Summer 8-9-2019

Paging Dr. Strong: A Call to Action towards Addressing Occupational Stress and Burnout among Primary Care Health Professionals

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by

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A Capstone Project submitted in partial fulfillment of the requirement for the degree of Master of Science in Behavioral Health

University of San Francisco

San Francisco, California

August 2019

Abstract

Purpose: Within a rapidly evolving industry, occupational stress and burnout among healthcare clinicians and staff is becoming a pervasive public health crisis across all subspecialties. The purpose of this project was to use the Compassion Satisfaction-Compassion Fatigue (CS-CF) Theory as a method to assess burnout among primary care health professionals, in addition to developing recommendations to assist the promotion of a staff wellness initiative at an urban community clinic.

Methods: A needs assessment was conducted at a Community Health Center (CHC) in San Francisco. Data collection consisted of anonymous distribution of the Professional Quality of Life (ProQOL) Survey and semi-structured interviews of former CHC staff to further explore causes of occupational stress and to help identify methods for improvement.

Results: Out of the participants who completed the ProQOL survey (n= 31), the average Compassion Satisfaction score was approximately 41.87, indicating high levels of job satisfaction with occupation. Second, the average Burnout was 33.32, indicating a moderate level of occupational stress and burnout. Third, the average Secondary Traumatic Stress score was 19.97, indicating low coping difficulties with secondary exposure to traumatically stressful events at work. Lastly, interview data show both positive and negative themes pertaining to workplace environment at the CHC.

Discussion: ProQOL survey results indicating moderate levels of burnout were supported by the semi-structured interviews, which provided an in-depth perspective towards understanding employee's perspectives on the CHC workplace. Moving forward, increased focus on building staff engagement through team collaboration is essential to create an effective wellness intervention at the CHC.

Keywords:

Occupational stress and burnout, Workforce issues, Workplace environment, Healthcare workers, Public health, Compassion Satisfaction-Compassion Fatigue Theory, Organization and delivery of care

Introduction

Occupational stress and burnout is a complex health issue with multiple factors and confounding variables. In the healthcare industry, provider and staff burnout has been steadily increasing over the years. By the year 2025, the US Department of Health and Human Services estimates that an approximate population of 90,000 physicians will be suffering from high levels of burnout due to a poor workplace environment—declaring the issue a public health crisis (Datz, 2019). A number of studies have implemented data collection methods and pilot programs to investigate sources of stress and implement strategies that focus on improving employee health in healthcare workplace settings. In order to address this public health issue, it is imperative to assess levels of burnout and obtain constructive feedback from staff to develop wellness initiatives tailored to their needs.

The purpose of this project was to conduct a needs assessment at a community health center focused on primary care (CHC) to help identify areas of improvement from which the Staff Wellness Committee can develop a wellness project to support staff. The CHC serves a primarily low-income patient population from various communities in San Francisco. Patients at the CHC face a number of barriers to care, including financial burden, low literacy skills, food insecurity, and housing insecurity. Many patients also suffer from chronic illnesses and other health disorders that may be difficult to manage. Because of their patient population, providers and staff at the CHC oftentimes face long hours at work due to their case load for the day, with some expressing feelings of being stressed or burnt out from high workloads. To help support staff, the CHC established a Staff Wellness Committee, made up of a team of frontline staff and supervisors who are in charge of coordinating staff appreciation events. However, with the introduction of a new electronic health records system, the committee is currently in need of a wellness project to aid providers and staff who may feel overwhelmed or stressed out from the use of the new tool.

The goal of this needs assessment was to perform a data collection project using the Professional Quality of Life Scale (ProQOL) to determine levels of occupational stress and burnout among the CHC staff. Additional data was gathered from performing semi-structured interviews with former CHC staff, in

order to obtain feedback on the workplace environment at the clinic. From these two data collection methods, valuable insight was obtained to develop workplace recommendations that the CHC Staff Wellness Committee can use to help develop a wellness project tailored to the needs of the staff.

Background

In 1974, the concept of occupational burnout was first coined by American psychologist Herbert Freudenberger, who described it as long-term occupational stress with physical and behavioral characteristics of depression, rising antagonism and aggravation towards colleagues influence regarding one's career ambitions, and increased inflexibility (P. Bridgeman, M. Bridgeman, & Barone, 2018). Furthermore, Freudenberger identified 3 major domains of burnout syndrome: (1) emotional fatigue, (2) pessimism and disassociation, and (3) diminished confidence in performance (Bridgeman et al., 2018). With physician burnout rates affecting over 50% of all physicians, burnout has been proven to have negative effects on patient quality of care and safety, decreased productivity, higher rates of depression, and low job satisfaction (Hart, Paetow, & Zarzar, 2018). The *Quality Caring in Nursing and Health Systems* highlights the role of relationship-based care, in which quality care is defined as an extension of a provider's relationship with the patient, their family, and community, of whom can perceive a negative environment if a provider is stressed (Davidson, Graham, Montross-Thomas, Norcross, & Zerbi, 2017). In addition, the Quality Caring model suggests that patients are more likely to participate in positive health behaviors when they feel like they are receiving attentive care (Davidson et al., 2017). Moreover, there have been other studies which have investigated the association between burnout among healthcare workers and its effect on their health and quality of work. Throughout this paper I will analyze several peer-reviewed articles that study the potential work-related health effects related to burnout in healthcare environments.

Burnout among healthcare professionals

Smart et al., 2014 examined the various individual and organizational variables that affect their Professional Quality of Life score, as well as the identification of characteristics which may be used to

design intervention methods in the workplace. Under the umbrella of Professional Quality of Life, compassion fatigue is characterized by two issues: burnout and secondary traumatic stress (Smart et al., 2013). Another issue is compassion satisfaction, which is described as the level of pleasure one receives from their occupation (Smart et al., 2013). The ProQOL assessment tool is a scale that combines the measurement of three different issues: compassion satisfaction, burnout and secondary traumatic stress (Smart et al., 2013). Often, healthcare professionals who prioritize patient care lose sight of their own well-being and burnout levels, which has been found to be correlated with higher rates of medical errors and poor patient safety outcomes (P. Bridgeman, M. Bridgeman, & Barone, 2018). Medical residents in Ireland who experienced symptoms of burnout also comprised 64% of those who reported making a medical error, as compared to only 22% of those who did not experience burnout (P. Bridgeman, M. Bridgeman, & Barone, 2018). Furthermore, a survey conducted by the American Medical Association and RAND Corporation, a non-profit focused on improving healthcare policies and decision-making, found that two key factors related to burnout among physicians were electronic health records and quality of care (Bridgeman et al., 2018). Issues with EHR's technology, usability, and clinical documentation, in addition to barriers to providing high-quality care, such as lack of support from the practice's leadership team, are some examples of physician dissatisfaction in the workplace.

In addition to having adverse effects on patient care, burnout and low levels of engagement may also lead to higher turnover rates, which disturb continuity-of-care relationships and result in high expenses with having to recruit new providers and clinical staff members (Willard-Grace et al., 2019). While the cause of employee turnover may be due to varied personal factors, such as workplace expectations, conflicts with coworkers, or external sources of stress, like commute time or housing costs, healthcare organizations lose revenue due to job vacancies, with recruitment expenses estimated to cost up to $500,000 per provider (Willard-Grace et al., 2019).

