Improving Health through Action on Economic Stability: Results of the Finances First Randomized Controlled Trial of Financial Education and Coaching in Single Mothers of Low-Income

Abstract

Objectives. Evaluate the health impact of a novel financial education and coaching program in single mothers of low-income in Omaha, Nebraska.

Methods. Employed, single-mothers earning no more than 200% of the 2017 Federal Poverty Level (n=345) enrolled in the study between April 2017 and August 2020 and were randomized 1:1 to receive the Financial Success Program (FSP) or usual care. Baseline demographics, biometrics, financial strain, health behaviors and healthcare utilization were assessed at baseline and the 12-month study visit.

Results. Participation in the FSP resulted in significantly reduced financial strain, an increased rate of smoking cessation, and a reduction in avoidance of medical care due to cost compared to women in the usual care group.

Conclusions. The FSP represents an effective model in promoting economic stability in vulnerable individuals through a reduction in financial strain. Health behavior changes including an increased rate of smoking cessation were demonstrated within the first 12-months of intervention.

INTRODUCTION

Extensive evidence indicates financially disadvantaged individuals have poorer health outcomes than their advantaged counterparts.[1-3] The relationship between socioeconomic status (SES) and health is multifactorial. SES is often defined using wealth or income. Higher wealth and income can lead to better health by providing material benefits that promote good health: safe homes and neighborhoods, healthy foods and places for exercise, transportation, education and ability to afford medical expenses, among others.[4] Yet, a significant part of the inequality in health is not directly explained by wealth or income, but by the psychosocial stress associated with material resources, or lack thereof.[5]

Persistent stress, even at low levels, can lead to chronic disease.[6] The idea of "allostatic load" helps explain this finding.[7-8] Allostatic load refers to the wear and tear on an organism that eventually results in compromised resistance to illness and disease. Chronic financial strain, or the persistent struggle to meet daily challenges with inadequate resources, triggers biological cascades (inflammatory and immune dysregulating) that potentiate chronic disease.[8-9] Research suggests this wear and tear originates as a result of circumstances experienced well in advance of the morbidity and mortality that become evident at mid- late life and persistent, unrelenting financial strain accumulated over the life course is more strongly associated with poor health outcomes than episodic or transient financial strain.[5, 10]

Financial strain also plays a role in the uptake of healthy lifestyle behaviors. Persons experiencing financial stress are more likely to engage in smoking, alcohol consumption, poor diet and reduced exercise.[11] This can be attributed to the idea that financial strain erodes self-control. People of low-income must overcome more urges and make more difficult decisions more often than individuals with higher incomes. This increased regulation of behavior depletes

mental function, exhausts self-control, and leads to behaviors that are harmful to health.[12] Such "bandwidth tax" is also why interventions to promote healthy behaviors in persons of low-income are often less successful.[12,13]

Economic stability is a well-established social determinant of health (SDOH) and financial strain is a key driver of the health inequities observed in persons of low-income. Interventions aimed at reducing financial strain early in the life course may decrease cumulative exposure to allostatic load and alter the health trajectory of the financially disadvantaged. This study sought to assess the effectiveness of a financial education and coaching intervention in reducing financial strain and improving health outcomes in single mothers of low-income. To the best of our knowledge, this is the first randomized, controlled trial to examine the impact of financial education and coaching on health.

METHODS

The Finances First Study, conducted from April 2017 through August 2020, was a randomized, controlled trial to assess the health effects of financial education and coaching in 345 single mothers of low income. Single mothers between the ages of 19 and 55 were included if they were employed, earned less than 200% of the 2017 US Federal Poverty Guideline, and spoke English or Spanish. Women were excluded if they were known or planning a pregnancy, currently abusing alcohol or illicit drugs, or living in a domestic violence situation. Participants were recruited on a rolling basis and randomized 1:1 to the Financial Success Program (FSP) intervention which included nine weeks of financial education plus 12 months of 1:1 financial coaching versus usual care. For ethical reasons, women randomized to the control group were offered the opportunity to receive the FSP intervention after they completed the study. Some

women were referred to the study by an existing participant taking classes such as a friend, sister, or co-worker. Those individuals were randomized via block to the intervention group. This was done because historically, participants have shared knowledge with others not taking the class.

