

Building an Interdisciplinary International Program of Research

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Keys to Success

- Be mentored by wonderful people early
- Start mentoring others early
- Build interdisciplinary teams
- Think outside the box
- Be open to the moment
- Be curious
- Be excited about learning new things
- Be inclusive
- Reach out and bring others along
- Celebrate our successes together
- Remember why we are here and why we do what we do-our patients and their families, our students, and our colleagues
- Be grateful we get to do the work we do

Programs of Research

- Overweight and obesity management in adults and prevention of overweight and obesity in children in English and Spanish
- Management of diabetes (gestational diabetes mellitus and type 2 diabetes mellitus) in adults and prevention of type 2 diabetes in children in English and Spanish
- Majority is dyadic with a parent and child
- United States and México

First Program of Research

Overweight and obesity management in adults and prevention of overweight and obesity in children in English and Spanish in the United States and México

Dissertation

Women Maintaining Weight Loss
Published Dissertation UMI 3053652
Boston College, Chestnut Hill, Massachusetts

Berry, D. (2004). An emerging model of behavior change in women maintaining weight loss. *Nursing Science Quarterly*, 17, 242-252.

Lessons Learned

- Components necessary to build a theory-based intervention

Postdoctoral Fellow
Yale University School of Nursing

Institutional Training Grant for Self and Family
Management, National Institute of Nursing Research
T32NR008346, 2003-2005

PI: Margaret Grey

Role: Trainee

Nutrition and Exercise Education and Coping Skills
Training in Multiethnic Families

Sigma Theta Tau Delta Mu Chapter, 2004-2005

Sigma Theta Tau International, 2004-2005

Role: Principal Investigator

Berry, D., Sheehan, R., Heschel, R., Knafl, K., & Grey, M. (2004). Family-based interventions for childhood obesity: a review. *Journal of Family Nursing, 10*, 429-449.

Berry, D., Grey, M., Savoye, M., Melkus, G. (2007). An intervention for multiethnic overweight and obese parents and their overweight children. *Applied Nursing Research, 20*, 63-71.

Berry, D. Turner, M., Biederman, D. , & Flanagan, O. (2009). Benefits for Latino, African American, and Caucasian children and parents taught in the same community-based weight management intervention. *Hispanic Health Care International, 7*, 203-212.

Primary Care and Communities Tackling Obesity in Kids, National Institute of Child Health and Human Development, 1R01HD050981-15, 2005-2010

PI: Alice Ammerman

Role: Co-Investigator

Berry, D., Colindres, M., Vu, M.B., Pullen-Davis, L., Chung, G., Lowenstein, L., & Ammerman, A. (2009). Latino caregivers insight into childhood overweight, management, and their relationship with their health care providers. *Hispanic Health Care International*, 7, 11-20.

Lessons Learned

- The Latino population had very different needs

Children and Parents Partnering Together to Manage
their Weight, National Institute of Nursing Research,
1R0100254-05, NCT01378806, 2007-2012

Role: Principal Investigator

Berry, D.C., McMurray, R., Schwartz, T.A., Skelly, A.,
Sanchez, M., Neal, M., & Hall, G. (2012). Rationale,
design, methodology and sample characteristics of
the family partners for health study: a cluster
randomized controlled study. *BMC Public Health*.
2012 Mar 30;12:250.

Children and Parents Partnering Together to Manage their Weight (continued)

Giffuni, J., McMurray, R.G., Schwartz, T. & Berry, D. (2012). Actical accelerometry cut-points for quantifying levels of exertion: comparing normal and overweight adults. *International Journal of Exercise Science*, 5(2), 170-182.

Berry, D. C., Neal, M., Hall, E.G., McMurray, R.G., Schwartz, T.A., Skelly, A.H., & Smith-Miller, C. (2013). Recruitment and retention strategies for a community-based weight management study for multi-ethnic elementary school children and parents. *Public Health Nursing*, 30(1), 80-6.

Children and Parents Partnering Together to Manage their Weight (continued)

Berry, D.C., Schwartz, T.A., McMurray, R.G., Skelly, A.H., Neal, M., Hall, E.G., Amaulti, D. J., & Melkus, G. (2014). The family partners for health study: a cluster randomized, controlled trial for children and parent weight management. *Nutrition and Diabetes (Nature Publishing Group)*, 2014 Jan 13;4:e101.

