BMJ Open

Easier said than done: a qualitative study conducted in the USA exploring Latino family child care home providers as role models for healthy eating and physical activity behaviours

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To cite: Lindsay AC, Greaney ML, Wallington SF, *et al*. Easier said than done: a qualitative study conducted in the USA exploring Latino family child care home providers as role models for healthy eating and physical activity behaviours. *BMJ Open* 2017;**7**:e018219. doi:10.1136/bmjopen-2017-018219

► Prepublication history for this paper is available online. To view these files, please visit the journal online (http://dx.doi.org/10.1136/bmjopen-2017-018219).

Received 14 June 2017
Revised 20 September 2017
Accepted 27 September 2017

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ABSTRACT

Objective Latinos are the largest and most rapidly growing minority population group in the USA and are disproportionally affected by obesity and related chronic diseases. Child care providers likely influence the eating and physical activity behaviours of children in their care, and therefore are important targets for interventions designed to prevent childhood obesity. Nonetheless, there is a paucity of research examining the behaviours of family child care home (FCCH) providers and whether they model healthy eating and physical activity behaviours. Therefore, this study explored Latino FCCH providers' beliefs and practices related to healthy eating, physical activity and sedentary behaviours, and how they view their ability to serve as role models for these behaviours for young children in their care.

Methods This is a qualitative study consisting of six focus groups conducted in Spanish with a sample of 44 state-licensed Latino FCCH providers in the state of Massachusetts. Translated transcripts were analysed using thematic analyses to identify meaningful patterns.

Results Analyses revealed that Latino FCCH providers have positive beliefs and attitudes about the importance of healthy eating and physical activity for children in their care, but personally struggle with these same behaviours and with maintaining a healthy weight status. The ability of Latino FCCH providers to model healthy eating and physical activity may be limited by their low self-efficacy in their ability to be physically active, eat a healthy diet and maintain a healthy weight.

Conclusions Interventions designed to improve healthy eating and physical activity behaviours of children enrolled in FCCHs should address providers' own health behaviours as well as their modelling of these health behaviours. Future research can build on the findings of this qualitative study by quantifying Latino FCCH providers' eating and physical activity behaviours, and determining how these behaviours influence behaviours and health outcomes of children in their care.

Strengths and limitations of this study

- ► To our knowledge, this is the first study to examine Latino family child care home (FCCH) providers' view of their ability to serve as role models for healthy eating and physical activity behaviours of children in these settings.
- ► Study findings highlight the need for increased attention to FCCH providers' health behaviours as a means of promoting providers' own health, as well as healthy eating and physical activity among young children in their care.
- ► Interventions aimed at improving eating and physical activity behaviours of children attending FCCHs should consider health promotion activities to increase FCCH providers' self-efficacy for physical activity and healthy eating, and supports to help providers improve their eating and physical activity behaviours.
- ► Study limitations include the use of a non-random, purposeful and relatively small sample of low-income, Latino FCCH providers in four selected communities in Massachusetts, USA, which limits the generalisability of the findings.

INTRODUCTION

Latinos are the largest and most rapidly growing minority population group in the USA[1] and are disproportionally affected by obesity and related chronic diseases.[2 3] Children in low-income Latino families are at elevated risk of becoming overweight and obese, making childhood obesity among Latinos a pressing public health concern because childhood weight status tracks into adulthood.[3] Substantive efforts are needed to prevent and control obesity among Latino children if future trends in chronic diseases in this population are to be altered.