Intervention

The FSP has been operating since 2009 and has demonstrated a consistent track record of promoting durable financial behavior change, reducing financial stress and improving participant quality of life.[14-15] The FSP's comprehensive model helps families feel connected and supported by training participants to normalize and reframe their financial circumstances into something they feel they can manage and envision themselves as capable of living differently. They take actions to address immediate financial issues, learn and practice skills and behavior changes, and develop decision making strategies to foster financial confidence. The model's multiple interactive elements provide ongoing group support; year-long one-on-one financial coaching; and other value-added components that builds financial capacity and confidence. The FSP concentrates on three core components: an outstanding trainer, financial coaching, and an easy to use money management system. The program's focus on monthly cashflow management and its strategies include education, eliciting emotions, values clarification, pros and cons of making changes, and forming more positive habits to help participants take more effective action to support their financial well-being. The program was offered in English and Spanish and the detailed curriculum has been previously published.[16]

Data Collection

Written informed consent was obtained prior to the intervention and participants were seen by study investigators at baseline and at 12 months. Women randomized to usual care were provided the opportunity to participate in the FSP after study completion. Demographics, biometrics (height, weight, BMI, blood pressure, A1c and lipid panel), a program-developed survey and the Family Economic Strain Scale (FESS) were collected at the initial and final 12-month study visit. Due to COVID-19, final visits for participants finishing the study after March 2020 were completed by telephone, with an IRB amendment and approval. As a result, biometric data for these 40 participants was not obtained. The FESS is a 13-item survey validated to assess perceived economic strain in both one parent and two-parent families.[17] Higher scores indicate less perceived economic strain.

Statistics

Depending on data distribution, continuous variables are presented as mean and standard deviation or median and interquartile range. Categorical variables are presented as frequency count and percent. Between-group differences at baseline and follow-up were compared using independent-samples t-test or the Mann-Whitney test for continuous variables, and chi-square test or Fisher's exact test for categorical variables. Within-group change from baseline was evaluated using paired-samples t-test or Wilcoxon signed-ranks test for continuous variables, and McNemar's test for categorical variables. SAS v. 9.2 (SAS Institute Inc., Cary, NC) was used for all statistical analyses and $p \leq 0.05$ was used to indicate statistical significance.

RESULTS

A total of 345 women were enrolled in the study. As a result of missing two or more of the nine total financial education classes, only 115 of the 184 (62.5%) women randomized to receive the FSP intervention were included in the Per Protocol analysis (PP), all women randomized to FSP intervention were included in the Intent to Treat analysis (ITT) (Table 1).

Women who were randomized to the FSP (ITT and PP) experienced a significantly greater increase in FESS scores compared to women in the control group, indicating a decrease in perceived financial strain (Table 2). In addition, women who were randomized to FSP reported significant reductions in several of the negative effects of financial strain compared to control. Specifically, there was a reduction in the number of women randomized to FSP who reported "always" feeling stressed about finances (-24.3%, $p<0.001$ ITT; -24.9%, $p<0.001$ PP) when asked to report how often in the past year they encountered this experience using a likert-type scale (never, seldom, sometimes, frequently, always). Likewise, there was an increase in the number of women who completed the FSP who reported "never" losing sleep over money (19.7%, $p<0.001$ ITT; 21.3%, $p<0.001$ PP) and "never" allowing stress to affect relationships (28.6%, $p<0.001$ ITT; 30.5%, $p<0.001$ PP) (Table 2). Each of these changes was significantly greater than those demonstrated in the control group.

Women who were randomized to the FSP demonstrated a significant reduction in tobacco use (-5.8%, $p=0.02$ ITT; -4.9%, $p=0.008$ PP). This change was significantly different than that of the control group, which demonstrated a small, non-significant increase in the rate of smoking (+0.6%; $p=0.166$) (Table 3). No significant changes in biometric data were observed for any sample at 12 months.

