Health Beliefs in the Bangladeshi Community in Tower Hamlets: An Exploratory study of beliefs relating to food.

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Introduction

The desire to do this research developed from an interest expressed both by nursing and receptionist colleagues to be involved in the research process. As we were in the fortunate position of having receptionists drawn from the Bangladeshi community it seemed a natural progression to base our research amongst a population group that makes up a significant minority of our client group. According to the 2002 census, 33.4% of the population in Tower Hamlets are of Bangladeshi origin (http//: www.statistics.gov.uk). Whitechapel Walk-in-centre is located in Tower Hamlets and 29% of its clients are of Bangladeshi origin (Whitechapel Walk-in-Centre 12 Month Development Plan 2002/2003), clearly reflecting the population. This ties in well with the ethos of the Walk-in-Centre, in that it is committed to developing both its nurses and receptionists. The fact that we have the resource of receptionists from the Bangladeshi community has helped and will continue to help to inform the research process in examining beliefs amongst this community. One long-term objective is to enable the development and training of researchers from the Bangladeshi community.

Literature Review:

Research has established that people of Bangladeshi origin in the UK continue to experience poorer health than other sections of the community (Rhodes and Nocon, 2003; Modood et al. 1997). Poor diet is a significant contributing factor to poor general health in this minority ethnic group and subsequently to the increased levels of diabetes and other chronic illnesses in this group, in comparison to the white British population. (Greenhalgh et al, 1997).

Greenhalgh identifies firm views held by members of the Bangladeshi community with regard to diet, what is and is not acceptable. These views differed significantly from those held by dieticians. Similarly Greenhalgh identified a lack of awareness of the importance of exercise in maintaining ones health. These findings are born out by

anecdotal evidence from nursing colleagues who have carried out consultations with patients from the Bangladeshi community. There is a perception developing amongst staff that patients from this community have generally a poor diet and little awareness of the importance of exercise.

Greenhalgh et al identified in their study that the majority of their participants were older first generation Bangladeshis'. They therefore could not make a comparison between first generation and second generation Bangladeshis'. We sought to make such a comparison by questioning individuals from both generations. At the Walk-in Centre we have access to individuals across different age bands from both the first and second-generation Bangladeshi population in Tower Hamlets.

Greenhalgh et al (1998) in her qualitative research study carried out in the East End of London looking at health beliefs and diabetes highlights the complexity of the Bangladeshi culture in this area of the UK. The paper identifies similarities as well as differences between Bangladeshi and non-Bangladeshi cultures including understanding about diet and nutrition and the importance of this in developing culturally sensitive diabetic education. Her study showed that participants (first generation Bangladeshi) appeared highly motivated to change their diet but lacked understanding about the nutritional properties of different types of food.

Research completed by Greenhalgh and colleagues 1998-2005 includes examples of Bangladeshi perceptions as well as structural and material barriers to a healthy diet and the implications of these findings for health groups. The work highlights the importance of a 'what to do story' told by another Bangladeshi for the healthcare process to be most successful. 33 articles cite this study since its publication in 1998 identifying the importance of developing different and alternate methods of information exchange for South Asians with diabetes including (Fischbacher, Hunt, and Alexander 2004). Two letters one from Jim Hardy GP (1998) reinforces Greenhalgh et al's emphasis on beliefs and alternate ways of viewing medicine and sharing amongst community members. General practitioner Anna Livingstone and June Gray Health promotion nurse in Tower Hamlets(1998) emphasise the importance of social context in chronic disease management reinforce the need to consider alternative approaches to health education with the Bangladeshi population.

Greenhalgh et al's (2005) most recent research published this year with colleagues reinforces the results of her initial research and emphasises the importance of three essential ingredients for improving healthcare for non English speaking patients. They are:

- bilingual health advocate training
- organisational support for establishing advocate led services for the Bangladeshi community
- and running advocate led user groups. (Greenhalgh et al 2005)

Research Setting

The findings from the literature review need to be adapted to the specific context of the Whitechapel Walk in Centre, the local patient population and their specific needs, as well as staffing and skill mix at the Whitechapel nurse led Walk-in Centre. All of these factors affect the feasibility of undertaking this exploratory study and highlight the need to develop a research question that both contributes to the existing body of knowledge while also building research capacity locally.

