Research Article

Motivations and Outcomes of Volunteers at a Non-Student-Run Free Clinic

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ABSTRACT

Objective: Free clinics provide free or reduced fee health care services to un- or under-insured individuals in the United States. Volunteers are often the primary human resources of free clinics. Previous studies on free clinic volunteers were conducted at student-run clinics, however, little is known about volunteering at non-student-run free clinics. The purpose of this study is to examine motivations, interests and outcomes among volunteers of a non-student-run free clinic.

Methods: Free clinic volunteers (N=184) participated in a self-administered paper or online survey from January to May of 2016.

Results: "Values" were the most important motivation and outcome for volunteering. Older age was associated with

Introduction

Free clinics provide free or reduced fee health care services to un- or under-insured individuals in the United States (US) [1,2]. Unlike traditional primary care clinics or community clinics, volunteers are often the primary human resources of a free clinic [3]. The majority of the previous studies on free clinic volunteers were conducted on specific student volunteer groups (e.g. medical students, nursing students, pharmacy students) at student-run clinics [4,5]. Student-run free clinics help promote student interests in underserved populations, and encourage medical students to seek a career in primary care [6]. Nursing, pharmacy and social work students who participated in service learning at student-run free clinics reported increased inter-professional competencies [7].

However, most free clinics are not run by students; although there is no comprehensive list of free clinics, it has been reported that there are more than 1,200 free clinics in the US [8]. At the same time, the "Society of Student Run Free Clinics" only identifies a total of 96 student-run free clinics, including those outside the US [9]. Thus, it would be reasonable to estimate that there are many more non-student-run free clinics than student-run free clinics. Yet, very little is known about volunteers at non-student-run free clinics. To date, there is no comprehensive comparison between studentrun free clinics and non-student-run free clinics.

The percentage of US adults who volunteered in 2015 was 21.8% for men and 27.8% for women [10]. Among those who volunteered, the most common types of organizations where volunteers worked were religious organizations (33.1%), followed

lower levels of motivation for career, as well as motivation and outcome for understanding and protective function. Longer volunteering was associated with lower levels of motivation for values and careers and of outcomes for understanding. While graduate students were more likely to be motivated by career, undergraduate students were less likely to be motivated by values, compared to non-students.

Conclusion: Non-student-run free clinics not only provide educational opportunities, but also potentially a wide range of opportunities for individuals who are interested in community health.

Keywords: Free clinics; Volunteers; Motivations; Outcomes

by educational or youth service organizations (25.2%) and social or community service organizations (14.6%) [10]. There is no specific information about volunteers in clinics. Thus, it appears that volunteering at a free clinic or in a healthcare setting may not be necessarily common among adults in the US.

Existing research identifies that there are six motives for volunteering: career, learning new skills, social interaction, escaping from negative feelings, personal development, and personal values [11]. Personal values are one of the strongest motives for volunteering [12-14]. In addition, there are eight basic types of volunteer interests: interpersonal, political, administrative, animal, donating, building, and physical, which illustrate the varying interests individuals have in volunteering [15].

Based on these typographies, free clinic volunteers may have a combination of different interests and motivations. For example, free clinic volunteers may have higher interpersonal and donating interests than political or physical interests. In addition, there is the significant emphasis on volunteering in health professions for successful career development that is related to volunteer motives [16]. At student-run free clinics, the primary outcomes of volunteering included learning outcomes (e.g. improving practice behaviors and attitudes, interprofessional learning or clinical skills), and contribution to patient care for underserved populations [4,5,17,18]. Volunteer satisfaction is also used as an indicator of volunteer outcomes at student-run free clinics or other settings [19-21]. Volunteer outcomes are important for student-run free clinics and volunteers in order to evaluate whether they have achieved their goals. Volunteers at non-student-run free clinics may or may not have similar motivations and goals. Unfortunately, the information about volunteers at non-student-run free clinics is lacking.

The purpose of this study is to examine motivations, interests and outcomes among volunteers of a non-student-run free clinic. This study contributes to increased knowledge about free clinic volunteers. Since volunteers are important human resources for free clinics, it is imperative to identify volunteer motivation and outcomes so free clinics will further promote recruitment and retention of volunteers.

Methods

Overview

This community-based research project was conducted at a free clinic in the Intermountain West. The volunteer coordinator and the director of the clinic as well as the research team members developed the survey instrument, study protocol, participant recruitment strategies, and participated in interpreting the study results. The clinic provides free healthcare services, largely routine health maintenance, and preventative care, for uninsured individuals who live below the 150% federal poverty level and do not have access to employer-provided or government-funded health insurance. Patients of the clinic are from more than 50 countries. Six full-time paid personnel, who take leadership in the clinic's operations, and over 300 active volunteers serve the clinic. The clinic has been in operation since 2005, has no affiliation with religious organizations and is funded by nongovernmental grants and donations. The clinic is open 5 days a week. The total number of patient visits was 15,229 in 2014.