Lastly, participants were asked at baseline and the 12-month visit to report how many times in the last year they did not receive needed medical care due to cost. Women randomized to the

FSP reported a significant reduction in avoidance of needed healthcare due to cost (-14.9%, p=0.003 ITT; -18.5%, p=0.001 PP). This change was significantly greater than the non-significant reduction reported by the control group (-0.8%; p=0.789) (Table 4).

DISCUSSION

In this study, financial education and coaching significantly reduced perceived financial strain in single mothers of low-income. This finding in and of itself has promise in potentially reducing the disproportionate incidence of chronic disease seen in low SES groups. While changes in biometric data and chronic disease incidence were not demonstrated in the current study, research suggests these health inequities are a result of circumstances experienced well in advance of the morbidity and mortality that become evident at mid-late life.[5,10]

Data from the National Longitudinal Survey of Mature women found exposure to any financial strain over the life course increases risk for poor health, but the risk was greatest in women who faced long, unrelenting spells of financial strain.[5] The study authors concluded even temporary relief from financial strain is beneficial to women's health. This finding is supported by a second study that demonstrated persistent financial hardship was a more significant driver of poor health than its episodic occurrence and the health effects of early hardship may be obviated if followed by no further strain.[10] Of particular interest, the study found the association of financial strain and poor health in late-adulthood increases when financial strains are present between the ages of 35-50 and that financial hardship experienced prior to age 35 has an effect on late life health only when it is followed by additional hardship after age 35.[10] The average age in the current study is about 35, suggesting this is a pivotal time in the life course to address financial strain.

Women who completed the FSP reported a reduction in lost sleep over finances and a reduction in allowing finances to affect their relationships. These findings are noteworthy as adequate sleep and a supportive social network, when lacking, have been shown not only to cause stress, but to predict how individuals experience and cope with stress.[18-20] One of the hypothesized pathways of financial strain deteriorating health is through loss of supportive social relationships and family tension.[10] Social support has been shown to reduce stress, improve health and decrease mortality risk.[19] A similar, reciprocal relationship between sleep and stress has also been shown.[21] Perhaps participation in the FSP, mediated through a reduction in financial stress, leads to improved sleep and enhanced social support, which reduce further stress proliferation and potentiates good health.

While research indicates there is an independent effect of financial strain on health, above and beyond reported financial resources, participation in the FSP has also been shown to significantly increase income compared to control and at a rate greater than projected mean salary increases for 2020.[22-23] Interestingly, the improvements in income and financial stress were observed in women who participating in the FSP during the COVID-19 pandemic.[23] A sub-analysis of 40 women who completed their 12-month follow-up during the pandemic found that in contrast to women randomized to usual care, women in the FSP experienced fewer job losses and an increase in median salary and ability to save. These factors likely influenced the reduction in perceived financial stress demonstrated by the women in the FSP. Possibly through the financial education, available resources, and coaching, these participants were better equipped to adapt to adversity and demonstrate resiliency despite the pandemic.

In addition to reductions in financial strain, participation in the FSP significantly increased the proportion of women who quit smoking during the 12-month follow-up, despite lack of formal

183 smoking cessation education/intervention. This finding is particularly impressive as low-SES
184 smokers are less likely to successfully quit smoking than their higher SES counterparts and also
185 more likely to relapse.[24-25] These studies highlight the benefit of addressing financial strain in
186 tobacco cessation interventions with vulnerable populations. The notion of scarcity holds that
187 decision-making capacity and self-control erode when financial resources are under strain.
188 Interventions to reduce financial strain may preserve smokers' self-control reserves and enable
189 them to make healthier lifestyle decisions like smoking cessation.[12] Additionally, tracking the
190 expense of smoking as a part of the FSP intervention may have lead to greater awareness of the
191 financial implications of tobacco use, further supporting cessation.
192 An AJPH editorial on the social determinants of health equity identified "lifestyle drift" as a
193 significant barrier to acting on the social determinants of health to address health equity.
194 Lifestyle drift is the tendency in public health to focus on personal behaviors (smoking, health
195 eating, physical activity) without considering the drivers of these behaviors (the causes of the
196 causes).[26] Addressing finances first, an upstream cause of unhealthy behaviors, may lead to
197 expanded capacity to engage in healthy lifestyles. The FSP focuses on helping single mothers
198 move from resigned acceptance of chronic financial struggles to envisioning a better future for
199 themselves and their families. Improved monthly cashflow management and other future-
200 oriented actions lead to healthier lifestyle behaviors as financial stress levels decrease. While
201 greater awareness of the financial implications of tobacco use were salient to their decision-
202 making, their increased sense of empowerment and hope from achieving financial goals likely
203 underpinned their health-related behavioral changes.
204 Access to medical care is a significant concern for people of low-income. In 2019, data from the
205 National Health Interview Survey found that 17.7% of American adults with incomes below