Early care and education (ECE) settings are important social environments that influence the eating and physical activity behaviours of children attending these institutions.[4 5] Increasing ECE attendance rates and time spent in these settings make ECEs

important venues for health promotion and obesity prevention efforts targeting young children.[6] Family child care homes (FCCHs) are a type of ECE setting where providers care for children other than their own in their own home.[6 7] More than 1.9 million preschool children attend FCCHs, and this ECE setting is the second largest provider of non-relative care for children up to 5 years old in the USA.[8]

Latino families may prefer FCCHs to other ECE settings due to cultural preferences for family-like care, flexible hours and lower costs, thus making FCCHs an ideal setting for obesity prevention efforts designed for Latino families and children.[9] Latino parents who enrol their children in an FCCH believe that these settings are instrumental in shaping and reinforcing their children's healthy eating and physical activity habits.[10 11] In fact, recent research suggests that FCCH providers may be more influential than, or equally as important as, parents in shaping food preferences of young children.[5 12] FCCH providers, like parents, help establish and reinforce early healthy eating and physical activity behaviours among young children by developing an environment that fosters healthy behaviours.[12 13] FCCH providers influence the behaviour of children in their care in many ways (eg, knowledge of nutrition and physical activity, selection of daily activities, food selection, meal structure and so on).[12 13]

Research suggests that children model the behaviours of others and that this modelling helps young children develop lifelong habits that contribute to healthy weight or to overweight and obesity.[14] Social cognitive theory (SCT) posits that behaviour acquisition is directly related to observing others within the context of social interactions and experiences.[15–17] Many types of behaviours, including eating and physical activity, can be learnt through observing influential others such as caregivers and peers. For children attending FCCHs, the FCCH provider may be a particularly influential role model for healthy behaviours.[18]

Much of the obesity prevention research in FCCH settings has focused on improving the eating and physical activity environments of these settings and changing providers' feeding and physical activity practices.[11 19–23] For example, providers' beliefs, attitudes and practices related to health behaviours have been examined to identify potential targets for intervention.[19 22–26] However, there is a paucity of research examining FCCH providers' personal eating and physical activity behaviours, and how their behaviours may influence the behaviours of children in their care. Therefore, this qualitative study explored (1) Latino FCCH providers' beliefs and practices related to healthy eating, physical activity and sedentary behaviours, and (2) how Latino FCCH providers view their ability to serve as role models for young children in their care.

METHODS

Study design, setting and sample

This study was part of a larger multicomponent exploratory qualitative research project guided by the socioecological model designed to systematically explore multilevel factors influencing eating, physical activity and sedentary behaviours among Latino preschool-age children aged 2–5 attending FCCHs in Massachusetts.[10 11] Recognising the value of qualitative methodology in formative research, a focus group design with a phenomenological approach was used to collect and analyse data with the purpose of understanding providers' perceptions, perspectives and understandings of their ability to serve as role models for health behaviours (eg, physical activity and healthy eating) of children in their care (phenomenon). Focus group discussions (FGDs) were conducted because they are an important technique for conducting research in diverse cultural settings and provide valuable information.[27] Moreover, the synergistic effects of the group setting elicit ideas and discussions that may not arise in individual interviews.[28]

As noted in our prior research, FCCH regulators were identified and contacted by research staff to help develop a list of licensed FCCH from four areas in Massachusetts (North Shore, Greater Boston, Central and Western).[10 11] This list was used to randomly select 22 licensed from each of the four areas of Massachusetts (total 88 FCCH providers). Each selected provider was mailed a flyer in Spanish outlining the study that included a phone number to call for additional information. Interested providers were screened for eligibility (eg, self-identified as Latino, having at least three children aged 2–5 in the FCCH). A reminder phone call was made 1–2 days before the scheduled FGD.

Data collection

A native Spanish speaker trained in qualitative research methods moderated all FGDs in Spanish with assistance from the first author, using a piloted discussion guide with open-ended questions and probes. The pilot-tested guide explored FCCH providers' (1) beliefs and attitudes related to eating and physical activity, (2) barriers to having and/or maintaining healthy eating and physical activity habits, (3) perceptions of their influence on the eating, physical activity and sedentary behaviours of children in their care, and (4) perceptions of their ability to serve as role models of healthy eating and physical activity behaviours for young children in their care. This guide was used for all FGDs.

