

Research Article

Stress Management Classes for Uninsured Free Clinic Patients in the United States

Rebecca Higham¹, Samin Panahi¹, Sullivan R Howard¹, Emely Puerto¹, Maison A Evensen¹, Mu Pye¹, Jeanie Ashby² and Akiko Kamimura^{1*}

¹University of Utah, Salt Lake City, Utah, USA

²Maliheh Free Clinic, Salt Lake City, Utah, USA

ABSTRACT

Objective: Stress has become a growing public health concern in the United States (US). Uninsured, low-income or minority patients utilizing a free clinic are exposed to stress disproportionately across various areas of life. Health promotion programs regarding stress management have the potential to benefit vulnerable, low income populations by reducing stress-related health issues. The purpose of this study was to describe and evaluate the “stress-management” education class taught at a free clinic that provides healthcare to uninsured patients.

Methods: Data for this study were collected by a pre-stress management class survey, field notes during the stress management class, and post-class survey at a free clinic for low-income, uninsured patients. The surveys and class took place in June 2018. Direct observations

were based off the Theory of Planned Behavior (TPB).

Results: Fifty-five stress management classes were offered with a total of 83 participants. Among the class participants, 71 filled out the survey. Free clinic patients experience cumulative negative situations. One strategy to cope with stress is to organize participant responsibilities. Main stressors among the participants included finances, family, emotions, work, health, social relationships, and a sense of not belonging.

Conclusion: Providing resources regarding stressors would be a feasible solution for patients at free clinics. Future projects should work to develop stress management class which responds to the results of this study.

Keywords: Free clinics; Stress; Stress management; Health education; Health promotion; USA

Introduction

Stress is present in various areas of life and has been notably difficult to define and study. There is no agreement within academia on how to define, classify, or measure stress exposure [1]. However, causes and outcomes of stress have become a significant and growing concern throughout the United States (US) [2]. In 2017, 75% of Americans reported experiencing at least one symptom of stress in the last month [2]. These symptoms of stress included feeling nervous or anxious, irritability or anger, and fatigue. In order to cope and manage stress, Americans resort to both unhealthy and healthy ways (e.g. smoking, listening to music, exercise, meditation, and yoga) [2]. Stress is prevalent among various demographics throughout the United States and vary among different disparities [3]. Health disparities regarding socioeconomic status, race, and ethnicity have been well-documented through previous research [4]. Among the well-documented disparities in health, stress has been listed as one of the top 10 determinants of health [5]. Uninsured, low income populations are vulnerable to additional stressors. “Women, and racial and ethnic minorities report both more lifetime discriminatory events and day-to-day discriminatory strains than their higher status counterparts” [3]. These populations also have more continual difficulties and burdens [3]. There are also growing gaps between gender and stress; women have consistently reported feeling more stressed than men [6]. Stress is also significantly higher among Hispanic

and Black populations (in comparison to whites) and there is a large disparity by socioeconomic status (SES) and race in self-reports of stress [6]. Individuals who are low-income or fall in racial or ethnic minority groups are exposed to stress disproportionately across various areas of life, including having greater threats to health, safety, and economic advancement [7]. Uninsured, free clinic patients fall into the low-income category. Stress, or negative life events, can have a significant impact on both physical and mental health outcomes [3]. The presence of stress can cause impairments in stress recovery, such as notable disruptions to sleep, and can alter healthy behaviors, leading to obesity and substance abuse [8]. Those who live under the poverty line have poorer mental health, are diagnosed with more chronic health conditions, including diabetes and hypertension, and have a shorter life span [9]. Among persons with low income, occupational prestige, and/or education, there are higher rates of mortality, disability, morbidity, psychological distress, and mental disorders (compared to those who have more advantaged socioeconomic positions) [3]. Stress has become a growing contributor to poor health outcomes throughout the US, especially among vulnerable populations [9]. A previous study on free clinic patients and stress found that free clinic patients, particularly US born, English speaking, free clinic patients, tend to use negative coping strategies (e.g. substance use) [10]. Higher levels of perceived stress are associated with higher levels of depression, alcohol drinking and smoking among free clinic patients. Among foreign born free clinic

patients, parenting is one of the significant stressors [10-12]. While stress among free clinic patients an important issues to address, to the best of our knowledge, there are no previous studies that have examined intervention programs on stress management specifically at free clinics. The purpose of this study was to describe and evaluate the “stress-management” education class at a free clinic that provides healthcare to uninsured patients. This study will add to previous research regarding stress among uninsured free clinic patients and will fill gaps in research by evaluating and describing the “stress-management” class.

