you know, no leaders. (Freddie)

I don't know. (Sam)

These responses resulted in a dialogue on what might constitute a leader. When factors such as advocacy, championing and influencing were identified as aspects of leadership this enabled most respondents to identify either an organisation or a role model they could associate with a leadership role. Guidance by Plested et al. (2006), in the handbook on CRM, suggests keeping possibilities open as they describe leadership to include: "appointed leaders and influential community members" (p. 33). Despite this latitude in definition, leadership presented an inconsistency between how it is posited in the CRM and how Roma societies are characteristically organised. We found that, despite high levels of social solidarity amongst the members of the community, this "togetherness" was not formed around any recognisable local leadership. A similar finding was revealed in the "community needs assessment" carried by the local authority which reported that leadership was a missing link in their efforts to connect health initiatives with the Roma community (Ingold, 2014). Whilst most scores were low for this dimension, there were two respondents who took a different view and reflected positively about the work of two organisations who had embraced the responsibility to improve health for the Roma community, and in doing so, came to be seen as leaders.

Community climate. This dimension scored 2 (mean = 2, SD = 1.33), corresponding to the denial/resistance stage. Discussions about community climate identified a number of impediments to taking part in programmes. Chief among these were issues related to the life course of the Roma community, whereby discriminatory encounters and a resulting sense of social exclusion have left an indelible impact on attitudes towards seeking help and accessing services. Thus, instead of engaging with services, the default position has leaned towards avoidance and self-sufficiency. The comment below typified the conversations we heard:

They're survivors. They've had to survive all the way down through their history. Somehow they will find a way of making ends meet because that's all they know. They don't know being helped and that's why I think sometimes people take them the wrong way. (Sam)

This position, which combines recalcitrance with resilience, stems from the mistrust of authorities in their country of origin and other EU countries and was not seen as new or surprising given the discrimination the Romani people have endured (Cviklova, 2015; Matras, 2000). The tendency to keep to their inner-circle was therefore seen as logical, as Agata describes:

It is lack of trust, to any kind of services. I think it's because they were isolated in their own countries as well, even if they send their own children in Slovakia and Czech to the mainstream school, those children were subject of discrimination because of their skin colour, so it's something from the generation-to-generation I think in the minds, so they prefer to keep on the side, rather than being the part of the community, and general community I think.

A unifying reference point, mentioned by all respondents, was the impact of poverty on Roma families and how this meant immediate and basic needs would often crowd out considerations of a healthy lifestyle. This is not peculiar to the Romani people; poverty and poor diets are often

found in the same community (Baker, 2018; Goisis et al., 2016; Loring and Robertson, 2014). Such a community climate was not conducive to a positive uptake of programmes. A compounding factor in this milieu was the rise in cheap fast-food outlets selling calorie-dense products at very low prices. This may have alleviated the problem of food affordability which is crucial for people on low incomes but, as a consequence, was likely to increase the risk of families having poor-quality diets. Whilst respondents were cognisant of the potential long-term health effects of high fat take-away meals, they were equally able to empathise with the dilemma facing families on low incomes, as the following comment shows:

Let's say you have a family with five kids and the kids are hungry, okay, they go, mum I want this, mum I'm hungry. So you give them £5 and they think, oh I'll get chicken and chips for £5, you know what I mean. For that you can get chicken and chips for £5 and when you're doing bad, you know, when you live in an area like (name) and you're struggling, you have no job, you're just living from your benefits, you can eat for a fiver, you know. (Freddie)

Community knowledge about issues. This dimension scored as low as the community climate dimension, indicating denial/resistance (mean = 2, SD = 0.97). As discussed above, the limited food choices resulting from material poverty, coupled with limited knowledge about the issue, are likely to act in concert to create a culture whereby nutritional and obesity considerations are not at the forefront of people's lives. Whilst campaigns promoting health messages are common-place in the UK, they are not considered to have penetrated into Roma communities. Some respondents drew a link between the community's extant knowledge about this issue and the countries they had migrated from, as illustrated in the point made as follows:

