

# Recruitment and retention in studying childhood obesity in Saudi Arabia

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# Disclosure



|                                 |  |
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| Conflict of Interest:           | None                                       |
| Employer:                       | University of Dammam (education leave)     |
| Sponsorship/Commercial Support: | None                                       |

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| Sponsorship/Commercial Support: | None  |

# Goals and Objectives



## ✦ Goal:

To examine recruitment and retention issues encountered during a mixed methods study on childhood feeding and growth in Saudi Arabia.

## ✦ Objectives:

- 1- Summarize methodological issues related to recruitment in mothers and their children.
- 2- The learner will be able to relate to recruitment challenges when studying a new population.

# Acknowledgment

✦ STTI (small grant)



Sigma Theta Tau International  
Honor Society of Nursing®

✦ Alpha Alpha Chapter (doctoral grant)



UNC  
SCHOOL OF NURSING

✦ Saudi Arabia (scholarship)

• No conflict of interest.



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UNIVERSITY OF DAMMAM

# Outline



- ✦ Background
- ✦ Purpose of study
- ✦ Overall design
- ✦ Methods
- ✦ Results
- ✦ Conclusion

## Notes:

- Population: 31.54 million
- Area: 830,000 mi<sup>2</sup>
- Language: Arabic
- Religion: Islam
- Politics: Monarchy
- Economy: Oil-production

# Saudi Arabia



## Notes:

- Problem: Childhood obesity is a growing issue in Saudi.
- Gap: Mother's experiences with the problem has not been explored in the literature.

# Background



- ✦ The presentation addresses culturally-based recruiting challenges and recommends strategies for conducting community-based research in Saudi Arabia.
- ✦ Recruitment of mother's from the school system and/or the community has not been well documented in the Saudi literature.

# Purpose of Study



- ✦ Explore the fidelity and cultural appropriateness of the Child Feeding Questionnaire (CFQ) by Birch and colleagues (2001) and the Child Eating Behavior Questionnaire (CEBQ) by Wardle, Guthrie, Sanderson, and Rapoport (2001).
- ✦ Examine Saudi Arabian mother's perspectives of their preschooler's weight status, feeding styles and child's eating behaviors in relation to their child's actual weight status and adiposity and family socio-economic status.



# Overall Design

Descriptive Sequential Explanatory Mixed Methods Design



- Sequential because QN prior to the QL phase
  - Explanatory because the QL will help 'explain' the QN phase
- (Creswell & Clark, 2011)

# Methods



- ✦ Dissemination information about the study:
  - Plan A: Flyers to mothers through the school system.
    - = Out of the 600 flyers distributed in schools only 6 mothers expressed interest in the study.
  - Plan B: Flyers with the local newspaper.
    - = Due to security reasons in Saudi Arabia this plan was modified to word of mouth.
    - = Resulted in recruiting 2 mothers.

# نبحث عن أمهات للمشاركة معنا في بحث عن أساليب أكل الطفل

## ما المطلوب؟

- تعبئه إستبيان عن عادات أكل طفلك وأساليب التغذية .
- بالإضافة إلى معلومات عنك وعن طفلك .
- قياسات الطفل : طول ووزن و محور الخصر وسماكة الجلد لطفلك ( سنهتم بإتخاذ الحذر والرعاية عند أخذ القياسات !)
- \*\* الزمن المطلوب في المرحلة الاولى : ٣٠ - ٥٠ دقيقة .
- \*\* والمرحلة الثانية ( ان اردت المشاركة ) : ٦٠ دقيقة .
- جميع المعلومات ستكون سرية للغاية .

## شروط المشاركة :

- طفلك بين سن ٣-٦ سنوات من العمر .
- يجب أن تكون الأم سعوديه .
- ستوزع جوائز بسيطة بعد اكمال الدراسة وتسليم جميع الاستبيانات ( بطاقة شكر ، كتب للأطفال وبطاقات الهدايا للأمهات ) .