Methods

Overview

This project took place at a free clinic in Salt Lake City, Utah. This clinic is run by more than 400 volunteers and 10 paid staff members. The clinic is the primary healthcare facility for over 5,000 individuals and the total number of visits was 15,344 in 2016. Patients and families at the clinic fall below 150% of the federal poverty guidelines, do not have health insurance, and do not qualify for programs such as Medicare, Medicaid, CHIP, homeless services, or other government programs [13]. Funds for the clinic come from private grants and donations. A majority of the patients are between the ages of 21-64. Patients at the clinic come from more than 50 countries, about half of them speaking Spanish. Patients vary in terms of race, age, language, educational attainment, employment, and health status.

The clinic does not offer a formal class specific to stress management; however, they do provide a Healthy Living class that is held and lead by volunteers twice a month. This class covers topics including healthy diet, physical activity, and stress management. Other informal classes are conducted in the waiting room of the clinic. These classes are convenient for those who are unable to attend a formal health education class. Stress-management classes were held for the duration of this study.

Study procedure

This Study was approved by the International Review Board (IRB). Data for this study were collected by a pre-stress management class survey, field notes during the stress management class, and post-class survey. Only those who were 18 years or older, spoke English or Spanish, and those who were patients or a family member of a patient were able to participate. Others were allowed to attend the class but were not eligible to participate in the survey. Those who participated in the class were offered an exercise resistance band as well as instructions with exercises. The pre-class survey asked questions regarding participants' socio-demographic information (country of origin, gender, educational attainment, and employment status) and opinions on what methods would help reduce stress (exercise, listen to music, yoga, dance, medication, eat a lot, drink soda, drink coffee/tea, drink beer/wine/other alcohol drinks, talk to your family/friends, smoke tobacco, use medication, take aspirin, take opioids, take non-opioid pain killer, and other). The class consisted of a PowerPoint presentation presented in a handout regarding stress. The handout included a general definition of stress, everyday stressors, possible causes of stress, and four

suggestions for reducing stress (find a support system, be realistic, get organized and take charge, and take break and/or give yourself “me time”). The post-class survey consisted of one question rating the class on content and material (excellent, good, average, poor, very poor, and don't know). The field note template used was based on Theory of Planned Behavior that have attitudes, subjective norms and behavioral control as constructs to predict health behavior [14]. The stress management classes were conducted by four students – one instructor, one Spanish interpreter, one field note taker and one assistant. Participants were recruited in the waiting room of the free clinic, where the stress management class was offered, by the group of the students who conducted the classes.

Data analysis

Qualitative data were organized and analyzed based on themes emerged during the classes. SRH organized data from field notes, developed initial codes, and conducted preliminary analysis. AK reviewed the initial codes and preliminary analysis. RH re-organized the analysis to draw main findings. All authors reviewed the results and agreed the analysis. To ensure validity, rich thick descriptions were presented [15]. For reliability, the consistency of the codes was warranted [15].

Results

There were a total of 83 participants among the 55 stress management classes offered. Among the participants, 71 filled out the survey. The majority who were unable to fill out the survey were ineligible or under the age of 18.

