



The Role of African American Health Ministries in Promoting Healthy Behaviors among Type II Diabetics

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INTRODUCTION

Diabetes is a chronic disease that disproportionately affects African Americans. This poster presentation presents the findings of four newly formed health ministries that collaborated on the design and implementation of a Type II Diabetes Self Management Program for three African American communities in Albany, New York.

RESEARCH QUESTION

1. Do church health ministries enhance type 2 self management behaviors adherence?
2. Is Community Participatory Action Research (CPAR) using an American Diabetes Association developed faith based diabetes education program, an effective tool for a type 2 diabetic self management program?

METHOD

Adhoc group design with measures at baseline, end of program and 3 month telephone follow up.

Measures:
Diabetes Self Care Activities (SDSCA)
self report measure of diabetes regimen

- Blood glucose test
- General diet
- Fruits & vegetables
- Low fat diet
- Exercise
- Medication adherence
- Foot care

Diabetes Empowerment Scale – Short Form (DES-SF)*
©Diabetes Research and Training Center University of Michigan, 2003
• Measures the psychosocial efficacy of individuals with diabetes

Subscales
I maintaining psychosocial self efficacy
II assessing dissatisfaction and readiness to change
III Setting and achieving goals

Demographics (n=37)

Gender	M 21%	F 79%
Education	HS	44%
	HS+	56%
Marital Status	S	16%
	M	44%
	S/D	31%
African American		100%
Median Age		59
Median Income		\$30,00-39,000
Average years of diabetes		13
Medical Coverage	None 5%	Private 55%
	Medicare 7%	Medicaid 12%
	Mix 21%	