Children and Parents Partnering Together to Manage their Weight (continued)

McMurray, R.M., **Berry**, D.C., Schwartz, T.A., Hall, E.G., Neal, M.N., Lin, S., & Lam, D. (2016). Correlates of physical activity in obese parent child dyads. *BMC Public Health*. 2016 Feb 6;16(1):124.

Berry, D.C., McMurray, R.G., Schwartz, T.A., Neal, M.N., Hall, E.G., & Adatorwover, R. (2017). A cluster randomized controlled trial for child and parent weight management: children and parents randomized to the intervention group have highly correlated changes in adiposity. *BMC Obesity*. 2017 Dec 4; 17(1):175.

Children and Parents Partnering Together to Manage their Weight (continued)

Berry, D.C., McMurray, R.G., Schwartz, T.A., & Adatorwover, R. (2018). Benefits for both African American and White children and parents taught together in a community-based weight management program. *BMC Public Health*. 2018 Sep 10;18(1):1107.

Lessons Learned

- Latino population needed a culturally tailored intervention
- Needed to work with children earlier

Nutrition and Exercise Education, Coping Skills Training, and Physical Activity Feasibility Study for Spanish-Speaking Mexican Women and their 2-to-9 Year Old Children, Pilot Funding, Center for Innovation in Health Disparities Research, P20NR8369-05, 2006-2007
PI: Chris McQuiston
Role: Principal Investigator of Pilot Study

A Pilot Study to Test a Community-Based Intervention to Manage Overweight and Prevent Type 2 diabetes in Spanish-Speaking Women and Prevent Excess Weight Gain in their 2-to-4 year Old Children, NCTraCS, UL1RR025747, 2009-2010
PI: Etta Pisano
Role: Principal Investigator of Pilot Study

Berry, D., Colindres, M., Sanchez-Lugo, Neal, M., & Smith-Miller (2011). Adapting, feasibility testing, and pilot testing a weight management intervention for recently immigrated Spanish-speaking women and their 2-to-4 year old children. *Hispanic Health Care International*, 9, 186-193.

Lessons Learned

- Importance of engaging the community
- Getting to know the population you want to work with
- Listening to the community

Heterogeneity in Obesity Creativity Hub
The University of North Carolina at Chapel Hill
PI: Penny Gordon-Larsen
Role: Co-Investigator

Includes 27 Investigator, 16 departments, 6 schools,
and 5 Centers and Institutes

Examining
Perception of obesity as only energy imbalance
Most studies address a single factor
Most genetic studies ignore diet
Most animal studies in homogeneous inbred
One-size fits all research and treatment
Lack of transdisciplinary teams and data

Healthy Mothers-Healthy Children: An Intervention
with Hispanic Mothers and their Young Children
National Institute of Nursing Research, NR017199-01,
NCT03866902, 2018-2023
Role: Principal Investigator

Berry, D.C., Gonzales, C., Peragallo Montano, N.,
Ammerman, A.M., Evenson, K., Perreria,
K., Faith, M., Waters, H., Córtes, Y., Cazales, A., &
Perrin, E. (under review). Rationale, design, and
methods for the Healthy Mothers-Healthy Children
Study. *BMC Obesity*.

Pending Grants

Improving Health Behaviors in Immigrant Mexican Mothers and their 2-4 Year Old Children
National Institute on Minority Health and Health Disparities

Role: Principal Investigator
Resubmitted July 2019

Pending Grants

Obesity Attrition in Weight Management Programs

National Institute of Nursing Research

PI: Joseph Skelton

Role: Co-Investigator

Submitted June 2019

Second Program of Research

Management of diabetes (gestational diabetes mellitus and type 2 diabetes mellitus) in adults and prevention of type 2 diabetes in children in English and Spanish

Studies to Treat or Prevent Pediatric Type 2 Diabetes Clinical Trial, National Institute of Diabetes and Digestive and Kidney Diseases

U01DKG1223, 2002-2009

PI: Kathryn Hirst

Site PI: Joanne Harrell

Role: Co-Investigator

Lessons Learned

- How a large clinical trial was run

Developing a Model for Group Diabetes Visits at Alliance Medical Ministry, Kate B. Reynolds Charitable Trust, 2011-2013

PI: Diane Berry

Berry, D.C., Williams, W.M., Hall, E.G., Heroux, R., & Bennett-Lewis, T.B. (2016). Imbedding interdisciplinary diabetes group visits into a community-based medical setting. *The Diabetes Educator*, 42(1), 96-107.

