

Pathways to Health in Vulnerable Populations: CBPR as a Health Screening Intervention

Peterman, K.,¹ Mutic, A.,¹ Flocks, J.,² Mac, V.,¹ Economos, E.,³ Tovar-Aguilar, A.³ & McCauley, L.¹

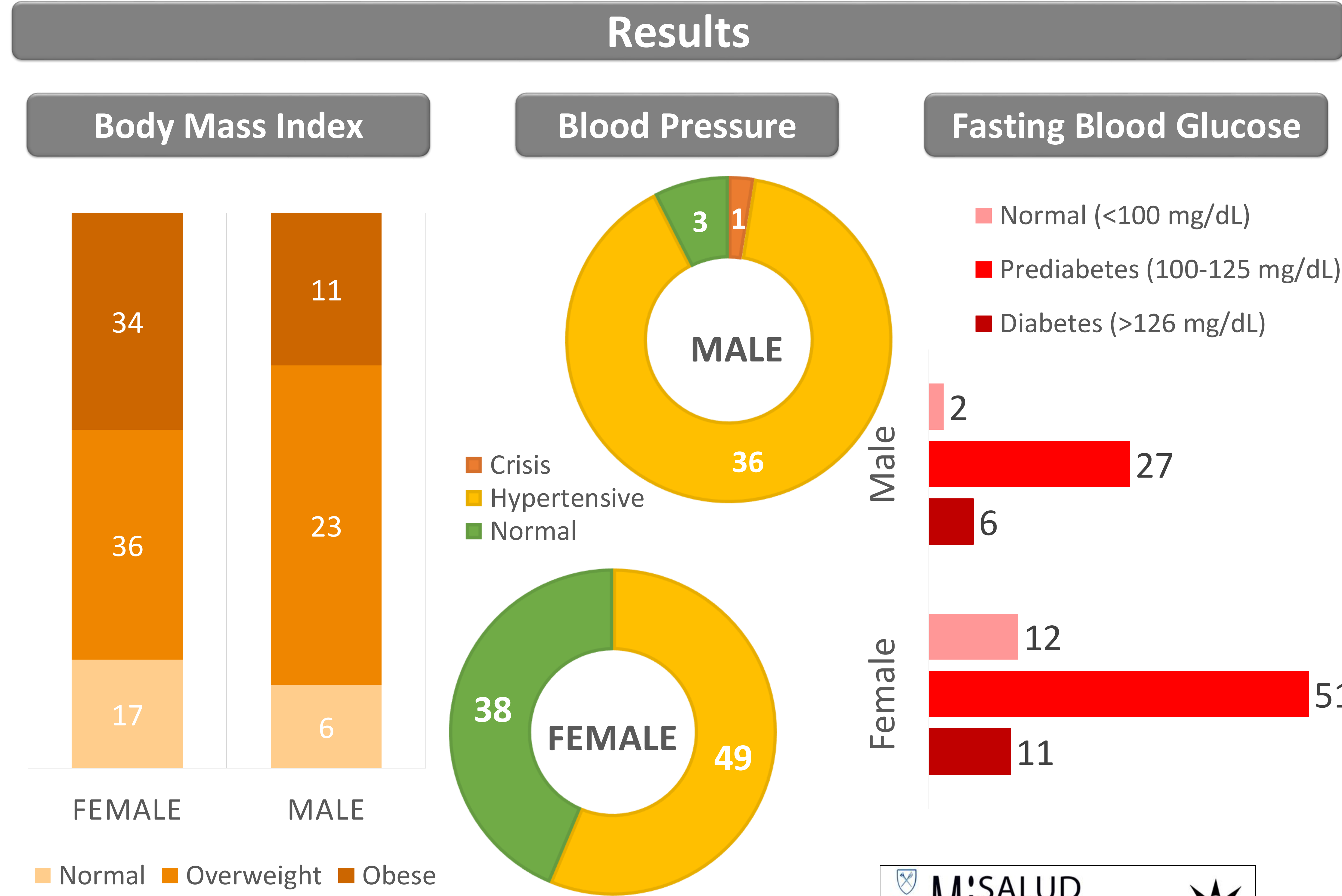
Nell Hodgson Woodruff School of Nursing, Emory University¹ Levin College of Law, University of Florida² Farmworker Association of Florida³

Background

The *Girasoles* (Sunflower) Study uses community-based participatory research (CBPR) to examine the physiologic response to heat stress, associated vulnerability factors, and resulting heat-related illness symptoms in Florida farmworkers. In addition to contributing to a large physiologic biomonitoring database, *Girasoles* has proven to be a critical health-screening intervention and has detected important case findings in a vulnerable population that often lacks access to resources for regular health care and health education.