More than a quarter of the patients attending the Whitechapel WiC are first and second generation Bangladeshi. Bangladeshi interpreters work as front line receptionists. Nunu Miah, Afia Khatun Ali, Roksana Begum and Aysha Begum are bilingual interpreters working for the WiC were keen to be involved with this research; and the more senior nurses are required to participate in audit and research as part of their job description. One of the aims of this study was to aid us in the development of a more appropriate health promotion and education programme for the Walk-in Centre.

Greenhalgh et al. al. (1998) undertook their study with first generation Bangladeshi people. After consultation with Clare Grace a Research dietician fellow at Queen Mary's University London who is conducting a qualitative study in Tower Hamlets with Greenhalgh using focus groups we decide to research first with second generation Bangladeshi patients attending the Whitechapel WiC to address the following research question:

Aims:

- To undertake a pilot study to identify whether there are differences in beliefs about healthy and unhealthy foods (or something similar) between the first and second generation Bangladeshi population of Tower Hamlets
- To develop the research capacity of allied health professionals and Bangladeshi interpreters in a nurse led environment.

Methods:

A questionnaire was used which included pictures of different types of food and an interpreter marked whether the participant agreed or disagreed with the questions relating to the pictures. In each exercise, research subjects were asked to pictures representing different categories. The pictures represent (by words (Bengali and English) and/or pictures) (i) a range of Bangladeshi and Western foods. The categories represented: healthy or not healthy, strong or weak, high or low in fat, high or low in sugar, high or low in fibre. There were 12 pictures in total. (In Bangladeshi culture "strong" foods may represent perceived nourishing power and digestibility and include white sugar and ghee. "Weak" foods are preferred for the everyday diet for the old or infirm and include included boiled (pre-fluffed) rice and cereals. (Greenhalgh et al, 1998))

Researchers recorded the answers in each category for each participant. They also recorded whether the participant was part of a family without children, with children at school, or a family with grown up children, their age and gender and any relevant comments related to the participants domicile when the exercise was carried out.

Data about the categorisation of information was entered in a database, and analysed using summary statistics by age, gender, length of time living in UK or developed world and whether or not born in UK

Recruiting subjects:

WWIC reception staff approached patients while they were waiting for a consultation. They explained the study and obtained informed consent, using the language preferred by the patient. Written information was available in English and Bengali, and reception staff read out a Sylheti translation where that was the chosen language. The interviews were carried out in a consultation room in the Walk-in-Centre to ensure confidentiality.

Timetable:

September 2005 – December 2005:

- Research Ethics Committee approval was applied for and granted.

January - May 2007:

- Collect data in the Walk-in Centre.

June-November 2007:

- Analysis and report-writing.

2008:

- Publication of results expected.

Resources:

Walk-in-Centre staff at the Walk-in-Centre carried out the study during opening hours. Academic support was provided by Professor Susan Proctor Stephen Abbott and Ambi Nijjar. Jane Bickerton, nurse consultant and Mary Daly, research coordinator at the Walk-in-Centre, supervised the collection of data. They were responsible for and organising the analysing and writing up of the data. This involved 1 day/week over the course of the project. Other resources that were necessary were funding for the receptionist staff while they were carrying out the interviews. Nunu Miah, Afia Khatun Ali, Roksana Begum and Aysha Begum were the receptionist/research assistants. 1 interview took about 20 minutes.

Results:

Data analysis:

Where figures do not sum to the expected total, this is due to missing data. Tests were not done for statistical significance, because the data set is too small. Because the sample was opportunistic, the results are not generalisable about the Bangladeshi population in Tower Hamlets as a whole.

1. Profile of respondents.

Number of respondents = 33

Male: 12; female: 21

Age: 20 were 30 or under (range = 12-30); 13 were 31 or over (range = 32-69)

Education: 16 in UK; 10 in Bangladesh; 2, other.