All FGDs were held in meeting rooms at public libraries between April and September 2015, and lasted approximately 90 min. Before each FGD, the moderator explained the procedures and answered participants' questions and obtained informed consent. All FGDs were audio-taped after participants provided written informed consent. Following the FGD, participants completed a brief, self-administered questionnaire assessing education, marital status, country of origin and length of time

living in the USA. A bilingual (Spanish and English) qualitative researcher served as an assistant moderator (ACL) and took notes during each session. The moderator and assistant moderator convened for 15 min at the end of each FGD in a private room and discussed new or recurring themes heard during the session, which were entered into a grid of major themes and subthemes. This grid system was used to closely follow the emergence of new themes and subthemes and to determine when data saturation was achieved.

Participants received a $25 gift card for their participation.

Data analysis

Audio tapes were transcribed verbatim in Spanish and translated into English without identifiers by a bilingual and native Spanish speaker using forward-backward techniques to establish semantic equivalence in translation. This process ensured that the integrity and equivalence of the data were not lost in the process of translation.

Transcripts were analysed using thematic analyses, an iterative process of coding data in phases to identify meaningful patterns.[28] Analytical phases included data familiarisation, generation of initial codes, identifying patterns and themes, and defining and naming themes.[29 30] Two authors, experienced qualitative researchers (ACL, MLG), independently coded all transcripts and identified emergent themes. These two authors then checked for consistency between their analyses and discussed any differences until consensus was reached. An inductive approach was employed, where emerging data were used to develop, refine and verify themes and findings. Descriptive statistics were calculated for the sociodemographic data using Microsoft Excel 2008.

RESULTS

Six FGDs with a total of 44 providers (41 women, 3 men), all of whom self-identified as Hispanic/Latino, were conducted before thematic saturation was reached, with no new themes or subthemes emerging during the sixth FGD. As displayed in table 1, about one-third of participants had graduated from high school (n=10; 22.7%) or earned their general education diploma (n=4; 9.2%), and close to 40% (n=17; 38.5%) had attended some college. Approximately 95.5% (n=42) were born outside of the USA, and had lived in the USA for an average of 22 years. All reported that Spanish was the main language spoken at home. Themes that emerged during the qualitative analyses are discussed in the following section, with quotes used to illustrate the themes.

Table 1 Sociodemographic and acculturation characteristics of focus group participants (n=44)

Age	Mean±SD 41±9.3	n (%)
Race		
Hispanic or Latino		44 (100)
Sex		
Female		41 (93.2)
Male		3 (6.8)
Foreign-born		
Yes		42 (95.5)
No		2 (4.5)
Country of origin		
Colombia		12 (27.3)
Dominican Republic		9 (20.5)
Guatemala		5 (11.4)
Puerto Rico		4 (9.2)
Peru		3 (6.8)
USA		2 (4.5)
Mexico		2 (4.5)
El Salvador		2 (4.5)
Honduras		2 (4.5)
Ecuador		2 (4.5)
Cuba		1 (2.3)
Years in the USA	Mean±SD 22±3.4	
Predominant language spoken at home		
Spanish		44 (100)
Marin scale acculturation score	Mean±SD 2.2±0.9	
Education		
General education diploma		4 (9.2)
High school graduate		10 (22.7)
Associate		17 (38.5)
Bachelor		12 (27.3)
Missing		1 (2.3)
Annual household income		
Under $25 000		10 (22.7)
$25 000–$50 000		26 (59.1)
More than $50 000		8 (18.2)
Marital status		
Single		2 (4.5)
Married		28 (63.3)
Separated		4 (9.2)
Divorced		8 (18.2)
Widowed		2 (4.5)

Theme 1: providers believe healthy eating and physical activity are important

Across all FGDs, providers appeared aware of the benefits of eating healthy (eg, eating fruits and vegetables, avoiding 'junk' food, drinking water, limiting sugar-sweetened beverages and so on) and being physically active, and believed that these practices are an integral influence on one's overall health. As one provider explained:

> Eating healthy and being physically active is an important part of being healthy. Past generations

have known this for ages. (Female Provider (FP) #10, Dominican Republic)

Overwhelmingly, providers believed in the importance of healthy eating and being physically active for children's overall health and socioemotional well-being. As one provider said:

> Eating healthy and being physically active are very important for children's health and well-being… Children are growing, learning and developing these habits while they are young. These [behaviours] will help them later in life. (FP#23, Mexico)

Providers also recognised that children are exposed to and spend many hours on sedentary activities such as playing video games, watching TV and using of electronics, and felt it was important to minimise the use of electronics.