Primary Care and Patient Care

As identified by previous studies, some of the indicators of burnout in primary care workers include psychosocial stressors, such as interpersonal relationships with colleagues, emphasizing the

importance of building teamwork and establishing good working relationships with coworkers (Garcia & Marziale, 2018). Furthermore, other sources of stress include charting and documentation, coping with failures and mistakes, engagement in the workplace, and lack of control over occupational stressors—all leading to pessimism, disassociation, and a lack of confidence in performance (Garcia & Marziale, 2018). Furthermore, in a randomized-controlled trial conducted by Benzo, Kirsch, & Nelson (2017), study participants were asked to complete a series of questionnaires which tracked five different measurements: ubjective Happiness Scale (SHS), Self-Compassion Scale-Shirt Form (SCS-SF), Five Facet Mindfulness Questionnaire (FFMQ), and the Perceived Stress Scale (PSS-4). Results from a sample size of 400 healthcare workers found that higher rates of well-being, optimism, and happiness, were associated with high survey scores measuring mindfulness and self-compassion (Benzo, Kirsch, & Nelson, 2017).

In Bodenheimer, Ghoroh, Willard-Grace, and Grumbach's (2013) study, researchers developed a primary care improvement model based on ten building blocks, made up of "4 foundational elements—engaged leadership, data-driven improvement, empanelment, and team-based care— that assist the implementation of the other 6 building blocks—patient-team partnership, population management, continuity of care, prompt access to care, comprehensiveness and care coordination, and a template of the future". In particular, a high-performing practice thrives on fully engaged healthcare staff and building effective teams in an effort to create measurable goals and objectives for patient management (Bodenheimer et al., 2013).

Intervention Strategies

In a recent study conducted by Brand et al. (2019), researchers conducted a systematic review of 11 studies which incorporated a whole-system approach in an attempt to improve the health and wellbeing of healthcare staff. Interventions varied by methods, ranging from mindfulness sessions to team-building courses, with ten out of the eleven studies providing positive results in improving the physical/mental health of healthcare staff, as well as the promotion of healthy behaviors (Brand et al., 2019). Because of the low number of identified whole-system intervention studies, this further strengthens the need to conduct further research on workplace interventions that may improve employee

wellness initiatives (Brand et al., 2019). In Davidson, Graham, Montross-Thomas, Norcross, and Zerbi's (2017) research study, Code Lavender was a pilot program developed to help increase peer support and decrease workplace stress by encouraging staff and providers to recognize coworkers under stress and show an act of kindness by providing them with a care package. The intervention consisted of a care package named Code Lavender, which consisted of: a vial of lavender aromatherapy oil, chocolate, a small card with quotes of encouragement, a handwritten notes of support curated by staff and administrators, a referral card to the Employee Assistance Program (EAP), and a lavender sticker which could be worn by staff to indicate to their peers that they were having a difficult day (Davidson et al., 2017). Although the intervention did not have significant statistical impact on the staff members' ProQOL scores, the program resulted in positive feedback from participants, with 100% of the 32% of Code Lavender users thinking it was helpful, and 84% reporting they would recommend it to others (Davidson et al., 2017).

In another study, the use of a successful corporate-based wellness intervention program, The Happiness Practice (THP), was explored to identify whether it would have an effect on overall burnout levels among healthcare providers. The program is comprised of six monthly 1-hour didactic lessons led by THP's co-founders, starting with and introductory session: "1) Be conscious; 2) Honor feelings; 3) Release control in favor of empowerment; 4) Co-create what works now; and 5) Learn life lessons", with optional "Happy Chats" — small-group discussions focusing on interpersonal relationship building (Hart, Paetow, & Zarzar, 2018). Used in other hospital institutions, THP has shown positive results in decreasing provider burnout, improving resilience, and increasing staff happiness and patient satisfaction (Hart, Paetow, & Zarzar, 2018). In order to test the effectiveness of the program, participants were asked to complete the Maslach Burnout Inventory (MBI) survey before and after the completion of the program. However, the study found that unlike previous results with other institutions, the wellness program did not improve burnout levels, with 82% of the participants reporting that they felt that the program neither improved nor worsened symptoms of burnout (Hart, Paetow, & Zarzar, 2018).

Another approach has been to focus on the re-design of the healthcare environment. Largo-Wight,

Chen, Dodd, and Weiler (2011), conducted a cross-sectional study at a southeastern university office to identify a correlation between nature contact, work-related stress, and employee health. Largo-Wight et al. (2011), used the Nature Contact Questionnaire (NCQ) to survey study participants, but also utilized the Perceived Stress Questionnaire (PSQ), and the Behavioral Risk Factor Surveillance System (BRFSS) to quantify results. While the PSQ measured psychosocial factors such as conflict and perceived isolation, the BRFFSS measured self-reported health factors, such as alcohol and coffee consumption (Largo-Wight et al., 2011). Using Pearson product bivariate correlations and a t-test to analyze results, Largo-Wight et al. (2011) found that employees who were exposed to higher amounts of nature contact at work had significantly low levels of perceived stress and work-stress health complaints (t-score of 2.1, $p<0.05$ for total low versus high nature contact). The findings from this study provide a new suggestion to biophilic design and nature contact, which is that the type of nature contact (outdoor, indoor, or indirect) affects employee stress and overall health, with outdoor nature contact being the best to improve those two factors (Largo-Wight et al., 2011). Nonetheless, limitations in this study included the fact that only one university office staff was studied throughout the entirety of the experiment, which limits the ability to generalize the results to the larger population (Largo-Wight et al., 2011). Hence, if this experiment were to be repeated, it would be wise to use participants from several university offices in order to derive at a definitive correlation between nature contact and employee health.

The concept of occupational burnout has triggered a rise for more research designs to investigate the potential health benefits of introducing different types of employee wellness interventions. Several studies have used those design concepts to develop workplace experiments that focus on improving employee health. Although the researchers used different methods of measurement, their studies resulted in quantifiable data that show a negative correlation between higher levels of burnout, decreased employee satisfaction, and poor quality of care. These peer reviewed journal articles represent a snippet of the wide amount of research that has been conducted to explore the concept of occupational burnout and employee wellness. Efforts to improve clinical work-life balance may strengthen providers and staff's

abilities to care for their patients.

Agency Profile

The community health center engaged in this project (CHC) is one of 14 community oriented primary care clinics in the San Francisco Department of Public Health (SFDPH) and the San Francisco Health Network (SFHN). The CHC is funded by the San Francisco Health Network, with a proposed budget of $101,138,327 for 2018-2019. Partner organizations include the San Francisco Marin Food Bank and Women, Infants, and Children (WIC). Located in the Portola District, the CHC serves the following neighboring communities: Visitacion Valley, Bernal Heights, Bayview/Hunters Point, Portola, and the Excelsior District. Its diverse patient population of close to 5,000 patients is composed of the following ethnic groups: 45% Hispanic, 35% Asian, and 11% African American.

The center provides services to children, adults, and older adults, and also specializes in the provision of services to women. Services include the Centering Pregnancy group, prenatal care, pregnancy testing and counseling, mammography, annual women's exams, pap smears, pre-operative exams, colposcopy exams and biopsies. The CHC also provides primary care services, mental health services, substance abuse counseling and referral, HIV testing and counseling, podiatry, and chronic disease management to all its patients.

As part of the San Francisco Health Network, the CHC believes patients must be actively involved in the decision-making process of their healthcare. Beyond providing a caring environment and quality care, the CHC's mission is to place patients first by offering patient-centered care tailored to the patient's needs through honoring cultural traditions, personal values, and lifestyles.

Problem Statement

Given that SFDPH will be integrating a new electronic health record system, switching all primary care clinics from *eClinicalWorks* to *Epic*, the Staff Wellness Committee at CHC expects higher levels of occupational stress and burnout within its primary care department. In response, the Committee identified the need to design a staff wellness initiative to better support primary care team members and

help address occupational stress. This needs assessment was conducted for the primary care team with the goal of measuring levels of burnout among staff and determining practical solution-based approaches that may help empower staff and improve patient care.

Methods

A mixed-method project was be conducted at a San Francisco Health Network (SFHN) partner community clinic. A needs assessment was conducted to understand levels and causes of provider and staff burnout. A convenience sampling method was used to reach as many eligible participants as possible, given the staff's busy schedules. Using both quantitative and qualitative data collection methods, a final report was created for CHC Staff Wellness Committee to use in designing a staff wellness initiative.