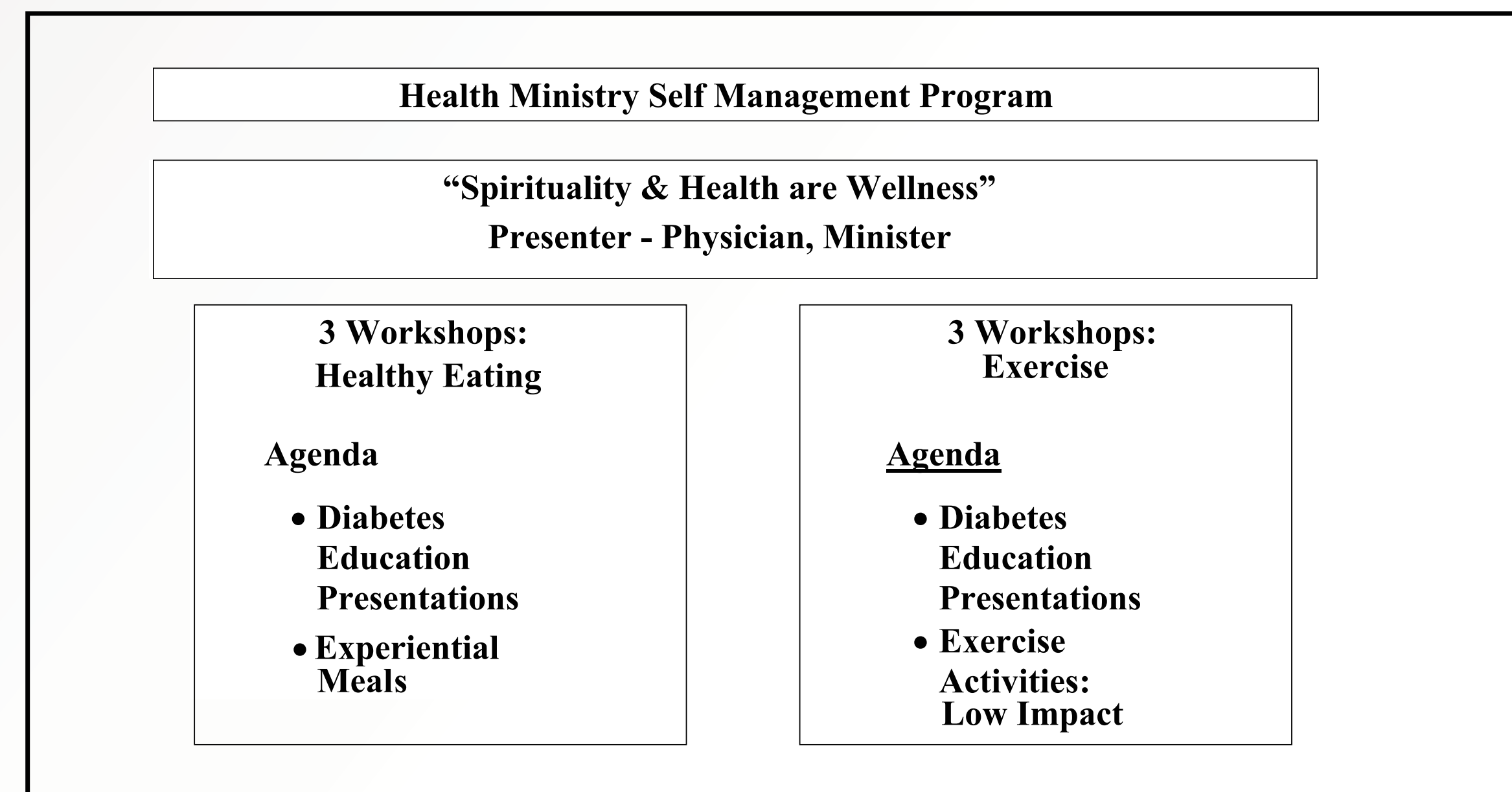
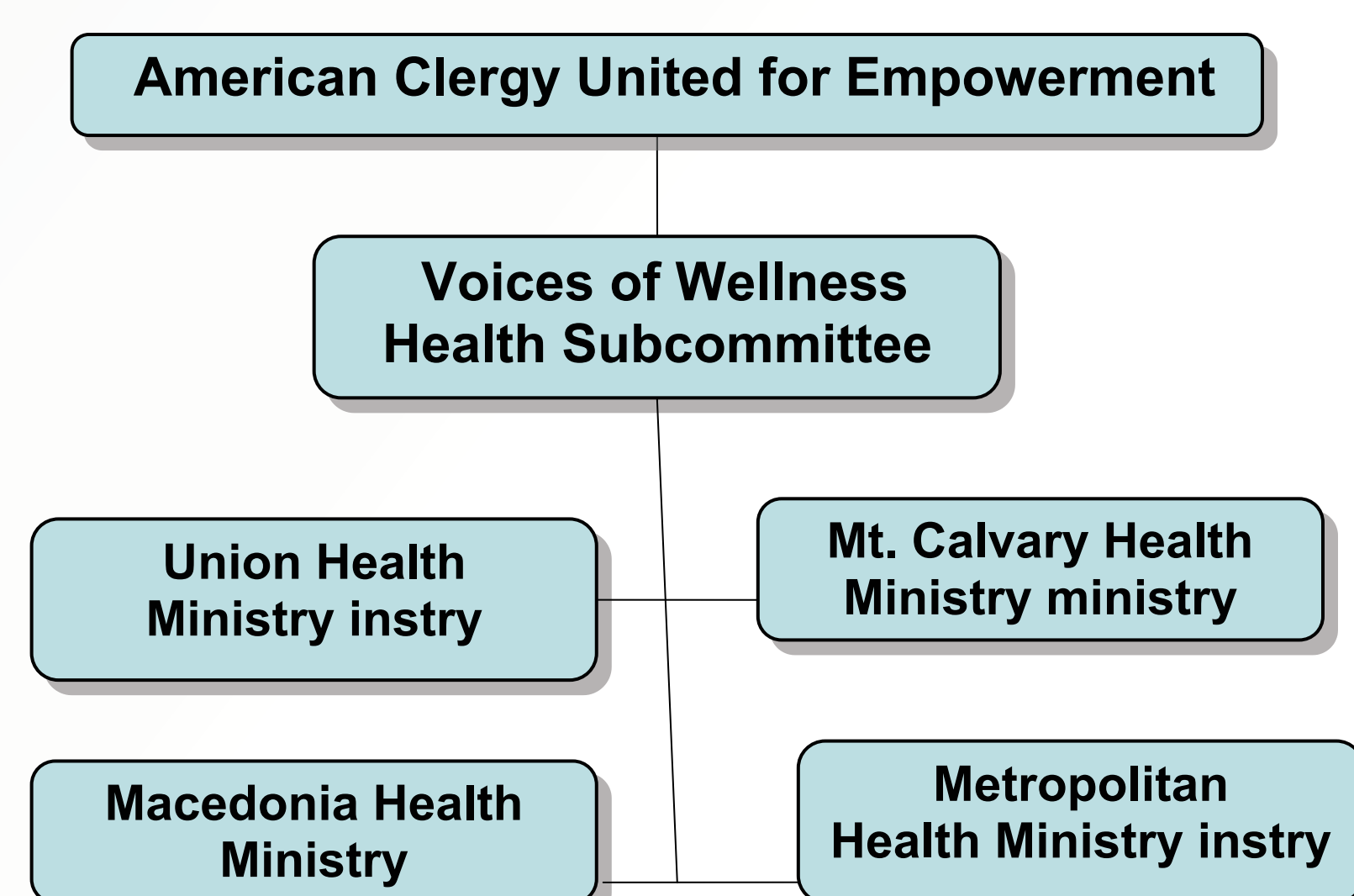