200% of the federal poverty level reported delaying and/or going without medical care due to cost.[27] This finding is significantly lower than the more than 40% of women in the current study who, at baseline, reported avoiding medical care in the past year due to cost. Women who participated in the FSP reported a reduction in the financial barriers to health care access. This may be important in preventing and managing chronic disease and reducing unnecessary disability and premature mortality.

The current study involved several strengths as well as limitations. As mentioned, this was the first study, to our knowledge, to evaluate the health effects of a financial education and coaching intervention using a randomized, controlled trial method. Other strengths include the use of a validated survey tool to assess perceived financial strain and inclusion of a significant proportion of African American and Latino participants.

An unfortunate limitation of the study relates to a change in collected data as a result of the COVID-19 pandemic. In March 2020, in response to a halt in non-essential clinical research, the US Food and Drug Administration (FDA) issued guidance for the conduct of clinical trials during the pandemic.[28] In lieu of a clinic visit, the Finances First study investigators conducted final follow-up visits between May 8, 2020 and July 29, 2020 by telephone. As a result, biometric assessments including weight, blood pressure, A1c and lipid panel were not obtained for the last 40 women to complete the study. Without this data, estimated atherosclerotic cardiovascular disease (ASCVD) risk could not be calculated. These missing data likely influenced the lack of significant reductions in ASCVD risk for the FSP group despite demonstrated increases in smoking cessation. A second limitation was the self-reported nature of the smoking cessation, urine cotinine was not obtained to confirm participants had truly quit.

Results from the current study highlight the effectiveness of a novel financial education and coaching intervention in addressing financial stability determinants of health. More research is needed to determine the long-term impact of the FSP, particularly as it relates to health trajectory and chronic disease risk mitigation. A 20-year prospective longitudinal study evaluating chronic disease prevalence in women who completed the Finances First study is currently underway. Additionally, research on the cost-effectiveness of the intervention is also needed.

PUBLIC HEALTH IMPLICATIONS

With the transition toward value-based payment models, the need to focus efforts on reducing health spending by improving health outcomes emphasizes the need for health care teams to attend to the social determinants influencing health. Integrating evidence-based interventions acting on the SDOH within the health care system is a promising approach to advancing health equity. The FSP represents an effective program in assisting vulnerable individuals with financial stability.

TRIAL REGISTRATION STATEMENT

This study was approved by the IRB. This study was performed in accordance with the ethical standards as laid down in the 1964 Declaration of Helsinki and its later amendments. This trial was registered at clinicaltrials.gov.

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Table 1. Participant Characteristics, by Sample: Finances First, Omaha, NE, 2018-2020