Measures

ProQOL Survey. Using the Professional Quality of Life scale (ProQOL), the project measured provider and staff levels compassion satisfaction, burnout and secondary stress, grounded in the Compassion Satisfaction and Compassion Fatigue (CS-CF) Theory. A paper copy of the latest version of ProQOL (ProQOL 5) was distributed to providers and staff during morning and afternoon huddle meetings and as available to staff in the Huddle Room (see Appendix C). When a staff member showed interest, they were instructed to anonymously fill out the ProQOL survey and write their occupation at the top of the page. Once completed, staff submitted their ProQOL survey by placing it inside a manila folder located in the Medical Records Room of the clinic. Uninterested staff were dropped from the study sample throughout the recruitment phase. I estimated our sample population size would consist of 47 primary care staff and providers, from which I estimated at least an 80% completion rate of the ProQOL survey. From the original sample size of 47 eligible participants, I estimated a total of 38 participants would turn in a completed survey by the end of the 3-month recruitment. After all completed ProQOL surveys had been gathered, results were analyzed using the ProQOL scoring manual (see Appendix E) and entered using an Excel spreadsheet where I calculated averages by domain, occupation, and staff as a whole.

Semi-structured Interviews. In addition, I also reached out to 3-5 former CHC employees to conduct semi-structured interviews and determine root causes of burnout and other factors that may help develop a needs assessment. Interviews were recorded and transcribed onto a Word document. Transcriptions will were then transferred onto NVivo, a qualitative data analysis software. Once uploaded, I used NVivo to help code and assess interviews to develop a final report. Transcriptions were scanned for common themes and coded as major concepts covered throughout the interviews, making note of the number of mentions for each concept. Lastly, results were then analyzed and included in the final report of the project.

Results

The project had two aims for data collection, 1) to determine burnout levels for CHC primary care staff through the use of the ProQOL survey, and 2) to conduct semi-structured interviews with former CHC staff to explore common themes related to occupational stress, based off their experiences when employed at the clinic.

ProQOL Survey Results

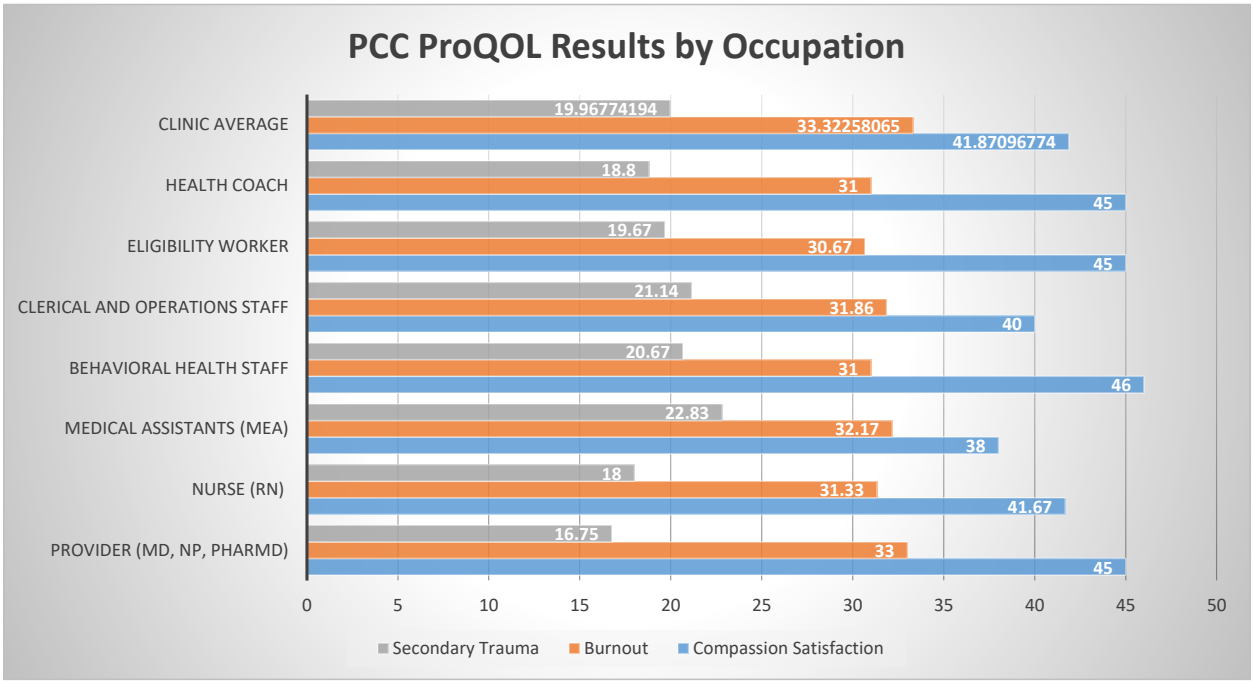
A total of 31 staff members from the CHC participated in the quantitative data collection of the project by filling out and turning in their completed ProQOL survey. There were 8 different teams who participated in the project: providers (MD, NP, or PharmD), nurses (RN), medical assistants (MEA), behavioral health staff (Behavioral Health Clinician or Behavioral Health Assistant), clerical and operations staff (Health Worker or clerical staff), eligibility workers, and Health Coaches (volunteer students trained to educate patients on chronic disease management). Table 1 shows ProQOL averages for each domain (compassion satisfaction, burnout, and secondary traumatic stress) as calculated for the entire staff, as well as by occupation. A complete list of average scores by question is shown in Appendix F. The breakdown of ProQOL results show that the team with the highest compassion satisfaction score was the Behavioral Health Staff (average compassion satisfaction score of 46). The team with the highest burnout score were providers (average burnout score of 33), and the team with the highest secondary

traumatic stress were the medical assistants (average secondary traumatic stress score of 22.83). The average scores for the entire staff, by each domain are as follows: average compassion satisfaction score of approximately 41.87, average burnout score of 33.32, and average secondary traumatic stress score of 19.97.

Table 1: Professional Quality of Life Scale (ProQOL) results, by occupation

Occupation	Number of Survey Participants	Average Compassion Satisfaction Score	Average Burnout Score	Average Secondary Traumatic Stress Score
Provider (MD, NP, PharmD)	4	45	33	16.75
Nurse (RN)	3	41.67	31.33	18
Medical Assistants (MEA)	6	38	32.17	22.83
Behavioral Health Staff (BHC or BA)	3	46	31	20.67
Clerical and Operations Staff	7	40	31.86	21.14
Eligibility Worker	3	45	30.67	19.67
Health Coach	5	45	31	18.8
Total Staff	31	41.870968	33.32258065	19.96774194

Graph 1: Professional Quality of Life Scale (ProQOL) results, by occupation



Interview Findings

Although it would have been helpful to interview current staff, I decided to focus on former employees due to their years of experience working at CHC, which ultimately led them to resign from their positions. Former CHC employees were asked to talk about their work experiences at the clinic, including reasons why they decided to resign from their positions. Interviewees were also asked to propose recommendations for staff-centered quality improvement projects. Three one-on-one interviews were conducted with former CHC employees using a semi-structured interview format. The interviewees have been labeled as Subject A, Subject B, and Subject C in order to protect their identity. Each interviewee resigned from their former position at CHC within the last year and are now working at a different location within the San Francisco Health Network. Table 2 outlines the most common concepts mentioned throughout each interview, as coded using NVivo. All interviewees had both negative and positive work experiences, with the top three themes being workspace, management, and workload. The theme with the highest number of mentions was workload (28); followed by management (17), lack of support (15), and relationships with co-workers (14). However, all three interviewees also had positive

work experiences, with the highest number of themes mentioned being connections with patients (8), learning experience (4), and experiences with co-workers (2).

