

# SF12v2 Health Scores for African Americans in a Cluster-randomized Community Trial

Thomas V. Joshua, PhD (c)<sup>1</sup>; Jane T. Garvin, PhD, APRN <sup>2</sup>; Lucy Marion, PhD RN<sup>1</sup>; Lovoria B. Williams PhD, APRN<sup>3</sup> <sup>1</sup>Augusta University, College of Nursing, <sup>2</sup>University of St. Augustine for Health Sciences, <sup>3</sup>University of Kentucky

#### INTRODUCTION

- Self-administered health survey short form (SF12v2) is commonly used to assess the health-related quality of life (HRQOL) among populations.
- There is a lack of data regarding its effectiveness among African Americans (AAs).

## AIM

To assess the quality of life among
 AAs enrolled in a faith-based
 diabetes prevention program, Fit
 Body and Soul (FBAS) compared to a
 health education (HE).

## METHODS

- Secondary data analysis of a prospective cohort study.
- Data were collected at three time points; baseline, 12 weeks, and 52 weeks.
- SASv9.4 was used to score the data.
- The SF12v2 data calculate two summary component scores, Physical Component Summary Score (PCS) and Mental Health Component Summary Score (MCS) with eight sub-domains.
- Scores range from 0 to 100, where a zero score indicates the lowest level of health and 100 indicates the highest level of health.
- Both PCS and MCS combine the 12 items in such a way that they compare to a national norm with a mean score of 50.0 and a standard deviation of 10.
- Whenever an individual respondent's scale score is below 45, or a group mean scale score is below 47, health status is below the average range.