	Control[a] (n=161)	Intervention Intent to Treat[b] (ITT) (n=184)	Intervention Per Protocol[c] (PP) (n=115)
Age (Median [interquartile range])	35.1+7.8	34.6+7.6	34.9+7.2
Mean household Income (thousands) ± SD	26.4±10.6	25.9±9.7	26.2±9.8
Race/Ethnicity			
Black/African American (%)	54.0	54.9	54.8
Non-Hispanic White (%)	29.8	21.2	18.3
Latina/Hispanic (%)	13.0	16.3	19.1
Other (%)	3.1	7.7	7.9
Highest Education Achieved			
Some High School (%)	6.3	7.6	7.8
High School Graduate (%)	8.8	14.1	11.3
Some College (%)	48.1	44.0	48.7
College Graduate (%)	36.9	33.7	32.2
Marital Status			
Single (%)	68.9	71.2	71.3
Married (%)	1.2	0	0
Divorced (%)	21.1	16.9	15.7
Separated (%)	6.2	10.9	11.3
Widowed (%)	3.1	0.5	0.9
Biometric Data			
Weight (kg) ± SD	91.5 ± 27.5	90.1 ± 25.7	91.5 ± 24.6
BMI ± SD	33.8 ± 9.3	33.3 ± 8.6	34.1 ± 8.3
Systolic Blood Pressure (mmHg) ± SD	116.2 ± 16.2	114.0 ± 15.1	113.4 ± 13.3
Diastolic Blood Pressure (mmHg) ± SD	79.1 ± 16.4	76.7 ± 11.5	76.4 ± 10.1
Total Cholesterol (mg/dL) ± SD	182.1 ± 39.1	177.9 ± 37.9	177.7 ± 38.8
Low-density Lipoprotein Cholesterol (mg/dL) ± SD	104.7 ± 35.1	99.4 ± 35.4	99.2 ± 36.6
High-density Lipoprotein Cholesterol (mg/dL) ± SD	54.7 ± 14.7	54.8 ± 17.5	54.0 ± 17.9
Triglycerides (mg/dL) (Median [interquartile range])	108 [72-158]	109 [71-148]	111 [79-151]
A1c (%) (Median [interquartile range])	5.5 [5.2-5.8]	5.5 [5.3-5.8]	5.6 [5.3-5.8]

[a]Included participants who received usual care
[b]Included participants who were randomized to financial education/coaching who completed 9 weeks of financial education as well as those who were randomized to financial education/coaching who did not complete 9 weeks of financial education
[c]Included participants who were randomized to financial education/coaching who completed 9 weeks of financial education

354 **Table 2. Changes in Self-Reported Financial Stress, by Sample: Finances First Study, Omaha, NE 2017-2020**