Survey results

The results of the stress management survey (N=71) (Table 1). The average age among the participants was 51.22 (SD=12.30). A majority of the participants were female (N=56, 78.9%). 69% of participants chose the Spanish survey (N=49, 69.0%). The most common countries of origin were Mexico (N=34, 47.9%), USA (N=10, 14.1%), Guatemala (N=5, 7.0%), and Peru (N=4, 5.6%). Other countries included Argentina, Brazil, Chile, Ecuador, Egypt, El Salvador, Tonga, and Venezuela. Nearly 20% of participants had an educational attainment of less than high school (N=14, 19.7%). Approximately half of the participants were employed (N=37, 52.1%). Approximately 70% of participants rated exercise as a top relaxation method (N=50, 70.4%) followed by talking to family/friends (N=46, 64.8%), music (N=45, 63.4%), dance (N=27, 38.0%), and yoga (N=23, 32.4%). Over half of the class rated the class in the post-class survey as Excellent (N=39, 54.9%), while others rated it as Good (N=11, 15.5%), or Non-response (N=21, 29.6%).

Fields note results

The summary of the 55 stress management classes (Table 2). The number of participants in each class ranged from one to four and the majority of classes took approximately 7 minutes. Each class included topics of stress (definition, cause, and stressors) and four strategies to reduce stress.

Table 1: Participant characteristics.

	Frequency (%)
Language – Spanish	49 (69.0)
Female	56 (78.9)
Country of origin*	
Mexico	34 (47.9)
USA	10 (14.1)
Guatemala	5 (7.0)
Peru	4 (5.6)
Educational attainment – less than high school	14 (19.7)
Employed	37 (52.1)
Relaxation methods (Top 5 – multiple answers)	
Exercise	50 (70.4)
Talking to family/friends	46 (64.8)
Music	45 (63.4)
Dance	27 (38.0)
Yoga	23 (32.4)
Class rating (post-class survey)	
Excellent	39 (54.9)
Good	11 (15.5)
Non-response	21 (29.6)
	Mean (SD, range)
Age	51.22 (12.30)

Environments (e.g. noise, disruptions)

Because the class was held in the waiting room of the clinic, there were various possible distractions during each class. Some distractions included background noise consisting of loud music, commercials, chatter among other patients, children playing with toys, and patients being called back to see the provider. Although there were disruptions during the classes, participants overall seemed to engage with the presenter. Participants demonstrated engagement by following along with the slides, asking questions, and expressing concerns.

Group dynamics

The class format and dynamics varied throughout each class. In some classes, participants engaged and were more attentive than others. When classes were held in groups, certain participants talked more than others. There were times where patients had to leave before finishing the presentation. Other times there were both English and Spanish speakers in the class; thus, a translator was provided. This leaves room for differences in translations across both languages. Sometimes patients would speak in large sentences, leaving room for incomplete translations. The translation during these classes could have been distracting to participants and disrupted class flow. The dynamics for each class were different in regard to number of people, language, and participation.

Engagement

Overall, participants engaged in the class despite the disruptions and environment. Participants that were fully engaged were attentive, made eye contact, responded to questions, and filled out pre- and post-class surveys. Most participants were engaged and followed along with the handout/PowerPoint.

Throughout the stress management classes, participants asked questions regarding stress (e.g. differences between stress, depression, and anxiety), sleep (e.g. what to do to help with sleep, how much sleep is necessary each night), exercise (e.g. if it's necessary to exercise if their job is physical, where to participate in a yoga class), meditation (e.g. when they can meditate), and follow up on stress management class.

Participants vocalized concerns regarding everyday stressors (e.g. spouse, family, divorce, finances, moving, work, disorganized work area), healthy food habits (e.g. difficulty eating meals, cost of organic food being too high, alcohol/tobacco consumption, poor nutrition, eating diet high in fried foods), exercise (e.g. not exercising, difficulty exercising during pregnancy), and applying tips to everyday life (e.g. taking a vacation, saying 'no' more often, therapy). In each class, participants were asked to define stress. These responses included economic issues (e.g. work, bills), health issues, negative emotions (e.g. mad, sad, worried), being overwhelmed with responsibilities, family, lack of sleep, feeling rushed, anxiety, school, mental health (e.g. thoughts/attitudes), and physical or emotional stressors. Participants were also asked to look at a PowerPoint slide which listed possible stressors and pick ones that are the most stressful to them. This list included: work, classes, studying, relationship with partner, relationship with family, relationship with friends, trauma, change in residence, change in amount of social activities, roommate, childcare, finances, appearance, physical health, not "fitting in", getting married, change to a new school, change in eating habits, legal matters, mental health, law violation, spiritual/religious issues, major/career decisions, attitudes/thoughts, buying a house, change in amount of recreation, death of friend/family member. Responses included: social relationships,

Table 2: Summary of stress management classes.