Table 2: Themes surfaced in semi-structured interviews.

Concepts	Subject A : Interview Transcript	Subject B : Interview Transcript	Subject C : Interview Transcript	Total Mentions
Negative Experiences				
Environment				
Career growth	0	4	1	5
Lack of recognition for hard work	1	4	1	6
Lack of resources	4	0	0	4
Lack of support	6	3	6	15
Relationships with Co-Workers	6	6	2	14
Workspace	4	0	0	4
Management	2	7	8	17
High Expectations	4	0	4	8
Workload	4	1	23	28
Positive Experiences				
Connection with patients	1	6	1	8
Connections with Coworkers	1	0	1	2
Learning experience	0	2	2	4

Graph 2 illustrates the number of times each interviewee mentioned a specific concept throughout their interview.

Graph 2: Themes surfaced in semi-structured interviews results

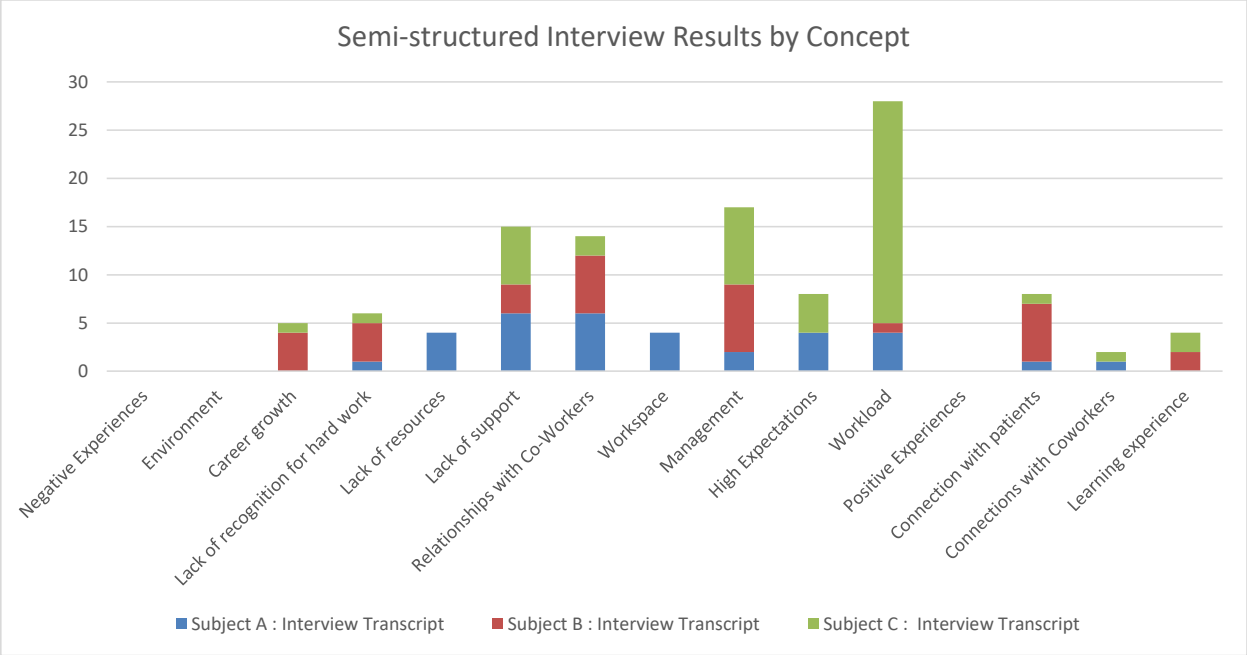


Table 3 shows selected quotes from the interviewees which were coded under a common concept as either a negative or positive experience.

Table 3: Selected quotes from semi-structured interviews with former CHC staff

Negative Experiences	
Environment	
Career growth	"To me, if I were to have the opportunity to grow, then I would have stayed [at PCC]" (Subject B). "I want to change. That's the thing. Because I don't want to stay until I retire and because I'm not going back to school anyways. And I want to see some of the other settings" (Subject C).
Lack of recognition for hard work	"So I guess, not feeling respected that I am trying everything that I can do with these families and then also feeling that support providers" (Subject A). "I want to be valued as the worker that I am because at the end of the day I want to help people" (Subject B).
Lack of resources	"For my position, because I would work for one provider and several families, sometimes it was just frustrating to have the pressure by providers to fix these families' social needs when in reality, there's not much we can do for these families based on whatever situation they had going on or based on their lack of support" (Subject A).
Lack of support	"At least for me, during my time at [PCC], I had quite a few supervisors and that was also frustrating because I never had just one supervisor whom I created this great relationship with and felt like I was supported. It was mainly whatever the provider needs and whatever the medical staff needs rather than taking into account what does Behavioral Health needs in order for them to succeed in their role with these families" (Subject A). "No. There is no having people be trained. I've talked to everyone in charge and they would say that I can come to them and talk, but they're not gonna do anything about it" (Subject B). "They just keep asking you to do this and that. So, within 20 minutes, this is no way I can finish. So I feel I don't get any support from the clinic" (Subject C).
Relationships with Co-Workers	"I would also say maybe not all, but some providers not understanding my role and not understanding that I am also just only one person in this clinic trying to case manage all the families that came in" (Subject A).
Workspace	"I was able to voice out my opinions, but there was also a point that I felt helpless because I was told that they didn't think it was going to happen, or me saying that I need a better workspace" (Subject A).
Management	"So I really want to see more supportive management rather than things right now" (Subject C).
High Expectations	"When I was referred to patients, sometimes providers would say 'let me refer you to our expert', and that sometimes was frustrating because they would already set a certain expectation when I came in to see patients. It would be frustrating for me to let down the family because they felt I was going to come and fix their issues. To fix their needs" (Subject A). "But they always ask the same thing. Finish everything. Because of the first patient perspective, but they don't think about the staff the way that the staff are working at that moment" (Subject C).
Workload	"As you can imagine, let's say I was out on vacation, there was no one to take care of my workload, so I would come back from vacation to a stack of work that then I'm just like, 'man, I need another vacation!'. I feel like I voiced that, so if I were to come back, that would've been something I would like to change" (Subject A). "I mean, you don't want to stress yourself, because if you're stressed out yourself, you don't get a good customer for your patients. That's the first thing. And second thing it's no good for your family and yourself. So I was like, I want to change. I want to do something easier so I can have a better mindset for my family" (Subject C).
Positive Experiences	
Connection with patients	"Honestly I did love the patients...For me, helping people was very rewarding, so those connections were why I was [at PCC]...I miss that part of helping people" (Subject B). "The most I like was the patients. The patients I really like. They see me as like family" (Subject C).
Connections with Coworkers	"Community, family-oriented, and passionate" (Subject A). "You know you always see me at [PCC] because I did make a good family at [PCC] in 4 and ½ years" (Subject C).
Learning experience	"In my experience there, I learned a lot. Like learning how to deal with other people from different cultures. I liked it" (Subject B). "But at the same time after I transfer, I feel like I have learned a lot from [PCC]. Just a lot. So no matter which clinic I go right now, I feel like it's easy. Just easy-peasy. So I really like the way that [PCC] teach you... So and it also seems like my school. Because I learned a lot from [PCC]. A lot. Even right now some of the providers right now ask me why I know so much. So I would still appreciate what I've learned from [PCC] and what they taught me" (Subject C).