Volunteer positions of the clinic include: patient technicians (Medical Assistants), patient assistance (organizing donated medications and distributing them to patients), interpreters, resource office assistants, clerical office workers, x-ray technicians, dentists, nurses, physicians, physician assistants, and healthy living coaches. Potential volunteers contact the volunteer coordinator of the clinic and are then invited for an interview with the volunteer coordinator. If they decide to become volunteers after the interview, they receive a training manual and a checklist of volunteer tasks. New volunteers receive a one to two hour orientation during the first shift. The volunteers also undergo several official training sessions tailored to the specific roles they fulfill at the clinic. As of June 2016, there were approximately 340 active volunteers in total. Approximately 30% of the volunteers are patient technicians. One quarter of the volunteers are interpreters, and some fulfill multiple positions at the clinic. Among the total volunteer hours in 2014 (27,852 h), 20.7% were physician volunteer hours and 10.2% were registered nurse volunteer hours.

Participants and data collection

This study was approved by the Institutional Review Board (IRB) of the University with which the research team is affiliated. Participants were current or former free clinic volunteers aged 18 years or older. The data were collected from January to May of 2016 using a self-administered paper survey and an online survey based

on a convenience sample. The paper survey was distributed by the volunteer coordinator at the clinic. The volunteer coordinator also sent an email that included the link to the online survey to current and former volunteers once a month.

Measures

Volunteer motivation and outcomes: Volunteer motivation and outcomes were measured using a previously validated scale, the Volunteer Functions Inventory (VFI) [11]. The VFI uses a 7-point Likert scale (1=not at all important/accurate for you, 7=extremely important/accurate for you). There are 30 items to measure volunteer motivation with six subscales: career (obtaining career-related benefits from volunteer work), social (opportunities to engage with other people), values (expression values related humanitarian concerns through volunteer work), understanding (learning new knowledge, skills and abilities through volunteer work), enhancement (obtaining personal growth and development through volunteer work), and protective (reducing negative feelings or feeling of guilt associated with having more fortune than others). The examples of the items include: "I can make new contacts that might help my business career" (career); "My friends volunteer" (social); "I feel compassion toward people in need" (values); "Volunteering lets me learn through direct hands on experience" (understanding); "Volunteering makes me feel important" (enhancement); and "By volunteering, I feel less lonely" (protective). Scoring is based on the sum of the five items in each sub-scale. Higher scores indicate higher motivation.

Volunteer outcomes, which are measured separately from motivations, have seven sub-scales including career, social, values, understanding, enhancement, protective and satisfaction. Each of the career, social, values, understanding, enhancement and protective subscales has two items and uses a sum of the two items for scoring. The examples of the items include: "In volunteering with this organization, I made new contacts that might help my business or career" (career); "People I know best know that I am volunteering at this organization" (social); "Through volunteering here, I am doing something for a cause that I believe in" (values); "From volunteering at this organization, I feel better about myself" (enhancement); "Volunteering at this organization allows me the opportunity to escape some of my own troubles" (protective); and "I have learned how to deal with a greater variety of people through volunteering at this organization" (understanding). The satisfaction sub-scale has five items (e.g. "My volunteer experience has been personally fulfilling." The sum of the five items was used for scoring of the satisfaction scale. Higher scores indicate higher levels of outcomes.

Volunteer experiences: The following information was collected from participants on the survey: how the volunteers found the clinic; whether they were current or former volunteers; reason they stopped volunteering at the clinic (former volunteers only); volunteer role(s) at the clinic; preferred ways to be contacted by the clinic; the length of time spent volunteering at the clinic. In addition, participants were asked whether they believed the clinic should improve each of the following

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items for volunteers using a 5-point Likert scale (1=strongly disagree, 5=strongly agree): training; orientation; sign-up; volunteer hours, communications with volunteers; provision of information about new updates. These items were selected by the staff of the clinic based on their experiences and needs.

Socio-demographic characteristics: Participants were asked to identify the following socio-demographic characteristics: age; gender; whether there were graduate students, undergraduate students or non-students; graduate major (for graduate students only); undergraduate major (for undergraduate students only); career goal (for undergraduate students only); occupation (for non-students only); and foreign language(s) spoken, if any.