In this country (UK) it's always been advertised, as sugar is not good for you but in Slovakia it hasn't been advertised that much and especially from the Roma community and a lot of us used to live in segregated villages, outside of cities, outside of the world, they never heard of things like, "oh chocolate is bad for you", they only realise after a few years when the teeth are really bad and they have diabetes or whatever from that, you know. (Freddie)

A likelihood of attendance to voluntary programmes requires people having some prior knowledge about the issue and the potential benefits that may be accrued through attendance, such as the opportunity to gain new knowledge and skills. An important consideration here is the limited English language skills amongst the first generation of Romani people and the potential barriers this may give rise to. Respondents described this as a two-fold problem: first, the limited engagement efforts by professionals using the right languages to recruit people from Roma community into programmes; and, second, the delivery of programmes in the relevant languages to make the content meaningful. Both of these were seen as blockages to participation.

Cultural competence of service providers is a prerequisite of successful support programmes, and this includes taking into account the language and literacy skills of any given community (McCurdy and Daro, 2001). Respondents highlighted the value of delivering projects through staff members who shared the Roma identity and they offered some positive examples where this method had been employed. Whilst most respondents agreed inclusive ways always yielded better results, they were also mindful of the barriers to achieving this, including funding shortages.

Resources related to issue/prevention. We placed this dimension at the stage of vague awareness (mean = 3, SD = 1.23); consistent with the overall community readiness score. When analysing the discussion relating to volunteers as a resource, we noted a pattern emerging showing volunteering to be an "alien" concept for the Roma community. A recurrent point we heard was that volunteering did not have a cultural fit to the socio-economic status of the Roma, and any efforts to improve the rates of taking up voluntary roles had only achieved a modest amount of success. Volunteering was perceived as a luxury undertaken by the privileged classes. One respondent explained:

I remember one of our paid Eastern European workers saying to me "you've got to understand Grainne in the countries they've come from it was the rich people that volunteered, poor people don't volunteer" and they see themselves as poor people so why would they volunteer? (Grainne)

Other tangible resources designed to improve nutrition and reduce obesity, such as classes for learning about healthy lifestyles, feeding routines and practical sessions such as "cook and eat",

were seen as important but access to them was bounded by the social and environmental circumstances facing this community. Long working hours, often in the unregulated economy, language barriers, insecure housing tenures and limited welfare benefit rights made it difficult for Roma families to think beyond their basic physiological needs. Enroling on health and social wellbeing courses, in such circumstances, did not feature as a priority. Some of the points raised in discussing this dimension were highly charged as three respondents argued that most of the programmes available in community centres and children centres are designed in ways that require the Roma community to fit the service and not the other way round, something which unwittingly resulted in their exclusion. If people were expected to participate, then this required some material change in their circumstances to enable their participation otherwise the expectation was misplaced. On this point, one of the respondents saw this as "history repeating itself" and drew a parallel between the current Roma community and the original diaspora of Pakistanis when they first arrived in Bradford during the 1960s. Tamara lamented:

I know how difficult that was, you know, and we haven't learnt anything from that, you know. We're doing the same thing again, we're trying to make a community conform to what we know is right without helping them along that journey of change from where they were. You know, we're trying to get them to jump from zero to five and just jump.

Discussion

Our study has shown that efforts to address issues related to nutrition and obesity in the Roma community, when considered from the complex lens of the six dimensions of the CRM approach, are unlikely to be prioritised or embraced by the community. Efforts to tackle the issues were in place, but these were not compatible with the community's awareness about the issues or with the community climate. This creates a mismatch between community readiness and implementation efforts. An overall score of 3 suggests a vague form of awareness about the issue and therefore a limited imperative for any action.