Discussion

This project was designed to assess levels of occupational-related stress and burnout among staff members in a community health center that provides primary care services (CHC). To achieve this, I referred to Dr. Beth Hudnall Stamm's model for identifying the key factors that measure burnout levels, developed as the Compassion Satisfaction-Compassion Fatigue (CS-CF) Theory. As part of the assessment, the theory uses Professional Quality of Life Scale (ProQOL) to measure three components: Compassion Satisfaction, Burnout, and Secondary Traumatic Stress. By distributing the ProQOL survey to providers and staff at CHC, I was able to attain insight as to which occupational teams are experiencing higher levels of work-related stress and burnout, as well as obtaining overall score averages for the entire primary care team at the clinic. Furthermore, by conducting semi-structured interviews with former CHC staff, I was able to capture some of the major occupational stressors that prompted them to resign from their positions, as well as recommendations for improvement to help design a staff wellness initiative aimed at supporting staff. However, because a convenience sampling was used to obtain participation by interested CHC staff, the data cannot be generalized to all primary care healthcare staff within SFHN. ProQOL data collection would need to be expanded to include other clinics within SFHN in order to compare and contrast data results.

Compassion Satisfaction

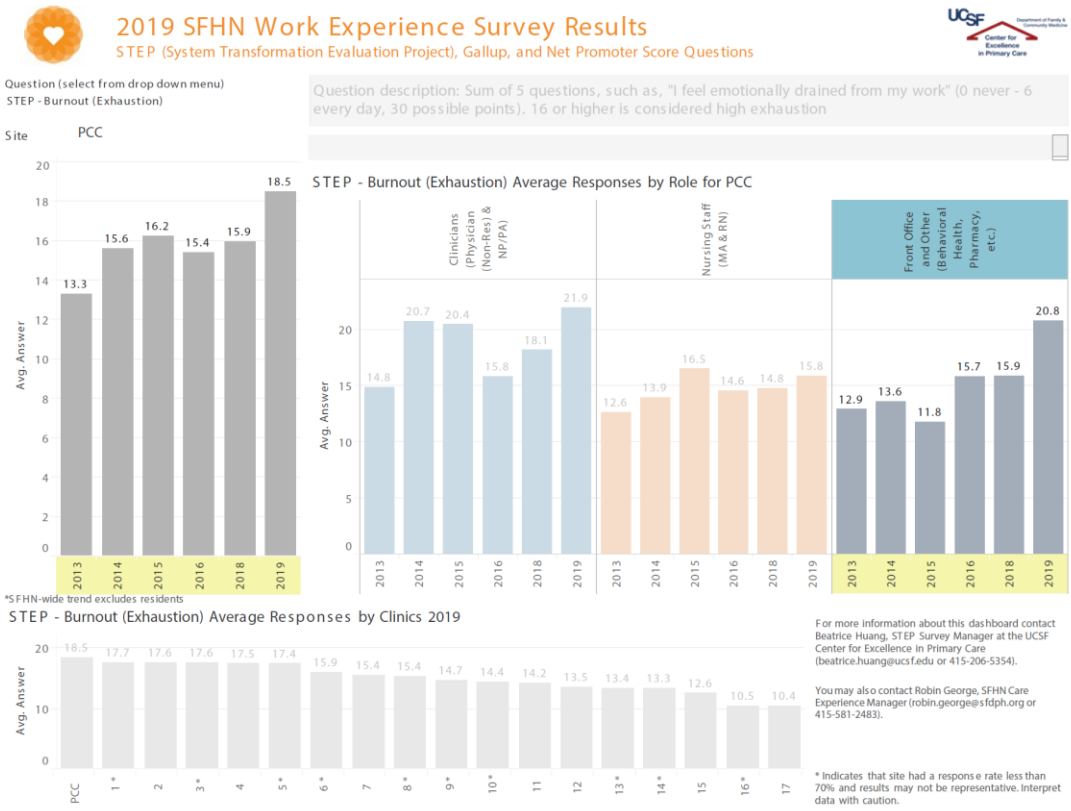
According to Stamm (2010), the Compassion Satisfaction component of the CS-CF Theory describes an employee's feelings about their occupation, most importantly identifying whether they have a positive outlook about their ability to make constructive contributions at work and receive pleasure by helping others, whether it be a patient or colleague. Hence, the higher the score (a score of 23 or more), the more likely an employee might be optimistic about being able to adapt to changes in workload and feel successful at their work as a healthcare professional. Administration of the ProQOL survey resulted in moderate to high levels of compassion satisfaction across each primary care team at the CHC. This is an indication that employees at the CHC are generally happy about the work that they do, who are driven by their role as helpers. High levels of Compassion Satisfaction within a healthcare team are essential for

team collaboration an efficient workflow. Therefore, employees who share a common vision for providing high quality patient care are less likely to exhibit high levels of burnout.

Burnout

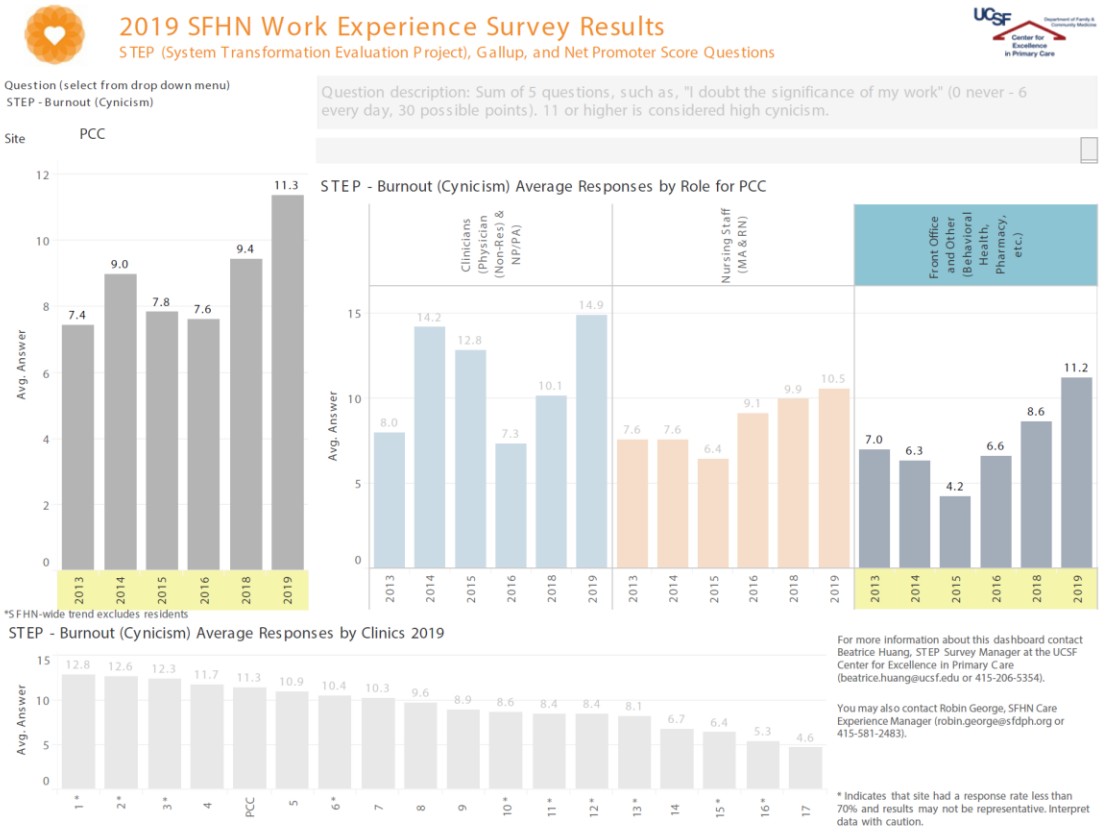
Stamm (2010) stated that there are two components that contribute to compassion fatigue, which she describes as an employee's negative feelings towards work-related stressors. These are burnout and secondary traumatic stress. According to Stamm (2010), burnout includes elements of exhaustion, unhappiness, and disengagement with their work, and an inability to sustain positive beliefs about their ability to be productive at work. A burnout score of 23 or higher indicates that an employee may feel that they are inefficient at work, most likely due to a heavy workload or poor system management. Results from the ProQOL survey revealed that across all primary care teams at CHC, employees have moderate levels of burnout, with providers experiencing the highest level of burnout (average of 33) and eligibility workers expressing the lowest level of burnout (average of 30.67). These results closely match the 2019 SFHN Work Experience Results conducted by the UCSF Center for Excellence in Primary Care, as shown in Graph 3. Each year, UCSF administers a system-wide assessment of SFHN employees' work experience through the distribution of three electronic surveys: System Transformation Evaluation Project (STEP), Gallup, and Net Promoter. The purpose of the evaluation is to explore SFHN primary care employee perceptions on their work experience, team management, and patient care across all participating clinics in San Francisco (UCSF Center for Excellence in Primary Care, 2019). Graph 3 indicates levels of burnout pertaining to exhaustion-specific questions. As illustrated on the bar graphs, CHC has the highest clinic average for burnout (exhaustion) among staff and providers. According to the study, a sum of 16 or more indicates high levels of exhaustion. With a clinic average of 18.5, the survey data affirms the ProQOL burnout scores calculated in this project.