Table 1. Paired samples t-tests of Diabetes Self Care: Pre-Post and Pre-3 months Aggregate

Categories and Items	M	N	SD	t
Blood Test				
Days per week test blood				
Pre Test	4.12	33	2.724	-2.515*
Post Test	5.09	33	2.112	
Pre Test	4.63	35	2.756	-2.918**
3 Months Test	5.71	35	2.066	
Testing Blood as Recommended				
Pre Test	3.30	27	2.715	-3.193**
Post Test	4.56	27	2.636	
Pre Test	3.52	31	2.791	-1.679
3 Months Test	4.35	31	2.524	
Diet				
Days per week healthy eating				
Pre Test	3.78	32	2.166	-4.422***
Post Test	5.34	32	1.516	
Pre Test	3.86	35	2.144	-3.875***
3 Months Test	5.40	35	1.913	
Days per week follow eating plan				
Pre Test	3.76	33	2.385	-4.401***
Post Test	5.45	33	1.201	
Pre Test	3.94	35	2.222	-3.758***
3 Months Test	5.26	35	1.578	
Days per week fruits/vegetables				
Pre Test	4.79	33	2.342	-.678
Post Test	5.12	33	2.043	
Pre to 3 Month Waves				
Pre Test	4.29	35	2.515	-1.857
3 Months Test	5.11	35	1.937	
Days per week high fat foods (lower mean=improvement)				
Pre Test	3.24	34	2.119	2.511*
Post Test	2.56	34	1.795	
Pre Test	3.39	36	2.101	2.814**
3 Months Test	2.44	36	2.049	
Medication				
Days per week recommended medication				
Pre Test	6.68	34	1.364	-.147
Post Test	6.71	34	.836	
Pre Test	6.40	35	1.752	-.387
3 Months Test	6.54	35	1.400	
Exercise				
Days per week 10 minutes				
Pre Test	3.82	34	2.528	-1.460
Post Test	4.38	34	2.160	
Pre Test	3.71	35	2.480	-2.059*
3 Months Test	4.63	35	2.302	
Days per week 30 minutes				
Pre Test	3.03	33	2.756	-2.344*
Post Test	4.12	33	2.342	
Pre Test	3.20	35	2.774	-1.435
3 Months Test	4.03	35	2.269	
Days per week specific exercise				
Pre Test	2.81	31	2.892	-1.862
Post Test	3.68	31	2.737	
Pre Test	2.71	34	2.939	-.318
3 Months Test	2.91	34	2.778	

Foot Care				
Days per week				
Pre Test	5.27	33	2.478	-2.150*
Post Test	5.97	33	1.895	
Pre Test	5.31	36	2.528	-2.253*
3 Months Test	6.08	36	1.680	
Days per week dry toes				
Pre Test	5.76	34	2.375	.292
Post Test	5.68	34	2.543	
Pre Test	5.76	36	2.468	.060
3 Months Test	5.69	36	2.550	
Days per week check shoes				
Pre Test	3.44	34	3.305	-2.046*
Post Test	4.44	34	2.732	
Pre Test	3.25	36	3.341	-.164
3 Months Test	3.36	36	3.100	

RESULTS

SDCA Improvements

- Participants increased the number of days they checked their blood/glucose level within a week as recommend by their physician.
- Participants followed healthy eating plans and reduced intake of high fat foods from base line to end of program and continued at 3 months. However, there was no change in consumption of fruits and vegetables.
- Participants improved ten minutes of exercise. Interestingly, there was no change in exercising for 10 minutes during the workshops but there was significant improvement during 3 month follow up.
- There was improvement in 30 minute exercise during the program but level was not maintained at 3 month follow up.
- Participants significantly improved the number of days that they checked feet and maintained at 3 month follow up.
- Significantly increased the number of days per week they checked their shoes during the workshop period. However, they were not maintaining that level at 3 month follow up.

Categories and items indicating no significant change

- Testing Blood as recommended – pre-3 month follow up.
- Days per week fruits/vegetables intake pre-post, pre – 3 month.

DES Improvements

- Improvements in scores from baseline to 3 months.
- Managing the psychosocial aspects of diabetes
- Assessing the dissatisfaction and readiness to change
- Setting and achieving goals
- Empowerment improvement provided deeper insight into the improved self management results

PRACTICE IMPLICATIONS

- All programs required the commitment and continued support of Church Pastor.
- Schedule exercise programs in consideration of food intake requirements.
- CPAR enables community residents to make valuable contributions to research that promotes healthy communities.

Post Workshop Support Requirements

- Form monthly support groups at each church.
- Support & educate family members.
- Institutionalized health promotion programs within the Church Health Ministries.
- Expand community network with Health Institutions.