Total time living in developed country:
3 years or less: 4; 4 – 20 years: 11; 21 or more: 17

Proportion of life lived in developed country:
All or most (70 %+): 14; 30-70%: 12; little (less than 30%): 6

2. Beliefs about food

2.1 Are these foods healthy?

Numbers (percentages)

	Yes	*No*	*Don't know*
burger and fries	4 (12.1)	29 (87.9)	0
tandoori chicken	19 (57.6)	9 (27.3)	3 (9.1)
salad	32 (97.0)	1 (3.0)	0
ghee	4 (12.1%)	27 (81.8)	2 (6.1)
cola	3 (9.1)	30 (90.9)	0
pepper / morris	14 (42.4)	17 (51.6)	2 (6.1)
porridge / khoi	26 (78.8)	3 (9.1)	4 (12.1)
gourd curry / khodu niramish	24 (72.7)	7 (21.2)	1 (3.0)
yogurt / doiee	27 (81.8)	3 (9.1)	2 (6.1)
Asian sweets / mishti	7 (21.2)	26 (78.8)	0
cabbage / khobi	32 (97.0)	1 (3.0)	0
white rice / bhatt	26 (78.8)	5 (15.2)	2 (6.1)

There were some answers that were very clear to the participants whereas pepper offered some ambiguity. Asking the professionals afterwards suggested even more ambiguity about other categories. Is yogurt healthy? Yes definitely. What about when it is chocolate yogurt as the picture suggests? Is white rice healthy? Definitely not as healthy as brown rice. We have left the results stand as the process of carrying out the research was also relevant and the questions that were raised afterwards were also part of the learning process.

2.2 Are these foods strong or weak?

Are these foods weak?
Numbers (percentages)

	Yes	*No*	*Don't know*
burger and fries	12 (36.4)	9 (27.3)	12 (36.4)
tandoori chicken	7 (21.2)	15 (45.5)	10 (30.3)
salad	4 (12.1)	28 (84.8)	1 (3.0)
ghee	11 (33.3)	15 (45.5)	7 (21.2)
cola	18 (54.5)	9 (27.3)	6 (18.2)
pepper / morris	12 (36.4)	13 (39.4)	8 (24.2)
porridge / khoi	4 (12.1)	20 (60.6)	9 (27.3)
gourd curry / khodu niramish	6 (18.2)	20 (60.6)	7 (21.2)
yogurt / doiee	6 (18.2)	20 (60.6)	7 (21.2)
Asian sweets / mishti	11 (33.3)	14 (42.4)	8 (24.2)
cabbage / khobi	7 (21.2)	22 (66.7)	4 (12.1)
white rice / bhatt	5 (15.2)	23 (69.7)	5 (15.2)

Are these foods strong?

Numbers (percentages)

	Yes	*No*	*Don't know*
burger and fries	11 (33.3)	14 (42.4)	7 (21.2)
tandoori chicken	18 (54.5)	2 (6.1)	12 (36.4)
salad	25 (75.8)	4 (12.1)	4 (12.1)
ghee	19 (57.6)	7 (21.2)	7 (21.2)
cola	16 (48.5)	11 (33.3)	6 (18.2)
pepper / morris	18 (54.5)	7 (21.2)	8 (24.2)
porridge / khoi	19 (57.6)	3 (9.1)	11 (33.3)
gourd curry / khodu niramish	22 (66.7)	6 (18.2)	5 (15.2)
yogurt / doiee	18 (54.5)	6 (18.2)	9 (27.3)
Asian sweets / mishti	16 (48.5)	9 (27.3)	8 (24.2)
cabbage / khobi	25 (75.8)	3 (9.1)	5 (15.2)
white rice / bhatt	23 (69.7)	6 (18.2)	4 (12.1)

The categories of strong and weak food were not understood by many of those interviewed. The rate of Don't Know for these questions was much higher than for other questions, across all twelve foods, and in 16 cases, interviewers recorded that the interviewee did not understand the term. As already stated, these terms were taken from Greenhalgh et al's (1998) study of the folk beliefs of first generation Bangladeshis. The fact that our sample included many who were educated in the United Kingdom or had lived in high income countries for many years may be sufficient explanation of the difference between the two studies. Thus, a well-intentioned use of the literature to increase the validity of the study did not do so, largely because, as is well-known, BME communities are not necessarily homogeneous in their attachment to 'folk beliefs'.