Graph 3: 2019 SFHN Work Experience Survey Results



Graph 4 measures levels of burnout pertaining to cynicism, such as doubting the significance of their work. For this measurement, a sum of 11 or more points indicate high levels of cynicism. The 2019 clinic average for Burnout (Cynicism) at CHC is 11.3, which is considerably alarming, especially when looking at the point average for clinicians, which increased by 4.8 points since 2018, to a point average of 14.9. These findings reveal the need to further explore factors that may be contributing to provider and staff burnout, as well as to arrive at a solution-based approach to help address barriers and better support primary care employees.

Graph 4: 2019 SFHN Work Experience Survey Results



Secondary Traumatic Stress

Secondary Traumatic Stress is characterized by showcasing feelings of being emotionally affected by another's trauma, as if it were one's own experience (Stamm, 2010). For instance, a healthcare worker may experience a patient's trauma as if it were their own. Hence, the higher the ProQOL score (a score of 23 or more), the more likely an employee might be experiencing secondary traumatic stress, and may need to seek immediate help before their fear of exposure gets in the way of their work and/or personal life. The overall secondary traumatic stress score for the CHC staff was generally low (an average of 19.96774194), with the highest team average (22.83) seen in medical assistants (MAs), followed closely by clerical and operations staff (21.14), and behavioral health staff (20.67). Staff may need additional support to help with their exposure to triggering events at work. The low levels of secondary traumatic stress among the CHC staff are not too concerning, and may indicate

that employees have a good support system at work or home that helps protect them from secondary stress when serving patients who have experienced trauma.

Semi-structured interviews:

The results gathered from the semi-structured interviews offer good insight as to what work-related factors add to perceived occupational stress while working at PCC. Former PCC employees were contacted in order to help identify areas of improvement that may help in the development in a Staff Wellness Initiative proposal for current PCC staff. All three interviewees who agreed to be a part of the study offered constructive feedback. The most common theme mentioned was the amount of workload assigned for their specific role, which often made them feel stressed about being able to complete tasks in a timely manner, or provide quality patient care on days when they were understaffed. Other workplace issues involved their relationship with co-workers and their immediate supervisor, expressing a lack of support and being held to high expectations. However, one interviewee also mentioned that although she often felt overburdened with responsibilities, she also felt like she had a good learning experience, stating: "But at the same time after I transfer, I feel like I have learned a lot from [PCC]. Just a lot. So no matter which clinic I go right now, I feel like it's easy. Just easy-peasy. So I really like the way that [PCC] teach you... So and it also seems like my school. Because I learned a lot from [PCC]. A lot. Even right now some of the providers right now ask me why I know so much. So I would still appreciate what I've learned from [PCC] and what they taught me". Additionally, all three interviewees mentioned that despite feeling burnt out from their roles, they felt like PCC staff offered a welcoming environment and were very patient-centered and passionate about their work. Moreover, an important aspect of their experience at PCC was being able to exercise their skillsets to help patients and build positive connections while case managing. One interviewee mentioned: "Honestly I did love the patients...For me, helping people was very rewarding, so those connections were why I was [at PCC]...I miss that part of helping people". These positive experiences add to the validity of the Compassion Satisfaction scores retrieved from the ProQOL data collection of current PCC staff. High levels of Compassion Satisfaction within a healthcare team are essential for team collaboration an efficient workflow. Therefore, employees who share a common vision

for providing high quality patient care are less likely to exhibit high levels of burnout.

Implications for Practice

According to Stamm (2010), a combination of high compassion satisfaction and low to moderate levels of burnout and secondary traumatic stress produces the most favorable ProQOL score. The next step would be to open up the topic for discussion at a staff meeting. By introducing staff to the CS-CF Theory and having team members speak up about work-related concerns, the Staff Wellness Committee at CHC could lead the development of staff-centered wellness projects (quality improvement projects focus on the clients and patients served. You have not clearly documented from the literature how staff wellness improves services. For a well-functioning team, it is essential for the Staff Wellness Committee at the CHC to gather more input from staff in order to proceed in the launch of a staff wellness initiative. This can be done in several ways, such as having a suggestion box for a project, or having a staff meeting to discuss potential projects and gather feedback. Another example might be to have staff divide into small teams to think about an innovative solutions-based approach to help reduce occupational stress in the workplace. Teams can meet as a group and discuss potential project ideas, present their project at a staff meeting, then have the entire staff place a vote on the best project they think should be implemented. The winning team may then have full control of their project during their pilot launch to test out its effectiveness. Not only would the clinic be addressing productivity and improving staff wellness, but also encouraging teamwork with co-workers and have them be more involved in a full-scale quality improvement.

Other clinics may benefit from tracking staff wellness and burnout levels to help develop a needs assessment to improve employee satisfaction. Because different healthcare specialties and departments face a variety of challenges on a day-to-day basis, with varied levels of stress, it is important for healthcare practices to listen to the needs of their staff when developing quality improvement projects. Continuous data on occupational stress and burnout may illustrate areas of improvement where management staff can focus their attention to help create a better working environment for all employees.

In addition, this could also increase funds to help build bigger workspaces re-designed with ergonomic and privacy features in order to be more employee and patient-centered. Streamlined protocols and improved workspaces may lead to higher employee satisfaction ratings and a smooth workflow that benefits both staff and patients. Future studies that explore how the symptoms of burnout syndrome are related to employee and patient outcomes may give rise to organizational support for developing and maintaining employee wellness programs promoting self-care and healthy work environments

Future Research

Community clinics benefit from investing in research on employee wellness initiatives. A potential area for research is to assess the understanding of stress and burnout levels among providers and healthcare workers within a healthcare system through the integration of wellness initiatives developed by staff. Understanding the causes of occupational stress within the workplace can help clinic leaders develop effective staff wellness programs to better support staff. Moreover, if community clinics were to share their findings on the effectiveness of their staff wellness programs, healthcare networks may be able to craft comprehensive intervention programs to implement them system-wide within their network.

The research may be to utilize staff wellness data to raise awareness of occupational stress and burnout within the healthcare industry. Both new and established healthcare networks may benefit from this data to help develop nurturing workplace environments tailored to their staff's needs. Projects may include changes in protocols to help with the distribution of tasks to reduce workload, as well as to improve value stream maps with minimal waste time so that patients can get the most out of a visit with their provider. Further research, therefore, should focus on improving the workplace environment in healthcare settings not only to benefit the employee, but to improve a patient's experience with their care team.