Data analysis: Data were analyzed using SPSS version 22 (IBM SPSS Statistics, Armonk, NY). Descriptive statistics were conducted to describe the distribution of the outcome and independent variables. The general linear model (GLM) was performed to predict factors associated with volunteer motivations and outcomes with independent variables of age, female, current volunteer, speaking at least one foreign language, months of volunteering at the clinic, graduate student status and undergraduate student status.

Results

The socio-demographic characteristics of the participants (N=184) and descriptive statistics (Table 1). The average age of the participants was 32.84 (SD=14.95). More than 60% of

Table 1: Socio-demographic	characteristics	of	participants
and descriptive statistics.			

Frequency (%)	
Female	115 (62.5)
Race/Ethnicity (top3)	
White	150 (81.5)
Hispanic/Latino/Latina	18 (9.8)
Asian or Pacific Islander	10 (5.4)
Graduate students	36 (19.6)
Major (top3) (% - out of 36)	
Medicine	17 (47.2)
Nursing	13 (36.1)
Physician Assistant	10 (27.8)
Undergraduate students	82 (44.6)
Major (top3) (% - out of 82)	
Pre-med	30 (36.6)
Nursing	28 (34.1)
Science	14 (17.1)
Career goal (top3) (% - out of 82)	
Physician	38 (46.3)
Nurse	28 (34.1)
Physician Assistant	24 (29.3)
Not a student/other	66 (35.9)
Occupation (top3) (% - out of 66)	
Registered Nurse	17 (25.8)
Retired	9 (13.6)
Transition	8 (12.1)

Current volunteer	144 (78.3)
How found the clinic (top3 – multiple answe	er)
Family/friends	63 (34.2)
University	40 (21.7)
Clinic's web site	14 (7.6)
Reason stopped volunteering (top3 – multip	ole answer) (%
- out of 40)	
Schedule conflict	21 (52.5)
Relocated	9 (22.5)
Started a new job	9 (22.5)
Volunteer role (top3 – multiple answer)	
Patient tech	68 (37.0)
Interpreter	36 (19.6)
Nurse	25 (13.6)
Preferred contact method (top3 – multiple a	answer)
E-mail	160 (87.0)
Text message	43 (23.4)
Phone call	22 (12.0)
Speaks at least one foreign language	87 (47.3)
Languages (top3 – multiple answer) (% - or	ut of 87)
Spanish	60 (69.0)
Chinese	7 (8.0)
Portuguese	5 (5.7)
German	5 (5.7)
Mean (SD)	
Age	32.84 (14.95)
Months of volunteering at the clinic	16.14 (23.00)
The clinic should improve for volunteers ^a	
Training	2.65 (1.10)
Orientation	3.12 (1.10)
Sign-up	3.38 (1.07)
Volunteer hours	3.64 (0.86)
Communication with volunteers	3.08 (1.05)
Provision of information about new updates	2.84 (1.05)
Volunteer motivation ⁶	24.00 (0.00)
Career	24.80 (9.08)
Social	17.94 (7.58)
Values	31.34 (3.83)
	28.14 (6.17)
Enhance	23.41 (7.29)
Protect	18.11 (7.93)
Volunteer outcome ^e	
Career	9.23 (3.85)
Social	8.70 (3.95)
Values	11.36 (2.42)
Understanding	10.87(2.70)
Enhance	9.11 (3.57)
Protect	7.56 (3.38)
Satisfaction	30.52 (5.58)

N=184

^a Higher scores indicate higher levels of agreement. Score range 1-5

^b Higher scores indicate higher levels of motivations. Score range 7-35

^c Higher scores indicate higher levels of outcomes. Score range 2-14 (except for satisfaction whose score range is 7-35)

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the participants were female (n=115, 62.5%). Slightly more than 80% of the participants self-identified their race as white (n=150, 81.5%). Twenty percent of the participants were graduate students (n=36, 19.6). Of the 36 graduate students, half of them were medical students. Nearly half of the participants were undergraduate students (n=82, 44.5%). The three common majors among the undergraduate students included pre-med (36.6% of 82), nursing (34.1% of 82), and science (17.1% of 82). Nearly half of the undergraduate students (46.3% of 82) reported they would like to become physicians in the future. Among the participants who were not students (n=66), one-quarter of them were registered nurses (25.8% of 66).