2.3 Are these foods high in fat?

Numbers (percentages)

	Yes	*No*	*Don't know*
burger and fries	32 (97.0)	1 (3.0)	0
tandoori chicken	17 (51.5)	12 (36.4)	3 (9.1)
salad	2 (6.1)	31 (93.9)	0
ghee	31 (93.9)	1 (3.0)	0
cola	20 (60.6)	9 (27.3)**	4 (12.1)
pepper / morris	1 (3.0)	29 (87.9)	3 (9.1)
porridge / khoi	6 (18.2)	16 (48.5)	11 (33.3)
gourd curry / khodu niramish	8 (24.2)	20 (60.6)	4 (12.1)

yogurt / doiee	10 (30.3)	19* (57.6)	2 (6.1)
Asian sweets / mishti	32 (97.0)	1 (3.0)	0
cabbage / khobi	0	33 (100.0)	0
white rice / bhatt	15*** (45.5)	2 (6.1)	15 (45.5)

[*may eat low fat yogurt; ** suggests that some people assume that all unhealthy food must be high fat; *** suggests people can't distinguish between carbohydrate and fat.]

2.4 Are these foods low in sugar?

Numbers (percentages)

	Yes	*No*	*Don't know*
burger and fries	10 (30.3)	19* (57.6)	4 (12.1)
tandoori chicken	14 (42.4)	10 (30.3)	9 (27.3)
salad	21 (63.6)	10* (30.3)	2 (6.1)
ghee	8 (24.2)	15* (45.5)	10* (30.3)
cola	12** (36.4)	19 (57.6)	2 (6.1)
pepper / morris	11 (33.3)	15 (45.5)	7 (21.2)
porridge / khoi	16 (48.5)	9 (27.3)	8 (24.2)
gourd curry / khodu niramish	17 (51.5)	13 (39.4)	3 (9.1)
yogurt / doiee	15 (45.5)	15*** (45.5)	3 (9.1)
Asian sweets / mishti	6 (18.2)	26 (78.8)	1 (3.0)
cabbage / khobi	16 (48.5)	15* (45.5)	2 (6.1)
white rice / bhatt	15 (45.5)	15* (45.5)	3 (9.1)

[* as above (i.e. people don't understand about which fats, carb, sugar are in which foods; ** may drink diet coke? *** depends on what sort of yogurt]

2.5 Do these foods have high fibre?

Numbers (percentages)

	Yes	*No*	*Don't know*
burger and fries	2 (6.1)	23 (69.7)	8 (24.2)
tandoori chicken	6 (18.2)	15 (45.5)	12 (36.4)
salad	24 (72.7)	7 (21.2)	2 (6.1)
ghee	5 (15.2)	20 (60.6)	8 (24.2)
cola	4 (12.1)	20 (60.6)	9 (27.3)
pepper / morris	8 (24.2)	11 (33.3)	13 (39.4)
porridge / khoi	19 (57.6)	3 (9.1)	11 (33.3)
gourd curry / khodu niramish	18 (54.5)	7 (21.2)	7 (21.2)
yogurt / doiee	13 (39.4)	12 (36.4)	7 (21.2)
Asian sweets / mishti	4 (12.1)	17 (51.5)	11 (33.3)
cabbage / khobi	24 (72.7)	6 (18.2)	3 (9.1)
white rice / bhatt	16 (48.5)	11 (33.3)	4 (12.1)

More information

Respondents were asked whether they would like more information about healthy eating: twenty did, and twelve did not.

Of the sixteen educated in UK, seven wanted more info about healthy eating, and eight did not (one blank). Of the ten educated in Bangladesh, nine wanted more information and one did not.

Those wanting more information were given five different opportunities to express a language preference for health education, each in connection with a different means of such education (a one-off session; a course; visual material' audio material; a helpline). They did not necessarily reply to each language question if they were not interested in that education means.