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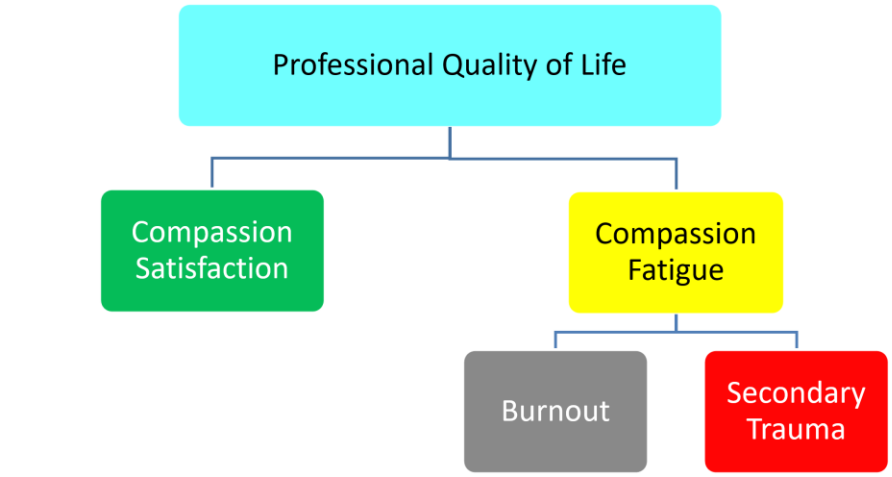
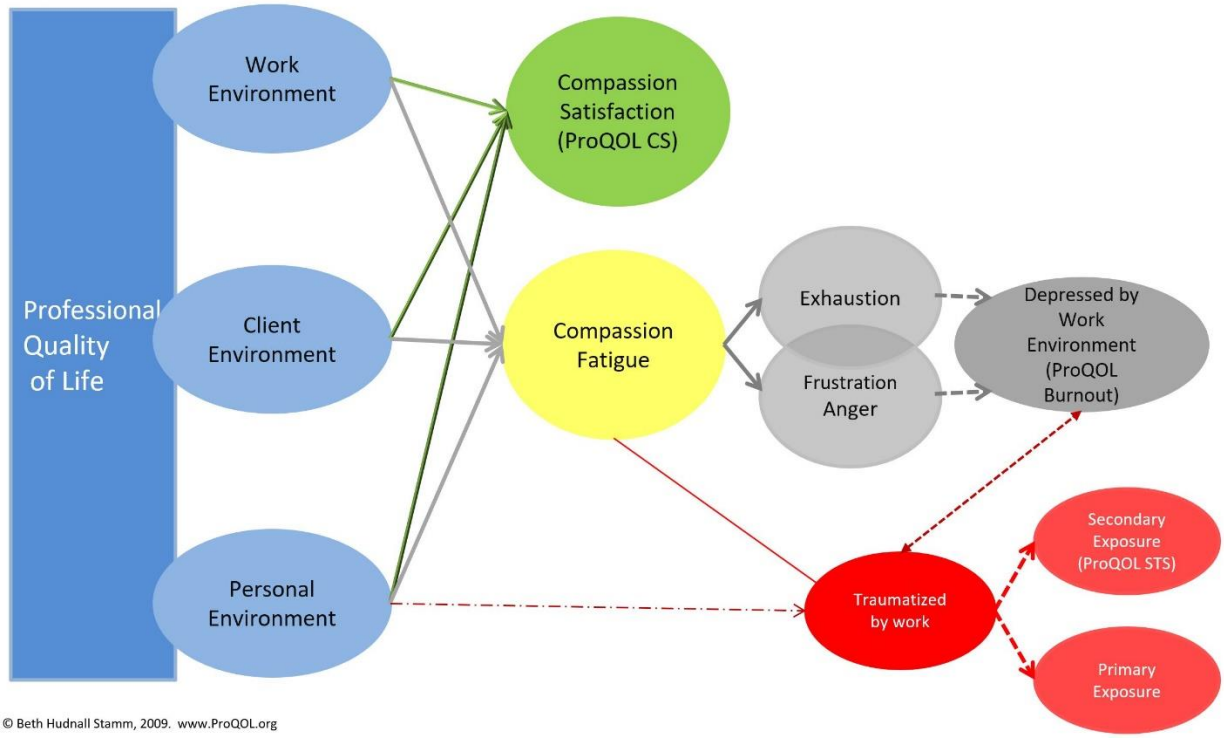
Appendix

Appendix A: Professional Quality of Life (ProQOL) Diagram



Appendix B: Professional Quality of Life (ProQOL) Diagram, showing relationships with other confounding factors



Appendix C: ProQOL 5 survey

PROFESSIONAL QUALITY OF LIFE SCALE (PROQOL)

COMPASSION SATISFACTION AND COMPASSION FATIGUE
(PROQOL) VERSION 5 (2009)

When you *[help]* people you have direct contact with their lives. As you may have found, your compassion for those you *[help]* can affect you in positive and negative ways. Below are some-questions about your experiences, both positive and negative, as a *[helper]*. Consider each of the following questions about you and your current work situation. Select the number that honestly reflects how frequently you experienced these things in the *last 30 days*.

1=Never	2=Rarely	3=Sometimes	4=Often	5=Very Often

_____ 1. I am happy.
_____ 2. I am preoccupied with more than one person I *[help]*.
_____ 3. I get satisfaction from being able to *[help]* people.
_____ 4. I feel connected to others.
_____ 5. I jump or am startled by unexpected sounds.
_____ 6. I feel invigorated after working with those I *[help]*.
_____ 7. I find it difficult to separate my personal life from my life as a *[helper]*.
_____ 8. I am not as productive at work because I am losing sleep over traumatic experiences of a person I *[help]*.
_____ 9. I think that I might have been affected by the traumatic stress of those I *[help]*.
_____ 10. I feel trapped by my job as a *[helper]*.
_____ 11. Because of my *[helping]*, I have felt "on edge" about various things.
_____ 12. I like my work as a *[helper]*.
_____ 13. I feel depressed because of the traumatic experiences of the people I *[help]*.
_____ 14. I feel as though I am experiencing the trauma of someone I have *[helped]*.
_____ 15. I have beliefs that sustain me.
_____ 16. I am pleased with how I am able to keep up with *[helping]* techniques and protocols.
_____ 17. I am the person I always wanted to be.
_____ 18. My work makes me feel satisfied.
_____ 19. I feel worn out because of my work as a *[helper]*.
_____ 20. I have happy thoughts and feelings about those I *[help]* and how I could help them.
_____ 21. I feel overwhelmed because my case [work] load seems endless.
_____ 22. I believe I can make a difference through my work.
_____ 23. I avoid certain activities or situations because they remind me of frightening experiences of the people I *[help]*.
_____ 24. I am proud of what I can do to *[help]*.
_____ 25. As a result of my *[helping]*, I have intrusive, frightening thoughts.
_____ 26. I feel "bogged down" by the system.
_____ 27. I have thoughts that I am a "success" as a *[helper]*.
_____ 28. I can't recall important parts of my work with trauma victims.
_____ 29. I am a very caring person.
_____ 30. I am happy that I chose to do this work.

Appendix D: ProQOL score descriptions

YOUR SCORES ON THE PROQOL: PROFESSIONAL QUALITY OF LIFE SCREENING

Based on your responses, place your personal scores below. If you have any concerns, you should discuss them with a physical or mental health care professional.

Compassion Satisfaction _____

Compassion satisfaction is about the pleasure you derive from being able to do your work well. For example, you may feel like it is a pleasure to help others through your work. You may feel positively about your colleagues or your ability to contribute to the work setting or even the greater good of society. Higher scores on this scale represent a greater satisfaction related to your ability to be an effective caregiver in your job.

If you are in the higher range, you probably derive a good deal of professional satisfaction from your position. If your scores are below 23, you may either find problems with your job, or there may be some other reason—for example, you might derive your satisfaction from activities other than your job. (Alpha scale reliability 0.88)

Burnout_____

Most people have an intuitive idea of what burnout is. From the research perspective, burnout is one of the elements of Compassion Fatigue (CF). It is associated with feelings of hopelessness and difficulties in dealing with work or in doing your job effectively. These negative feelings usually have a gradual onset. They can reflect the feeling that your efforts make no difference, or they can be associated with a very high workload or a non-supportive work environment. Higher scores on this scale mean that you are at higher risk for burnout.