Approximately 80% of the participants (n=144, 78.3%) were current volunteers. The response rate of current volunteers was 42.4% while that of former volunteers was 5.9%. There was no difference in volunteer motivations and outcomes between current and former volunteers (not shown in the table). The average length of volunteering at the clinic was 16.14 months (SD=23). The participants commonly found the clinic through family or friends (n=63, 34.2%) or the University (n=40, 21.7%). Approximately half of the former volunteers (52.5% of 40) stopped volunteering at the clinic due to schedule conflicts. More than one-third of the participants (n=68, 37%) were patient tech volunteers. Nearly 90% of the participants (n=160, 87%) preferred to be contacted by email from the clinic. Approximately half of the participants (n=87, 47.3%) spoke

at least one foreign language. Spanish was the most common foreign language spoken by the participants (69% of 87).

As for clinic improvements for the volunteers, orientation had the highest score (mean=3.38, SD=1.07) followed by volunteer hours (mean=3.64, SD=0.86). Among the volunteer motivation items, values had the highest score (mean=31.34, SD=3.83) followed by understanding (mean=28.14, SD=6.17). Among the volunteer outcome items excluding satisfaction, values had the highest score (mean=11.36, SD=2.42) followed by understanding (mean=10.87, SD=2.70). The mean satisfaction score was 30.52 (SD=5.58).

The *F* value of the multivariate tests (Pillai's trace) for the GLM computed using alpha=0.05 was 1.60 (p<0.05) and the predictors of volunteer motivations is mentioned in (Tables 2 and 3). Older age was associated with lower levels of motivation for career (p<0.01), understanding (p<0.05) and protection (p<0.01). Longer volunteering was associated with lower levels of motivation for values (p<0.05) and understanding (p<0.01). Compared to non-students, graduate students reported higher motivation for career (p<0.05) while undergraduate students reported lower levels of motivation for values (p<0.05) while undergraduate students reported lower levels of motivation for values (p<0.05) while undergraduate students reported lower levels of motivation for values (p<0.01).

Older age was associated with lower levels of outcomes for career (p<0.01), understanding (p<0.01), enhancement (p<0.05), and protection (p<0.01). Longer volunteering was associated with lower levels of understanding (p<0.05) and protection (p<0.05) (Table 3).

Dependent variables Career <i>B</i> , <i>p</i> -value Values <i>B</i> , <i>p</i> -value Understanding <i>B</i> , <i>p</i> -value Protect <i>B</i> , <i>p</i> -value	alue
period and the second provide the second standing provide the second provide the second standing provide the second standing provides the second standing providest the second standing provid	
Independent variables	
Age -0.28 <0.01 0.02 N.S0.10 <0.05 -0.23 <0).01
Female -0.97 N.S. 0.52 N.S. 0.85 N.S. 0.37 N	.S.
Current volunteer 0.17 N.S. 1.06 N.S. 0.89 N.S. 0.66 N	.S.
Speak foreign language -0.96 N.S. 0.23 N.S. 0.18 N.S2.05 N	.S.
Months of volunteering -0.08 N.S0.05 <0.05 -0.09 <0.01 0.01 N	.S.
Graduate student 3.41 <0.05 -0.25 N.S. 0.81 N.S0.03 N	.S.
Undergraduate student 2.92 N.S2.42 <0.01 0.03 N.S0.82 N	.S.
(Intercept) 34.34 <0.01 31.43 <0.01 31.53 <0.01 25.85 <0	0.01

N=184

General Linear Model. *p*-values are based on parameter estimates; N.S.: Not Significant

The following dependent variables are not included because none of the predictors were significant: Social and enhancement

Table 3: Predictors of volunteer outcomes.								
Dependent variables	Career <i>β</i>	<i>p</i> -value	Understanding β	<i>p</i> -value	Enhance β	<i>p</i> -value	Protect β	<i>p</i> -value
Independent variables								
Age	-0.10	< 0.01	-0.05	< 0.01	-0.08	< 0.05	-0.05	< 0.01
Female	-1.07	N.S.	-0.11	N.S.	0.28	N.S.	-0.11	N.S.
Current volunteer	0.26	N.S.	0.45	N.S.	-0.07	N.S.	0.45	N.S.
Speak foreign language	-0.90	N.S.	-0.24	N.S.	-0.03	N.S.	-0.24	N.S.
Months of volunteering	-0.01	N.S.	-0.03	< 0.05	0.01	N.S.	-0.03	< 0.05
Graduate student	1.49	N.S.	-0.17	N.S.	-1.12	N.S.	-0.17	N.S.
Undergraduate student	1.36	N.S.	-0.53	N.S.	-0.34	N.S.	-0.53	N.S.
(Intercept)	12.66	< 0.01	13.26	< 0.01	11.89	< 0.01	13.26	< 0.01

N=184

General Linear Model. p-values are based on parameter estimates; N.S.: Not Significant

The following dependent variables are not included because none of the predictors were significant: Social values and satisfaction

Discussion

This study examined motivations and outcomes among volunteers at a non-student-run free clinic. The results that suggest values are the most important motivation and outcome are consistent with previous studies conducted in non-free clinic settings [12-14]. The results of this study suggest three other main findings. First, older age was associated with lower levels of motivation for career, as well as motivation and outcome for understanding and protective function. Second, longer volunteering was associated with lower levels of motivation for careers and of outcomes for understanding. Third, while graduate students were more likely to be motivated by career, undergraduate students were less likely to be motivated by values, compared to non-students.