> I don't really allow any use of electronics. It's really hard, but nowadays even little kids and babies have so much access to electronics. My policy is that kids cannot bring any electronics to daycare. (FP#11, Colombia)

Furthermore, most providers felt that screen-time should be regulated, and several spoke of not allowing children to have more than 1 hour of screen-time per day. Watching TV was the most common type of screen-time providers reported allowing children to have, and that they watching TV was most often allowed during transitions such as drop-off, pick-up and meal preparation. Some providers reported that they regulated screen-time in hopes of increasing children's physical activity.

> I feel that we need to regulate how much TV and electronics we allow to make sure that the kids are active. In our daycare, we [couple-run FCCH] only allow it during drop-off and pick-up and sometimes when we both need to prepare lunch. (Male Provider (MP) #3, Colombia)

Theme 2: providers recognise their eating and physical activity habits could improve

Nearly all providers spoke of needing to improve their own eating and physical activity habits to promote weight loss and improve their overall health. For example, one provider stated:

> I know I need to improve my eating habits, start eating more healthy foods, and keep away from the junk food. I know that if I change the way I eat, I will lose some weight, and I really need to do that for my health. (FP#18, Dominican Republic)

Several providers discussed struggling with being overweight. Some described how their being overweight affected their energy levels and overall health, while others expressed concerns for their current health status. One provider stated:

> Since I had my kids and gained weight, I have tried to lose, but it's not easy. You lose the weight and then gain it again. (FP#6, Colombia)

Another provider mentioned:

> I would like to lose some weight and be more active. I know I need to do it. I am aware that my weight is a problem and that it affects my health. (FP#17, Puerto Rico)

Moreover, most providers reported being told by their healthcare providers that they needed to lose weight to improve their health and various health issues such as arthritis, hypertension and type 2 diabetes. As one provider stated:

> The last time I saw my doctor, he told me I needed to lose weight if I did not want to become diabetic…so, I am trying for my health. (FP#4, Guatemala)

Theme 3: personal barriers to healthy eating and physical activity behaviours

Providers discussed daily life obligations, including work, competing demands and limited resources, as being barriers to being healthy. One provider said:

> You know, I always say, we are in the business of taking care of others, we are not good about taking care of ourselves even though we know we need to…There is very little time and when there is any time, you are just tired. (FP#38, Colombia)

Another provider added:

> I have a busy schedule with work, and when I am not working, I am trying to take care of the house and my family. It's a busy life. There's barely any time for taking care of myself…Just taking time off to go to a doctor's appointment is difficult. (FP#8, Dominican Republic)

Another provider explained:

> You get caught up with work and daily life, and at the end, there is little time to take care of oneself. (FP#33, Puerto Rico)

Some providers spoke about attempting to change their eating and physical activity habits without success, and a few voiced a lack of confidence in their ability to overcome the obligations and demands of day-to-day life to focus on and succeed in this change. One provider explained:

> You know, I have tried many times. It starts well. I plan my food in advance, I start going for walks, but then something happens, and it gets me off track and when I realize, I am back to the same old habits…It's hard when you have to take care of so many things, with long and demanding working hours, and you don't have the time to focus on yourself. (FP#2, Honduras)

Furthermore, providers reported that although they were aware of the importance of healthy eating and physical activity, this knowledge did not always translate into them being physically active and eating healthy. As one provider said:

> It's what they say, it's easier said than done…We know it's important to eat healthy and be physically active and not sit around and just watch TV, etcetera, but putting these to practice is not as easy as just saying it. (FP#12, Dominican Republic)

Theme 4: providers are confident in their abilities to help children develop healthy eating and physical activity habits