Most expressed a consistent preference across those of these questions that they did answer (from one to five). In summarising these results, four categories have been created: English preferred; Bengali preferred; Sylheti preferred; preferences were mixed. The table shows how these preferences relate to gender, age and place of education.

Table shows how these preferences relate to gender, age and place of education.

	English N = 8	Bengali N = 3	Sylheti N = 4	Mixed N = 5
Gender: men women	 2 6	 - 3	 2 2	 2 3
Age: aged 30 or less aged 31 or more	 8 -	 - 3	 2 2	 2 3
Education*: in UK in Bangladesh	 5 2	 1 -	 - 3	 1 4

*Missing data for 3, one educated elsewhere.

Discussion

Respondents seem to have grasped some 'headlines' about nutrition, without having a grasp of the detail. This is particularly the case among those whose education in the United Kingdom, although these numbers are too small to test for statistical significance. Over 90% thought that salad and cabbage are healthy, and 75% or more thought that burger and fries, ghee, cola and Asian sweets were not. But understanding of what sorts of nutrients were to be found in particular foods was less. Most respondents were clear that burger and fries, ghee and Asian sweets are high in fat, and that salad and cabbage were low. The second Health and Lifestyles survey records that 91% of Bangladeshis reported understanding what fat is (Johnson et al, 1999). They were more confused about sugar, with only 63.6% thinking salad is low in sugar and only 48.5% thinking that cabbage is. The high rate of Don't Know for questions about fibre, except in the case of salad and cabbage, suggests a lack of understanding.

An important finding is that 'strong' and 'weak' as categories for food were not understood by man of our respondents, in contrast with the findings of Greenhalgh et al (1998). Future research projects should take this into consideration.

It would be interesting to know how other population groups would have scored. There are no directly comparable studies to ours, but the literature tends to indicate that people in general grasp the 'headlines' without understand the detail, just as we found. Conner et al (1998) found that though Australian women do not primarily think in terms of nutritional groups, there was awareness that sugar and fat were potentially unhealthy. Buttriss (1997) found that a nationally representative UK sample were poor at recognising foods containing fibre, though they recognised that fat and sugar were unhealthy. Indeed, Hankey et al (2003), Barratt (2001) and Dibsdall et al (2002) all found that health professionals grasp of nutritional detail was poor. Coveney (2004) and Buttriss (1997) found that poorer populations were less likely to have a grasp of nutritional detail, and although our study did not ask about affluence and deprivation, it is reasonable to assume deprivation in most cases, given the poverty of the borough as a whole (see Introduction).

In general, therefore, we did not find evidence to support the belief that he Bangladeshi population in Tower Hamlets does not understand what constitutes healthy eating in general, compared with the population in general. There may of course be subtle differences which a comparative study would discover. However, this lack of evidence is important; given the evidence (Abbott and Riga, 2007) that health care professionals in Tower Hamlets think that patient ignorance about health is an important factor in their use of health care in Tower Hamlets.

The data on language preference challenges some of the stereotypes found by Abbott and Riga (2007), where health professionals thought that language was a big problem. One might expect that women, older people and those educated in Bangladesh were less likely to speak English. Obviously, numbers this small can't prove otherwise, but they do suggest that the reality is less homogeneous that the stereotyping implies.

The original timescale that was planned for this project overran and from conception to completion the project took about 4 years. This was largely due to a lack of resources. All the individuals involved in this project did it on top of their normal workload and in a busy Walk-in Centre there was very limited capacity to carry out the project within the original timescale. Unfortunately the money that was released to carry out the research was not ring fenced and by the time it was needed to pay the individuals involved it was no longer available. This was also a valuable lesson in the research process. Money needs to be protected. Despite all the problems the enthusiasm and commitment that was there at the start was sustained throughout and it was because of this we were able to final complete the research.

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http://www.statistics.gov.uk/default.asp

Whitechapel Walk-in-Centre 12 Month Development Plan 2002/2003

Appendix 1

Costings for Project

Nurse Co-ordinator for 10 months.	£2,000
Receptionist staff carrying out 100 interviews	£1,000
Colour Printed questioners	£500
Administration	£500
Total	£4800