					P Values				
	Control (n=161)[a]		Intervention Intent to Treat[b] (ITT) (n=184)		Within Group		Between Group		Interaction
	Baseline	12 Months	Baseline	12 Months	Control	ITT	Baseline	12 Months	
Financial Stress									
Mean Family Economic Strain Scale Score + SD	32.5±9.4	36.7±10.2	34.3±9.8	42.3±10.2	<0.001*	<0.001*	0.079	<0.001*	<0.001*
Frequency of Losing Sleep Worrying About Money in Past Year									
Never (%)	9.9	19.2	6.0	25.7	0.011*	<0.001*	0.172	0.182	0.030*
Seldom (%)	16.2	16.4	19.0	23.0	0.866	0.662	0.485	0.159	0.606
Sometimes (%)	20.5	23.3	29.9	29.7	0.475	0.884	0.046*	0.211	0.622
Frequently (%)	26.1	16.4	26.6	8.1	0.058	<0.001*	0.909	0.029*	0.042*
Always (%)	27.3	24.0	18.5	13.5	0.223	0.275	0.050*	0.022*	0.720
Frequency of Feeling Emotionally Stressed About Finances in Past Year									
Never (%)	0.0	4.8	2.7	5.4	-	0.157	0.064	0.812	-
Seldom (%)	5.6	8.9	8.2	23.1	0.346	<0.001*	0.351	<0.001*	0.184
Sometimes (%)	19.3	28.8	21.2	30.4	0.019*	0.080	0.655	0.758	0.883
Frequently (%)	25.5	20.6	26.6	23.7	0.376	0.362	0.806	0.522	0.755
Always (%)	49.7	37.0	41.9	17.6	0.002*	<0.001*	0.145	<0.001*	0.024*
Frequency of Feeling that Financial Stress Has Affected Health in Past Year									
Never (%)	12.4	26.0	12.0	37.8	<0.001*	<0.001*	0.895	0.030*	0.074
Seldom (%)	18.6	20.6	17.9	21.6	0.237	0.555	0.867	0.822	0.827
Sometimes (%)	29.2	23.3	27.2	21.6	0.189	0.276	0.677	0.732	0.986
Frequently (%)	18.6	11.6	23.4	6.8	0.041*	<0.001*	0.283	0.147	0.055
Always (%)	20.5	18.5	19.6	12.2	0.317	0.034*	0.829	0.132	0.239
Frequency of Feeling that Financial Stress has Affected Relationships in Past Year									
Never (%)	25.5	30.1	19.0	43.9	0.273	<0.001*	0.150	0.014*	<0.001*
Seldom (%)	11.8	21.2	13.6	22.3	0.005*	0.053	0.620	0.825	0.792
Sometimes (%)	22.4	22.6	26.6	20.3	1.000	0.058	0.359	0.626	0.253
Frequently (%)	23.0	13.0	23.4	4.1	0.024*	<0.001*	0.932	0.006*	0.013*
Always (%)	17.4	13.0	16.9	9.5	0.061	0.050*	0.894	0.334	0.563
Frequency of Feeling that Financial Stress has Affected Ability to Perform Job in Past Year									
Never (%)	31.1	48.0	26.1	54.7	<0.001*	<0.001*	0.307	0.245	0.058
Seldom (%)	17.4	19.2	25.0	21.6	0.655	0.336	0.086	0.603	0.439
Sometimes (%)	28.0	13.7	26.6	14.3	0.003*	0.007*	0.784	0.885	0.777
Frequently (%)	14.3	9.6	10.9	3.4	0.162	0.008*	0.338	0.030*	0.171
Always (%)	9.3	9.6	11.4	6.1	0.763	0.090	0.525	0.263	0.151
					P Values				
	Control[a] (n=161)		Per Protocol[c] (PP) (n=115)		Within Group		Between Group		Interaction
	Baseline	12 Months	Baseline	12 Months	Control	PP	Baseline	12 Months	
Financial Stress									
Mean Family Economic Strain Scale Score + SD	32.5±9.4	36.7±10.2	34.4±9.4	43.4±10.0	<0.001*	<0.001*	0.104	<0.001*	<0.001*
Frequency of Losing Sleep Worrying About Money in Past Year									
Never (%)	9.9	19.2	7.0	28.3	0.011*	<.001*	0.386	0.089	0.038*
Seldom (%)	16.2	16.4	20.9	25.5	0.866	0.516	0.316	0.078	0.590
Sometimes (%)	20.5	23.3	34.8	25.5	0.475	0.117	0.008*	0.690	0.113
Frequently (%)	26.1	16.4	19.1	9.4	0.058	0.022*	0.177	0.108	0.571
Always (%)	27.3	24.0	18.3	11.3	0.223	0.046	0.080	0.011*	0.311
Frequency of Feeling Emotionally Stressed About Finances in Past Year									
Never (%)	0.0	4.8	2.6	6.6	-	0.103	0.071	0.536	-
Seldom (%)	5.6	8.9	7.0	27.6	0.346	<.001*	0.642	<.001*	0.060
Sometimes (%)	19.3	28.8	24.4	27.4	0.019*	0.423	0.309	0.806	0.340
Frequently (%)	25.5	20.6	26.1	22.6	0.376	0.355	0.907	0.689	0.837
Always (%)	49.7	37.0	40.9	16.0	0.002*	<.001*	0.147	<.001*	0.023*
Frequency of Feeling that Financial Stress Has Affected Health in Past Year									
Never (%)	12.4	26.0	12.2	37.7	<.001*	<.001*	0.951	0.047*	0.109
Seldom (%)	18.6	20.6	20.0	20.8	0.237	0.862	0.776	0.968	0.813
Sometimes (%)	29.2	23.3	27.0	22.6	0.189	0.527	0.684	0.904	0.841
Frequently (%)	18.6	11.6	20.0	8.5	0.041*	0.012*	0.776	0.417	0.342