\* أشكركم على المشاركة مقدما ، ، ،

الباحثة / سمى سامر حماد ، مرشحة للدكتوراه في جامعة كارولينا الشمالية في تشابل هيل (بأمريكا) .

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## ✦ Accessing Participants:

- Meet mothers at the preschools when dropping off and picking up their children in the morning and afternoon this method resulted in a low recruitment because mothers were rarely bringing children to school.
- ✦ Principles of schools proposed meeting mothers through presenting a health awareness lecture in the school.
  - = This resulted in having more mothers attending and participating.
- ✦ Other school supervisors proposed adding the PI in WhatsApp, a group messaging mobile application.

# Results



- ✦ Active engagement was needed to bring unique strategies suitable for each school.
- ✦ Strategies that facilitated recruitment:
  - Cooperation from the school system
  - Parental involvement (such as, WhatsApp)
  - Health awareness lecture with school events (such as, parent meeting).



# معاً نتحدث عن صحة طفلك

الباحثة/ سمى سامر حماد  
 مرشحة للدكتوراه من جامعة نورث كارولينا في تشابل هيل  
 محاضرة مبتعثة من جامعة الدمام / كلية التمريض



# Continued...



- ✦ WhatsApp assisted the PI to introduce the study aims to interested mothers.
- ✦ Nurse researchers are in a unique position to provide health lectures and to talk about their research with the local community to enhance recruitment (Barthow et al., 2015).

# Continued...

- Highest participants and attendance of mothers was achieved:
  - ✦ When health lectures were on the same day of parent's meeting.
  - One school had 70 attendees and 35 mothers joined the study.
  - Less attendees were present (n=4) in another school:
  - ✦ Health lecture was on a regular school day, but many others submitted the consent forms and joined the study (n=30) after schools followed-up, through WhatsApp.



WhatsApp





# Conclusion



- ✦ The revised strategies used for this study found to be successful as evidenced by completion of the quantitative phase and recruiting 233 mothers and their preschoolers.
- ✦ Creative problem-solving
- ✦ Persistence
- ✦ Engagement in the local community and
- ✦ Understanding the target population was key to successful recruitment.

(Guerra, da Silveira, & Salvador, 2015; Goldberg & Wright, 2015)



# References



- ✦ Barthow, C., Jones, B., Macdonald, L., Vernall, S., Gallagher, P., & McKinlay, E. (2015). Researching in the community: the value and contribution of nurses to community based or primary health care research. *Primary Health Care Research & Development*, 16(3), 224-234. doi:10.1017/S1463423614000097
- ✦ Birch, L. L., Fisher, J. O., Grimm-Thomas, K., Markey, C. N., Sawyer, R., & Johnson, S. L. (2001). Confirmatory factor analysis of the Child Feeding Questionnaire: a measure of parental attitudes, beliefs and practices about child feeding and obesity proneness. *Appetite*, 36(3), 201-210. doi:10.1006/appe.2001.0398
- ✦ Creswell, J. W., & Clark, V. L. P. (2011). *Designing and conducting mixed methods research* (2nd ed.): Thousand Oaks, CA.: Sage.
- ✦ Goldberg, J. P., & Wright, C. M. (2015). Lessons learned from two decades of research in nutrition education and obesity prevention: Considerations for alcohol education. *Patient Education and Counseling*.
- ✦ Guerra, P. H., da Silveira, J. A. C., & Salvador, E. P. (2015). Physical activity and nutrition education at the school environment aimed at preventing childhood obesity: evidence from systematic reviews. *Jornal de Pediatria*. Retrieved from <http://www.sciencedirect.com/science/article/pii/S0021755715001412>
- ✦ Wardle, J., Guthrie, C. A., Sanderson, S., & Rapoport, L. (2001). Development of the children's eating behaviour questionnaire. *Journal of Child Psychology and Psychiatry*, 42(07), 963-970. doi:10.1017/S0021963001007727

# Thank you

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