Class	Length (minutes)	Number of participants	Gender distribution	Language
1	19	3	3 females	Spanish/English
2	44	2	2 females	Spanish/English
3	16	2	2 females	Spanish
4	9	1	1 male	Spanish
5	9	4	3 females 1 male	Spanish/English
6	8	1	1 female	Spanish
7	7	1	1 male	English
8	8	1	1 female	English
9	15	2	1 male 1 female	Spanish
10	1	1	1 female	Spanish
11	15	1	1 male	Spanish
12	1	1	1 male	English
13	11	3	2 females 1 male	Spanish
14	10	2	1 male 1 female	Spanish
15	9	1	1 female	Spanish
16	1	1	1 female	English
17	3	1	1 female	English
18	29	2	2 females	English
19	9	2	1 male 1 female	Spanish
20	8	1	1 male	English
21	7	1	1 female	Spanish
22	7	1	1 female	English
23	3	1	1 female	English
24	2	1	1 female	English
25	2	1	1 female	English
26	9	2	2 females	English/Spanish
27	14	1	1 female	Spanish
28	17	4	4 females	Spanish
29	6	2	2 females	Spanish
30	7	2	1 male 1 female	Spanish
31	7	2	2 females	Spanish
32	9	1	1 female	Spanish
33	10	1	1 female	Spanish
34	8	1	1 female	English
35	10	2	1 male 1 female	English
36	15	1	1 female	English
37	1	2	1 male 1 female	Spanish
38	14	3	3 females	Spanish
39	2	1	1 female	Spanish
40	13	2	2 females	Spanish
41	9	2	1 male 1 female	English and Spanish
42	7	1	1 female	Spanish
43	6	1	1 male	Spanish
44	10	1	1 female	English
45	2	1	1 female	English
46	29	2	2 females	English
47	9	2	1 male 1 female	English and Spanish

48	8	1	1 male	English
49	7	1	1 female	Spanish
50	7	1	1 female	English
51	2	1	1 female	English
52	8	1	1 male	English
53	5	1	1 female	Spanish
54	7	1	1 female	English
55	10	1	1 female	English

finances, work, physical health, family, classes, legal matters, trauma, relationship with partner, not “fitting in”, spiritual issues, change in residence, relationship with friends, buying a house, mental health, law violation, appearance and death. Participants were then asked to describe how they relax or manage stress. Responses include music (e.g. playing piano, listening to music), reading, exercising (e.g. walking, yoga, going to the gym), meditating, spiritual/ religious ways (e.g. going to church, thinking about spiritual things, prayer), going outdoors, taking time off, talking to family, getting organized, and cooking.

Discussion

This study described and evaluated the “stress-management” education class held for underserved populations at a free clinic using direct observations based off of the TPB. The format of this class was informal and was held in the waiting room of the clinic. Because of this environment, many participants were called back during the presentation (approximately 15 participants). The waiting room allowed for an open pool of participants yet provided many distractions. (kids, anxiousness regarding appointment, music, other patients nearby, other nearby conversations, etc.). Overall, the classes were well received by participants. Patients were grateful for resources provided, as well as having someone to listen and validate their emotions and everyday stressors. Many participants appreciated the handouts given throughout the presentation and were able to take them home for further use. Participants also expressed the need for further educational courses and resources. This study indicated three main findings. First, participants expressed a build-up of negative situations in their lives. Second, it appears planning ahead or organizing their responsibilities helps participants feel more in control of the situation. Third, finances, family (children), emotions, work, health, social relationships, and a sense of not belonging are main stressors in the lives of the participants. Uninsured, free clinic patients encounter cumulative negative situations. Patients utilizing free clinics are generally uninsured, low-income populations. Previous studies have found that individuals of low SES report higher levels of stress [7]. Negative stressful situations for low-income populations can include financial insecurity, job insecurity, barriers to occupational advancement, food insecurity, and debt [16]. Financial instability and stress was a common negative situation among low-income populations. Free clinic patients also have negative experiences regarding health. Uninsured patients have lower health outcomes, which could be due to a variety of reasons, including skipping necessary