## RESULTS

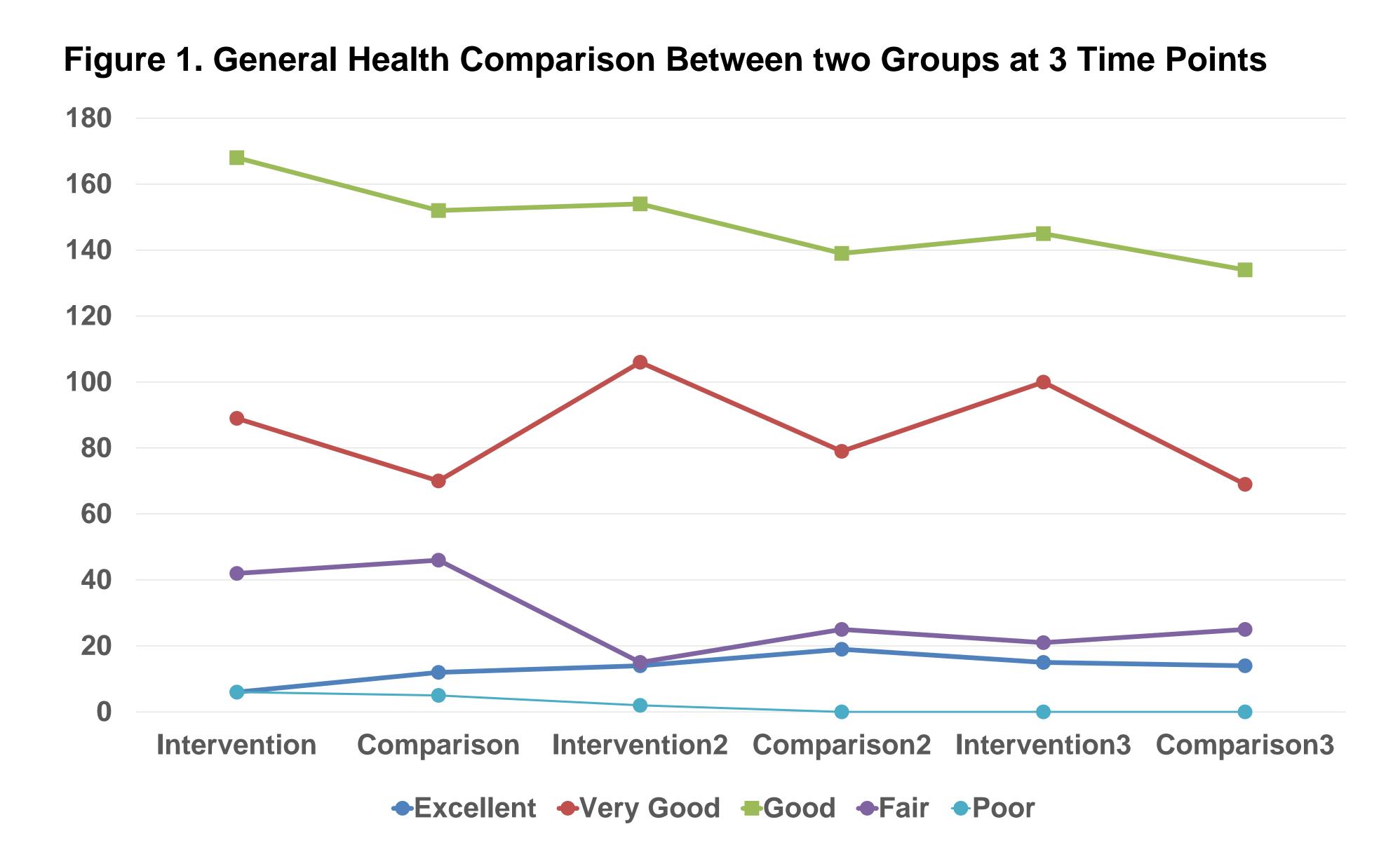


Table 1. SF 12v2 Physical Component score (PCS) comparison for age group above 45

Age	PCS									
	National	FBAS								
	General US population	Baseline		Week 12		Week 52				
		Int.	Comp.	Int.	Comp.	Int.	Comp.			
45 – 54 / 108	50	49	52	51	53	50	53			
55 – 64 / 87	47	47	48	48	49	48	48			

Int. = intervention; Comp. = comparison

Table 2. SF 12v2 Mental Component score (MCS) comparison for age group above 45

Age	MCS									
	National	FBAS								
	General US population	Baseline		Week 12		Week 52				
		Int.	Comp.	Int.	Comp.	Int.	Comp.			
45 – 54 / 115	50	53	52	55	53	54	53			
55 – 64 / 66	47	54	55	54	55	53	54			

Int. = intervention; Comp. = comparison

- Total of 604 people were enrolled. FBAS included 317(mean age = 46.59±10.9) and 287 (mean age = 46.39±10.9) were in the HE.
- General health was reported good or better for 85% of the sample in both groups at baseline.
- Overall PCS for FBAS was 49 at baseline, 51 at week 12, and 50 at week 52 and for HE was 48 at baseline, 49 at week 12 and 49 at week 52.
- Overall, MCS for FBAS was 51 at baseline, 53 at week 12, and 52 at week 52 and for HE was 51 at baseline, 52 at week 12 and 51 at week 52.

### CONCLUSIONS

- Quality of life among participants at week 12 was improved from baseline but not maintained at week 52.
- The SF-12v2 appears to be a valid survey tool for the assessment of HRQOL among AAs.

#### REFERENCES

Kuznetsov, L. et al., (2014). Diabetes-specific quality of life but not health status is independently associated with glycaemic control among patients with type 2 diabetes: A cross-sectional analysis of the ADDITION-Europe trial cohort. *Diabetes Res Clin Pract*, 104(2): 281-287.

Sattin, R. et al., (2016). Community trial of a faith-based lifestyle intervention to prevent diabetes among African-Americans. *Journal of Community Health*, *41*(1): 87-96.

Williams, L.. et al., (2013). Design of a cluster-randomized controlled trial of a diabetes prevention program within African-American churches: The Fit Body and Soul study. *Contemporary Clinical Trials*, 34(2): 336-347.

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