In light of our findings on the Roma community, it seems appropriate to quote George Orwell (1937) from *The Road to Wigan Pier*, in which he argues that only the rich can include in healthy and wholesome food; the poor are instead forced to eat instant and tasty food. He goes on to say –"and the particular evil is this, that the less money you have, the less inclined you feel to spend it on wholesome food" (p. 88). Whilst these sentiments strongly resonate with our findings, one prominent change in the 80 years since Orwell's words were published can be found in the social distribution of obesity, "in the past the rich were fat and the poor were thin, but in the developed world these patterns are now reversed" (cited in Wilkinson and Pickett, 2010, p. 91). For the Roma, we can see how the expediency of eating on a low budget may take precedence over eating healthily which inevitably increases rates of obesity.

It is not only the widespread availability of cheap calorie-dense foods which can be implicated for rising rates of obesity and associated health problems; we saw how limited knowledge about the issues and awareness about the available efforts to tackle them play their part. The low scores attained in both of these dimensions necessitate community engagement approaches which improve awareness about what is offered and why it is important in a way that takes account of cultural and historical sensitivities, such as language needs and low levels of trust.

The designers of the CRM offer some guidance on actions to consider to improve a score of 3. They suggest a focus designed to "raise awareness that the community can do something" (Edwards *et al.*, 2000, p. 303). They then go on to list a number of strategies to achieve this aim. These can broadly be described as community engagement; for example, they suggest "present information at local community events" (p. 303), and "begin to initiate your own events" (p. 303).

In any attempts to raise awareness, language competencies must be seen as a crucial component to success as they act as both barriers and facilitators. A systematic review exploring the relative strengths of different types of community engagement approaches found supporting evidence for approaches which employ people from the target communities as conduits for engagement (Cyril et al., 2015). This finding echoed with responses we heard and corresponds with the key findings in a systematic review completed by McFadden et al. (2018), which identifies

a number of studies that favourably discuss the role of outreach workers to improve access to, and uptake of, services amongst Roma communities. To take just one example, a randomised control trial to reduce HIV and sexually-transmitted diseases amongst Roma men found a significant difference when they employed men from the Roma community to take forward the health messages (Kelly *et al.*, 2006).

Strong leadership is identified in the CRM as the key ingredient if a community is to move up from a score of 3 (vague awareness) towards 4 (pre-planning), and Edwards *et al.* (2000) stipulate that the community needs "identifiable and active and energetic leaders who are able to make decisions about what needs to be done and who will do it" (p. 299). Our research found, at a local level, this may not be compatible with how the Eastern European Roma communities operate. While leadership does not always necessitate membership of a group, the cautionary point raised by Cools *et al.* (2017) about the implication of leadership from outside is important:

A growing number of ("expert") actors make claims on behalf of the Roma, while the Roma themselves remain underrepresented in many key positions and platforms with little control over their public image. Cases have been described in which NGOs and social workers "colonise" needs interpretations on behalf of the Roma. (Cools et al., 2017, p. 4)

Indeed, a limitation of the CRM research method is the focus on expert views. The paucity of reported Romani views in understanding barriers and facilitators for taking part in programmes presents a fertile area for research. Understanding and redressing, the absence of such voices could then consolidate the reliability of the CRM score and make more robust subsequent programme development plans. Though, it must be stressed that including these voices could only proceed after building a sufficient level of trust with the community.

The ontological conditions and social capacity issues of the Romani people who have recently migrated to the city where this research was conducted are similar to those who share this identity in other geographical neighbourhoods. It is therefore probable that the community readiness scores we have reached for nutrition and obesity may apply in other cities with Roma communities. However, caution must be exercised in generalising from our small study area, three wards in one UK city. Equally, we cannot generalise to say that the experience of other communities is likely to produce the same score as the Roma community even if they share similar characteristics and experiences.

Conclusion

To our knowledge, this research is the first time the CRM toolkit has been applied to gauge levels of readiness in the Roma community for any issue. This model has proven useful across a number of dimensions as it lays the basis for identifying particular areas related to community readiness that need to be addressed in order to create compatibility between intervention efforts and the community's willingness to participate. The qualitative analysis of transcripts further augmented the finding by providing contextual information about the social, economic and political circumstances surrounding the numerical scores. Taken together, score and context can assist with formulating plans to improve levels of readiness in the Roma community for the issues of obesity and nutrition.

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