regular doctor visits [17]. Previous studies have found that uninsured patients admitted to the hospital are sicker, leading to increased service needs [18]. The study also indicated that uninsured patients are more likely to leave against medical advice, have shorter hospital stays, and have poorer health outcomes by not receiving necessary care [18]. These negative health outcomes could be a common negative stressor among participants. Free clinic patients come from varying demographics, many coming from minority populations. Members of racial and ethnic minority groups report greater exposure to discrimination, including threats to safety and exposure to violence [19]. Minority populations also have a disproportionate range of personal, social, education, and material resources across the lifespan, including neighborhood disadvantages, and barriers to development [20]. These disadvantages can create and lead to negative stressful situations in the everyday life of free clinic patients. The results of this study suggest that one strategy to cope with stress for free clinic patients is to help organize responsibilities by getting them under control. By not having these responsibilities reasonably organized, future stress could potentially rise, thus resulting in worse outcomes for the patient and their families. Future programs regarding organizing responsibilities would be helpful among free clinic populations. Previous studies on free clinic patients and stress found that some may use negative coping habits, including substance use [10]. Because of this, patients may benefit from resources encouraging positive management to specific, everyday stressors common among underserved populations. Potential classes and resources for free clinic patients could include financial planning courses, daycare, exercise techniques for reducing stress, and social support groups. These resources may allow the participants to get social, financial, and community support when dealing with common everyday stressors. Future projects and classes are necessary to respond to the findings of this study. A main strength for this study is that it evaluated a “stress management” class for free clinic patients, which had not been done by any other previous studies. Although there were highly beneficial findings, there are weaknesses and limitations to this study. Being a qualitative study, the number of participants was too small to conclude the effectiveness of the “stress management” class and also to form a group based class structure. Conducting the class in the waiting room of the clinic helped recruit patients, however, class sizes were typically small. Future classes may benefit by advertising the classes in advance to increase participation and recruitment while keeping the informal waiting room class environment. Because of the waiting room environment, many of the classes were extremely short, which may limit the effectiveness of the class. The class also only allowed those who spoke English or Spanish to participate in the class and survey, leaving those who did not speak those languages unable to participate. Future classes should work to involve patients who may not speak English or Spanish. Limitations in translation may have also occurred because patients may speak several sentences at a time, leaving gaps in translation. Furthermore, even though only two languages were used, participants were heterogeneous, and thus it might have been difficult to include highly diverse

perspectives. The observations and findings of this study may not be generalizable to all free clinics.

Conclusion

This study is valuable in helping fill the gap in qualitative research regarding stress management among uninsured, free clinic patients and provides important practical implications. Because this project was only based on participant satisfaction, future projects may measure and work to promote behavioral changes in regard to stress management. The study only included participants who spoke English or Spanish; therefore, future projects may reach out to patients who were not covered by this study. Health promotion programs regarding stress management have the potential to benefit vulnerable, low income populations by reducing stress related health issues. Future projects should work to develop stress management classes responding to the results of this study.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship and/or publication of this article.

Ethical Approval

The University of Utah Institutional Review Board (IRB) approved this study.

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ADDRESS OF CORRESPONDENCE: Akiko Kamimura, PhD, MSW, MA. Department of Sociology, University of Utah, 380 S 1530 E, Salt Lake City, Utah 84112, USA, Tel: +1-801-585-5496; Fax: +1-801-585-3784; E-mail: akiko.kamimura@utah.edu

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