Lessons Learned

- Working together as a clinical team is important

Optimizing Outcomes in Women with Gestational
Diabetes Mellitus and their Infants,
1R21DK09275001A1, 2012-2015

PI: Diane Berry

Berry, D.C., Neal, M., Hall, E.G., Schwartz, T.A.,
Verbiest, S. Bonuck, K., Goodnight, W., Brody, S.,
Dorman, K.F., Menard, M.K., & Stuebe, A.M. (2013).
Rationale, design, and methods for the optimizing
outcomes in women with gestational diabetes
mellitus and their infants study. *BMC Pregnancy and
Childbirth*. 2013 Oct 10;13:184.

Optimizing Outcomes in Women with Gestational Diabetes Mellitus and their Infants (continued)

Berry, D.C., Johnson, Q.B., & Stuebe, A.M. (2015). Monitoring and managing the mother with gestational diabetes: a nursing perspective. *Nursing: Research and Reviews*, 5, 91-97.

Berry, D.C., & Johnson, Q.B., & Boggess, K. (2016). Management of type 2 diabetes in pregnancy and the consequences of fetal programming in their offspring. *Current Diabetes Reports*, 16(5), 1-6.

Optimizing Outcomes in Women with Gestational Diabetes Mellitus and their Infants (continued)

Stuebe, A.M., Bonuck, K., Adatorwovor, R., Schwartz, T.A., Berry, D.C. (2016). A cluster randomized trial of tailored breastfeeding support intervention for women with gestational diabetes. *Breastfeeding Medicine*. Epub 2016 Oct 26.

Berry, D.C., Hall, E.G., Neal, M. N., Adatorwovor, R. Schwartz, T.A., & Stuebe, A. (2016). Results of the optimizing outcomes in gestational diabetes in women and their infants, a cluster randomized, controlled pilot study: lessons learned. *Journal of the National Black Nurses Association*, 27(2), 1-10.

Optimizing Outcomes in Women with Gestational Diabetes Mellitus and their Infants (continued)

Glover, A.V., Berry, D.C., Schwartz, T.A., & Stuebe, A.M. (2018). The association of metabolic dysfunction with breastfeeding outcomes in gestational diabetes. *American Journal of Perinatology*. Epub 2018 Feb 2.

Diabetes Self-Management Education in México

Sigma Theta Tau International, 2016-2017

MPI: Lidia Guadalupe Compéan Ortiz and Diane Berry

Ortiz, L.G., Berry, D.C., Ruiz, O.C., González, E.R, Pérez, P.A., Rivas, E.A. (2014). Understanding basic carbohydrate counting, glycemic index and glycemic load for improved glycemic control in Hispanic patients with type 2 diabetes mellitus. *Hispanic Health Care International*, 12(3), 138-45.

Currently analyzing data and preparing a manuscript and preparing for the next grant submission in México

Additional Manuscripts

Compeán Ortiz, L.G, Del Ángel Pérez, B., Reséndiz González, E., Piñones Martinez, S., González Quirarte, N.H., & Berry, D.C. (2016) Self-care behaviors and glycemic control in low-income adults in México with type 2 diabetes mellitus may have implications for patients of Mexican heritage living in the United States. *Clinical Nursing Research*, 25(2), 120-38.

Additional Manuscripts

Bohorquez Robles, R., Compeán Ortiz, L.G., González Quirarte, N.H., Berry, D.C., Aguilera Pérez, P., & Piñones Martínez, S. (2017). Knowledge and practices of diabetes foot self-care and risk of developing foot ulcers in México may have implications for patients of Mexican heritage living in the United States. *The Diabetes Educator*. Epub 2017 May 1.

Lessons Learned

- Working together with international teams is important to understand the process you are studying

Medical Optimization and Management of
Pregnancies with Overt Type 2 Diabetes, National
Institute of Child Health & Human Development,
HD086139, 2016-2021

Role: Kim Boggess and Diane Berry (MPIs)

Berry, D.C., Thomas, S.D., Dorman, K., Ivins, A., Abreu, M.A., Young, L., & Boggess, K. (2018). Rationale, design, and methods for the medical optimization and management of pregnancies with overt type 2 diabetes (MOMPOD). *BMC Pregnancy and Childbirth*, 2018 Dec 12; 18(1):488.

Pending Grants

Maternal and Infant Arterial Stiffness in Pregnancies
Complicated by Type 2 Diabetes, National Heart,
Lung, and Blood Institute

PI: Matthew Cavender

Role: Co-Investigator

Submitted February 2019

Next Steps

Continue our collaborations in México

Currently developing new collaborations in the
Gallapagos

Questions?