If your score is below 23, this probably reflects positive feelings about your ability to be effective in your work. If you score above 41, you may wish to think about what at work makes you feel like you are not effective in your position. Your score may reflect your mood; perhaps you were having a "bad day" or are in need of some time off. If the high score persists or if it is reflective of other worries, it may be a cause for concern. (Alpha scale reliability 0.75)

Secondary Traumatic Stress_____

The second component of Compassion Fatigue (CF) is secondary traumatic stress (STS). It is about your work related, secondary exposure to extremely or traumatically stressful events. Developing problems due to exposure to other's trauma is somewhat rare but does happen to many people who care for those who have experienced extremely or traumatically stressful events. For example, you may repeatedly hear stories about the traumatic things that happen to other people, commonly called Vicarious Traumatization. If your work puts you directly in the path of danger, for example, field work in a war or area of civil violence, this is not secondary exposure; your exposure is primary. However, if you are exposed to others' traumatic events as a result of your work, for example, as a therapist or an emergency worker, this is secondary exposure. The symptoms of STS are usually rapid in onset and associated with a particular event. They may include being afraid, having difficulty sleeping, having images of the upsetting event pop into your mind, or avoiding things that remind you of the event.

If your score is above 41, you may want to take some time to think about what at work may be frightening to you or if there is some other reason for the elevated score. While higher scores do not mean that you do have a problem, they are an indication that you may want to examine how you feel about your work and your work environment. You may wish to discuss this with your supervisor, a colleague, or a health care professional. (Alpha scale reliability 0.81)

Appendix E: ProQOL scoring sheet

WHAT IS MY SCORE AND WHAT DOES IT MEAN?

In this section, you will score your test so you understand the interpretation for you. To find your score on **each section,** total the questions listed on the left and then find your score in the table on the right of the section.

Compassion Satisfaction Scale

Copy your rating on each of these questions on to this table and add them up. When you have added then up you can find your score on the table to the right.

3. ____
6. ____
12. ____
16. ____
18. ____
20. ____
22. ____
24. ____
27. ____
30. ____

Total: ____

The sum of my Compassion Satisfaction questions is	And my Compassion Satisfaction level is
22 or less	Low
Between 23 and 41	Moderate
42 or more	High

Burnout Scale

On the burnout scale you will need to take an extra step. Starred items are "reverse scored." If you scored the item 1, write a 5 beside it. The reason we ask you to reverse the scores is because scientifically the measure works better when these questions are asked in a positive way though they can tell us more about their negative form. For example, question 1. "I am happy" tells us more about the effects of helping when you are *not* happy so you reverse the score

You Wrote	Change to
	5
2	4
3	3
4	2
5	1

*1. ____ = ____
*4. ____ = ____
8. ____
10. ____
*15. ____ = ____
*17. ____ = ____
19. ____
21. ____
26. ____
*29. ____ = ____

Total: ____

The sum of my Burnout Questions is	And my Burnout level is
22 or less	Low
Between 23 and 41	Moderate
42 or more	High

Secondary Traumatic Stress Scale

Just like you did on Compassion Satisfaction, copy your rating on each of these questions on to this table and add them up. When you have added then up you can find your score on the table to the right.

2. ____
5. ____
7. ____
9. ____
11. ____
13. ____
14. ____
23. ____
25. ____
28. ____

Total: ____

The sum of my Secondary Trauma questions is	And my Secondary Traumatic Stress level is
22 or less	Low
Between 23 and 41	Moderate
42 or more	High

Appendix F: ProQOL results, by question

ProQOL Results: Primary Care Clinic Staff

February 2019

0-=Never 1=Rarely 2=Sometimes 3=Quite often 4=Almost always 5=Always

#	Questions	1	2	3	4	5	sum(freq)	n	Avg. Score.
1	I am happy.	0	1	2	18	10	130	31	4.19354839
2	I am preocuppied with more than one person I [help].	0	3	17	8	3	104	31	3.35483871
3	I get satisfaction from being able to [help] people.	0	1	2	9	19	139	31	4.48387097
4	I feel connected to others.	0	0	8	11	12	128	31	4.12903226
5	I jump or am startled by unexpected sounds.	3	12	14	1	1	78	31	2.51612903
6	I feel invigorated after working with those I have [help].	0	5	6	15	5	113	31	3.64516129
7	I find it difficult to separate my personal life from my life as a [helper].	11	10	8	1	1	64	31	2.06451613
8	I amn not as productive at work because I am losing sleep over traumatic experiences of a person I [help].	21	6	3	1	0	46	31	1.48387097
9	I think that I might have been affected by the traumatic stress of those I [help].	17	9	5	0	0	50	31	1.61290323
10	I feel trapped by my work as a [helper].	16	7	7	1	0	55	31	1.77419355
11	Because of my [helping], I have felt "on edge" about various things.	9	16	6	0	0	59	31	1.90322581
12	I like my work as a [helper].	0	0	3	9	19	140	31	4.51612903
13	I feel depressed because of the traumatic experiences of the people I [help]	9	16	6	0	0	59	31	1.90322581
14	I feel as though I am experiencing the trauma of comeone I have [helped].	19	10	2	0	0	45	31	1.4516129
15	I have beliefs that sustain me.	2	3	5	11	10	117	31	3.77419355
16	I am pleased with how I am able to keep up with [helping] techniques and protocols.	0	2	4	20	5	121	31	3.90322581
17	I am the person I always wanted to be.	0	1	9	13	8	121	31	3.90322581
18	My work makes me feel satisfied.	0	0	5	15	11	130	31	4.19354839
19	I feel worn out because of my work as a [helper].	1	11	15	2	2	86	31	2.77419355
20	I have happy thoughts and feelings about those I [help] and how I could help them.	0	0	7	13	11	128	31	4.12903226
21	I feel overwhelmed because my case [work] load seems endless.	2	9	16	1	13	137	31	4.41935484
22	I believe I can make a difference through my work.	0	0	6	15	10	128	31	4.12903226
23	I avoid certain activities or situations because they remind me of frightening experiences of the people I [help].	20	5	5	1	0	49	31	1.58064516
24	I am proud of what I can do to [help].	0	1	2	10	18	138	31	4.4516129
25	As a result of my [helping], I have intrusive, frightening thoughts.	17	6	8	0	0	53	31	1.70967742
26	I feel “bogged down" by the system.	4	12	11	2	2	79	31	2.5483871
27	I have thoughts that I am a "success" as a [helper].	0	1	8	17	5	119	31	3.83870968
28	I cannot remember certain very traumatic events linked to the victims.	15	10	1	5	0	58	31	1.87096774
29	I am a very caring person.	0	0	5	11	15	134	31	4.32258065
30	I am happy that I chose to do this work.	0	0	2	9	20	142	31	4.58064516

Appendix G: ProQOL table results by question and domain

Compassion and Satisfaction Scale	
Question	Avg. Score
3	4.483871
6	3.645161
12	4.516129
16	3.903226
18	4.193548
20	4.129032
22	4.129032
24	4.451613
27	3.83871
30	4.580645
Total	41.87097

Burnout Scale	
Question	Avg. Score
1	4.193548
4	4.129032
8	1.483871
10	1.774194
15	3.774194
17	3.903226
19	2.774194
21	4.419355
26	2.548387
29	4.322581
Total	33.32258

Secondary Stress Scale	
Question	Avg. Score
2	3.354839
5	2.516129
7	2.064516
9	1.612903
11	1.903226
13	1.903226
14	1.451613
23	1.580645
25	1.709677
28	1.870968
Total	19.96774

Appendix H: ProQOL graph results by question and domain