Older volunteers are different from younger volunteers in terms of motivations and outcomes. In the national statistics, the age groups which have the highest percentage of volunteering are age 35-44 (28.9%) and age 45-54 (28.0%) while the age group of age 20-24 had the lowest percentage (18.4%) [10]. The participants of this study were, on average, younger than those in the age groups that are most likely to be volunteers among the general public but are potentially older than volunteers at a student-run free clinic. Older volunteers have lower levels of motivation for career and understanding as they may have already had a career or life before volunteering. Younger volunteers may be volunteering to obtain experience needed to achieve certain career goals, as a part of professional education and/or to fulfill requirements to apply for graduate programs. Younger volunteers also may use volunteer opportunity for developing personal capital [22,23]. Non-student-run free clinics serve as an educational hub like student-run free clinics.

Likewise, in terms of volunteer motivations and outcomes, individuals who have been volunteering longer are different from those who have been volunteering for a shorter period of time. According to the Volunteer Process Model, there are three stages of volunteering: antecedents (pre-disposal characteristics such as personality or motivational characteristics are important determine whether individuals become volunteers), to experiences (interpersonal relationships, rewarding experiences, and satisfaction become more essential), and consequences (volunteers have changed their attitudes, knowledge and behaviors through volunteer experiences) [24]. Compared to those in the antecedents or experiences stage, volunteers in the consequence stage have a different focus (i.e., changes in attitudes, knowledge and behavior) and are more likely to be filled with self-focused reasons such as achieving personal development through volunteering [24,25]. Future studies should examine how free clinic volunteers' motivations and interests change after volunteering for a certain period of time and what should be done in the first two stages to improve retention.

Furthermore, graduate students, undergraduate students and non-students have different volunteer motivations and outcomes. Unlike student-run free clinics, where volunteers may be relatively homogeneous in terms of educational backgrounds and interests, non-student-run free clinics may have volunteers with diverse backgrounds. Non-student-run free clinics potentially provide volunteer opportunities to a wide variety of individuals while contributing to healthcare human resources differently from student-run-free clinics. Therefore, efforts need to be placed in not only retaining volunteers of non-student-run free clinics but also to train and influence the future generation of healthcare providers towards care of the underserved.

This study has limitations. This study was cross-sectional and limited when it comes to examining causal relationships among variables. The response rate was low for former volunteers. The total number of participants was relatively small. This study was conducted at a single non-student-run free clinic and thus the results of this study may not be applicable to other non-student-run free clinics which have very different volunteer demographics. Despite the limitations, since little is known about volunteers of non-student-run free clinics, this study contributes to increasing knowledge about volunteering at a non-student-run free clinic and to future studies on healthcare human resources for underserved populations.

Conclusion

This study examined motivations, interests, and outcomes among volunteers of a non-student-run free clinic and found non-student-run free clinics not only provide educational opportunities, but also potentially a wider range of opportunities for individuals who are interested in community health compared to student-run free clinics. The major practice implications of this study include: by emphasizing the benefits of volunteering at non-student run free clinics; free clinics 1) may be more successful to increase the number of volunteers and their motivations and outcomes; and 2) may recruit volunteers from the community, not just from universities. Future research should examine motivations and outcomes of free clinic volunteers using longitudinal studies (to address changes in motivations and outcomes over time) and qualitative studies (to explore context and culture of free clinic volunteering). Future research should attempt to identify, for example, how free clinics can provide more motivation for careers and values for long-term volunteers and how undergraduate volunteers can learn more about career options from volunteering, and how volunteering at a free clinic can change attitudes toward underserved populations.

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.

Funding

This project was funded by the Community-Based Research Grant from the University of Utah.

Acknowledgement

The authors want to thank the volunteers who participated in this study and acknowledge the contribution of the staff of the Maliheh Free Clinic. In addition, we thank Naveen Rathi, and Lindsey Wright for their help in data collection, or data entry.

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Submitted: January 16, 2018; Accepted: January 27, 2018; Published: February 03, 2018