Methods

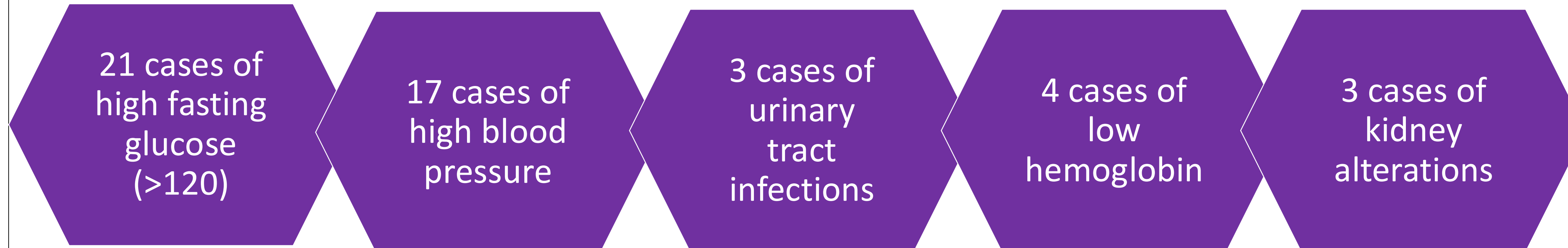
Researchers collected data on biological, ecological, and social factors from 128 Hispanic or Latino farmworkers who were recruited at two locations in Florida by local, trained community health workers. Biological data included blood pressure, fasting and non-fasting blood glucose, blood creatinine, blood urea nitrogen, urine dipsticks, as well as basic height, weight, body mass index, and body fat analysis measures. Many measures were taken multiple times per participant during the course of the study, increasing validity. At the end of the three-day study period, nurse researchers discussed health findings with each participant, counselled them accordingly, and made referrals to the local health clinics as necessary. Participants then completed individual qualitative exit interviews.



Baseline Characteristics of FL Farmworkers

Characteristics	Total (n = 128)		Apopka (n = 61)		Pierson (n = 67)	
	n	m (sd) or %	n	m (sd) or %	n	m (sd) or %
Age	128	38 (8)	61	38 (9)	67	37 (7)
19-33	44	34%	24	39%	20	30%
34-42	40	31%	10	16%	30	45%
43-54	44	34%	27	44%	17	25%
Female Gender	88	69%	44	72%	44	66%
Mexican Nationality	105	82%	41	7%	64	96%
Years of education	128	7 (3)	61	7 (3)	67	7(3)
Ever smoked	22	17%	14	23%	8	12%
Years in US agriculture	128	13 (7)	61	12 (8)	67	15 (6)
First year in US agriculture	10	8%	9	15%	1	1%
Hours worked per day	128	7.5 (1.4)	61	8.3 (1.0)	67	6.7 (1.2)

Participants Referred for Follow-up



Exit Interview Feedback

Q: What is the benefit of participating in this study?

“First because they gave me results about everything, like the blood test, blood pressure, my physical health. I liked it because they gave me results and now I know how I am. I know whether I am well or bad. This helped me know how to take care of my body”

“It helped me with my health and economically because of what they gave us. They told me that my blood sugar is high, that I need to go to the doctor. I did not know this.”

“Besides the compensation, the analysis. I regularly go to the clinic, but they confirmed I am healthy. It gave me peace of mind.”

“I think I got a lot of benefits. In our local clinic they do not analyze your blood to see if you have some kind of disease. And since we don’t go to the clinic, we take advantage of these programs to attend to our health and see how things are. This is why I came. Because I am one of those people that almost never goes to the doctor and my friend told me we should come. And here I am.”

“It is good to know that strangers want to know about us. It is good for our self-esteem; we feel more human because there are people who are concerned . . . imagine how much one would have to pay a doctor for these results. I don’t have Medicaid. I am a single woman . . . this is a real benefit for us.”

Implications

In a population of workers who may not have access to regular health screenings for chronic health conditions such as diabetes, hypertension, or kidney disease, notification of “out of range” or “beyond normal range” findings in the course of research can lead to referrals for local health care providers to recheck these incidental findings that may have otherwise been left undiscovered and uninvestigated.

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