Across all FGDs, providers spoke of their influential role in educating children about healthy eating and physical activity habits. As one provider said:

> We are teaching the children not only how to get along with one another, but we teach them that it's important to eat healthy, to be active and healthy! I have parents thank me for teaching their children how to be healthy. The parents don't have the time. They are not with the kids during the day. They get home and they are tired; after working long hours, they don't have time. (FP#41, Colombia)

Providers mentioned using strategies such as telling the children about the importance of being healthy—eating healthy and being active. One provider stated:

> I am always telling the children that it's really important to eat healthy foods and be active if they want to grow up and be healthy. (FP#27, Peru)

Most providers had high self-efficacy about their abilities to help children develop healthy eating and physical activity habits. Providers were confident in their ability to serve as educators and that they had the knowledge needed to teach children and their families about healthy diets and physical activity. One provider said:

> I feel very confident in my ability to help the children be healthy—eat well, be active…We are always going to trainings, reading the materials; we have to keep well informed. (MP#1, Dominican Republic)

Theme 5: providers view themselves as role models

Providers spoke of being role models for children in their care, despite the majority acknowledging that their own eating and physical activity health behaviours need to improve. As one provider stated:

> We know that it's important that we set a good example for the children, and I try my best. We want to do the right thing for the children, even if you don't do it for yourself. (FP#36, Ecuador)

Another provider added:

> It's important for the children to see us [adults] choosing healthy foods. Children want to copy what others do. So, if they see you eating fruits, they will want to eat fruits, but if they see you eating chips, that's what they will want to eat. (FP#13, Colombia)

Finally, some providers reported that improving their eating and physical activity behaviours would make them better role models for children. As one provider stated:

> Kids observe what we [adults] do, and they learn by seeing and copying what we [adults] do. So, I do all I can to help and teach the children to eat healthy and be physically active, but I know that if I am not doing it, it does not set a good example for them. I know that if they see me eating healthy and being active, they will want to eat healthy and be active…they copy our [adults] habits. (FP#5, Guatemala)

DISCUSSION

Building on our prior research examining providers' beliefs about healthy eating, physical activity and sedentary behaviours,[11] this study explored how Latino FCCH providers view their ability to serve as role models for healthy eating and physical activity behaviours for young children in their care. Mounting evidence suggests that child care providers influence the development of children's health behaviours through modelling of behaviours,[4 10 11 13 31 32] yet limited research has explored how FCCH providers view their ability to model healthful behaviours for young children in their care.[10 11 13 31 32] Parents' increasing reliance on child care settings for their children makes child care providers influential in promoting the development and maintenance of healthy behaviours for children in their care. Therefore, it is critical to understand how providers view their role and ability in promoting healthy behaviours.[4 5 12] To our knowledge, no studies have focused on Latino FCCH providers as role models. The present study addresses this research gap. This information is needed given that FCCH providers care for a large number of racial/ethnic minority children, including Latinos, a group at high risk of childhood obesity.[3–8]

Latino FCCH providers participating in this qualitative study viewed themselves as being knowledgeable about nutrition and physical activity, and being influential in helping children in their care develop and maintain healthy eating and physical activity habits. Moreover, study findings suggest that providers perceive that their own behaviours influence those of the children in their care. Nonetheless, the majority of providers reported that their own eating and physical activity behaviours needed to improve. These findings are consistent with a recent quantitative study conducted with a convenience sample of FCCH providers (n=166) in North Carolina, USA, that found that almost all providers (89.8%) were overweight or obese and approximately half of the sample did not meet health guidelines for physical activity and fruit and vegetable intake.[31]

Findings of the present study suggest that Latino FCCH providers' ability to model healthy eating and physical activity behaviours for children in their care may be limited by their low self-efficacy to participate in these behaviours themselves. This finding suggests that interventions should focus on helping FCCH providers change their eating and physical activity behaviours, including increasing their self-efficacy for performing these behaviours. SCT posits that behaviours are influenced by many factors, with one of them being observational learning.[15–17] Therefore, improving Latino FCCH providers' health behaviours would be beneficial for the providers' health status, and would also be an important target in the promotion of children's healthy eating and physical activity behaviours.[33–35]