Always (%)	20.5	18.5	20.9	10.4	0.317	0.011*	0.940	0.076	0.085
Frequency of Feeling that Financial Stress has Affected Relationships in Past Year									
Never (%)	25.5	30.1	15.7	46.2	0.273	<.001*	0.050*	0.009*	<.001*
Seldom (%)	11.8	21.2	18.3	23.6	0.005*	0.237	0.133	0.658	0.379
Sometimes (%)	22.4	22.6	27.0	17.0	1.000	0.034*	0.380	0.273	0.119
Frequently (%)	23.0	13.0	20.9	3.8	0.024*	<.001*	0.677	0.012*	0.042*
Always (%)	17.4	13.0	17.4	9.4	0.061	0.039*	1.000	0.379	0.450
Frequency of Feeling that Financial Stress has Affected Ability to Perform Job in Past Year									
Never (%)	31.1	48.0	26.1	55.7	<.001*	<.001*	0.370	0.226	0.066
Seldom (%)	17.4	19.2	29.6	22.6	0.655	0.286	0.017*	0.502	0.274
Sometimes (%)	28.0	13.7	25.2	12.4	0.003*	0.011*	0.613	0.761	0.972
Frequently (%)	14.3	9.6	7.8	2.8	0.162	0.058	0.098	0.035*	0.373
Always (%)	9.3	9.6	11.3	6.6	0.763	0.197	0.590	0.397	0.250

[a]Included participants who received usual care

[b]Included participants who were randomized to financial education/coaching who completed at least 7 weeks of financial education as well as those who were randomized to financial education/coaching who did not complete 7 weeks of financial education

[c]Included participants who were randomized to financial education/coaching who completed at least 7 weeks of financial education

Table 3. Changes in Smoking Status, by Sample: Finances First Study, Omaha, NE, 2017-2020.

	Control [a] (n=161)		Intent to Treat[b] (ITT) (n=184)		Within Group		Between Group		Interaction
	Baseline	**12 Months**	**Baseline**	**12 Months**	**Control**	**ITT**	**Baseline**	**12 Months**	
Current Tobacco Use (%)	19.3	19.9	23.4	17.6	0.166	0.020*	0.353	0.614	0.013*
	Control [a] (n=161)		**Per Protocol[c] (PP) (n=115)**		**Within Group**		**Between Group**		**Interaction**
	Baseline	**12 Months**	**Baseline**	**12 Months**	**Control**	**PP**	**Baseline**	**12 Months**	
Current Tobacco Use (%)	19.3	19.9	19.1	14.2	0.166	0.008*	0.979	0.238	0.01*

[a]Included participants who received usual care

[b]Included participants who were randomized to financial education/coaching who completed at least 7 weeks of financial education as well as those who were randomized to financial education/coaching who did not complete 7 weeks of financial education

[c]Included participants who were randomized to financial education/coaching who completed at least 7 weeks of financial education

Table 4. Changes in Healthcare Utilization, by Sample: Finances First Study, Omaha, NE, 2017-2020.

	Control [a] (n=161)		Intent to Treat[b] (ITT) (n=184)		Within Group		Between Group		Interaction
	Baseline	**12 Months**	**Baseline**	**12 Months**	**Control**	**ITT**	**Baseline**	**12 Months**	
Did Not Receive Medical Care in Past Year Due to Cost (%)	45.3	44.5	47.3	32.4	0.789	0.003*	0.718	0.033*	0.030*
	Control [a] (n=161)		**Per Protocol[c] (PP) (n=115)**		**Within Group**		**Between Group**		**Interaction**
	Baseline	**12 Months**	**Baseline**	**12 Months**	**Control**	**PP**	**Baseline**	**12 Months**	
Did Not Receive Medical Care in Past Year Due to Cost (%)	45.3	44.5	47.8	29.3	0.789	0.001*	0.683	0.014*	0.014*

[a]Included participants who received usual care

[b]Included participants who were randomized to financial education/coaching who completed at least 7 weeks of financial education as well as those who were randomized to financial education/coaching who did not complete 7 weeks of financial education

[c]Included participants who were randomized to financial education/coaching who completed at least 7 weeks of financial education