Most providers participating in this study reported lack of time and resources as being barriers to improving their eating and physical activity behaviours. FCCH providers need time, resources and support to improve their own eating and physical activity habits. Interventions designed to improve the eating and physical activity environments of FCCHs should target providers' personal health behaviours, incorporate training resources, and offer other supports to help FCCH providers change their behaviours and maintain a healthy weight. Furthermore, interventions should consider the busy lives of FCCH providers and the limited resources of FCCHs.

In conclusion, findings from the present study add to the scant literature examining child care providers' personal health behaviours and the potential influence of providers' modelling of health behaviours for children in their care.[31 36 37] Findings highlight the need for increased attention to FCCH providers' health behaviours as a means of increasing providers' health status as well as health behaviours of young children in these settings. Future research could build on the findings of this study by quantifying Latino providers' self-efficacy to perform healthy eating and physical activity and by determining how FCCH providers' health behaviours influence the behaviours and health outcomes of children in their care.

Study results should be considered in light of some limitations. Findings are based on a non-random, purposeful and relatively small sample of low-income, Latino FCCH providers in four selected communities in Massachusetts, USA, which limits the generalisability of the findings. There is a possibility of selection bias as it may be that providers with a heightened interest in promoting health behaviours chose to take part in the study. Furthermore, providers aware of the importance of health behaviours may have been inclined to give socially desirable responses. The lack of data on providers who did not join the study does not allow for assessment of the extent to which the providers in our sample represented the broader group of Latino FCCH providers. Thus, further research is needed to establish greater generalisability of the findings of the present study and to explore if they are applicable to other ethnic groups of FCCH providers in other parts of the country. Another limitation of this study is the FCCH's limited discussion of sedentary behaviour. This may have been due to the content of the FGD guide. Finally, despite the use of a rigorous process of backward-forward translation to ensure the integrity and equivalence of the data, it is possible that some loss of meaning might have occurred in the process. Future research can address these limitations by exploring influences on Latino providers' beliefs, attitudes and practices from other communities across the USA, selecting a larger sample size, and using multiple methods of data collection including direct observations.

CONCLUSION

Increasing evidence indicates the important role FCCH providers play in promoting and modelling healthy eating and physical activity for children in their care. Therefore, interventions targeting FCCH settings should consider health promotion activities to increase FCCH providers' self-efficacy for physical activity and healthy eating, and supports to help providers improve their eating and physical activity behaviours. These efforts would likely improve FCCH providers' eating and physical activity behaviours and promote healthy eating and physical activity behaviours and positive health outcomes of children attending FCCHs.

Acknowledgements The authors are grateful for the assistance of personnel at Massachusetts Department of Early Education and Care, Child Care Circuit, Family Care Systems, and CACFP, especially 'Yours for Children, Inc'. The authors are thankful to the providers and parents who participated in this study, and to Ms Amina Hetu for her collaboration in conducting the focus groups.

Contributors ACL in study design, data collection, data analysis, and manuscript preparation and review. MLG in study design, manuscript preparation and manuscript review. SFW in development of theoretical framework for the study, manuscript preparation and manuscript review. JAW in manuscript preparation and manuscript review.

Funding This study was supported by a grant from Aetna Foundation (grant no. 11-02395), for which ACL is the principal investigator.

Competing interests None declared.

Patient consent Obtained.

Ethics approval This study was approved by the Institutional Review Board for the Protection of Human Subjects at the Harvard TH Chan School of Public Health. Written and oral informed consent was obtained from all participants.

Provenance and peer review Not commissioned; externally peer reviewed.

Data sharing statement Data and all other materials for this study are kept at the Department of Exercise and Health Sciences, University of Massachusetts Boston. The data sets generated during and/or analysed during the current study are not publicly available due the terms of consent to which participants agreed to, but are available from the corresponding author on reasonable request.

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