



Fostering Eudaimonia, Joy, and Connection among Resident Physicians: A Pilot Study

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Received 07 September 2023;

Accepted 05 October 2023;

Published 12 October 2023

Abstract

Objective: To design an effective and accessible intervention to foster joy in medicine and connection among resident physicians. **Background:** Physician thriving is a complex construct captured by Aristotle's concept of eudaimonia: doing good and feeling good about one's work. Prior studies among resident physicians proposed social connection and joy in medicine as important factors for resident thriving. We hypothesize that our intervention of combining the Three Good Things (3GT), a positive psychology exercise, and a weekly family-style dinner reflecting upon the 3GT would help develop these domains and cultivate eudaimonia. **Methods:** A pilot study of the two interventions was conducted between February 13 to February 27, 2023 among internal medicine and medicine-pediatrics residents (PGY1-PGY4) at a single institution. Participants completed the 3GT exercise daily. Several validated instruments were completed at project enrollment, mid-way through the intervention, and one month after completion: the Two-Question Maslach Burnout Inventory, the Professional Quality of Life Scale, which assesses for burnout, compassion fatigue, and compassion satisfaction, and the Harvard Flourishing Index. This protocol was approved by the Institutional Review Board of the Yale University School of Medicine. **Results:** Seven residents enrolled and five completed the project, of which three completed all three of the surveys (pre-, midpoint, and post-project). Burnout decreased in 1 (33%) of participants at the midpoint of the study and in 3 (100%) after one month. Compassion satisfaction improved in 2 (67%) of participants both midway through the study and at one month follow up. Flourishing increased in 1 (33%) of participants midway and 2 (67%) at one month post study completion. All participants acknowledged increased awareness of positive experiences after beginning 3GT exercises. All participants expressed desire in expanding family dinners to the entire program and found them helpful in building community. **Conclusion:** The 3GT and family style dinners are helpful interventions in fostering compassion satisfaction, connection, and positive reflections, and decreasing burnout. Further study with a larger sample size, in other programs, is necessary to provide generalizability. Including regular family style dinners at a program-wide level may increase thriving.

Introduction

Physician burnout is a work-related syndrome defined as a prolonged response to chronic interpersonal stressors on the job [1], and is characterized by emotional exhaustion, depersonalization, and diminished personal accomplishment [2]. Burnout is epidemic among clinicians and affects all levels of trainees from medical students to residents and extends beyond training into the lives of practicing physicians [3]. The prevalence of burnout among resident physicians is as high as 89% [3,4]. Residency is a unique environment that places its residents at elevated risk of burnout due to the high levels of stress, increasing work responsibilities and demands, and limited control over one's own time and work schedule [3,5].

In contrast, physician thriving is a complex construct captured by Aristotle's concept of eudaimonia: doing good and feeling good about one's work. Thriving is influenced by both intrinsic traits, such as optimism and altruism, and extrinsic factors, such as social support [6]. In residency specifically, program leadership, learning climate, connectedness, joy in medicine, life balance, and internal factors contribute to a resident's sense of thriving [7]. Applying this descriptive model proactively may mitigate the effects of burnout, however data in this domain is lacking. Few studies explore fostering resident thriving by increasing joy in medicine and increasing connectedness.

The gratitude practice of Three Good Things (3GT) shows promise to ameliorate burnout and promote eudaimonia. 3GT is a brief, daily reflection where a participant acknowledges three positive aspects of life throughout the day [8]. One qualitative analysis among NICU healthcare providers employing 3GT was associated with positive emotions and increased resilience [8]. A second study showed that the 3GT intervention in healthcare workers led to significant improvement in burnout, specifically emotional exhaustion, depression, and happiness between baseline and 12-month follow up, and improvement in problems with work-life balance between baseline, 1-month, and 6-month follow up [9]. The 3GT intervention has been shown to increase positive mindfulness and help develop resilience in healthcare workers.

In addition, several studies have shown that building a sense of community from peers and family is an important factor in thriving and significantly increases resilience [10-12]. Shanafelt et al demonstrated in an interventional study that bimonthly physician small group meetings, convened over dinner with open-ended supportive conversation decreased burnout by 12.7% [13]. We hypothesize that our intervention of combining the 3GT and a weekly family-style dinner reflecting upon the 3GT will help develop two of the six themes of thriving: joy in medicine and connectedness.

Methods

Study Design

This prospective, interventional pilot study of 3GT and weekly family dinners was conducted between February 13 to February 27, 2023 at a single institution. Residents (PGY1-PGY4) in the traditional internal medicine, primary care internal medicine, and medicine-pediatrics programs were recruited via email and noon conference announcements. Participants were enrolled over 2 weeks, during which a brief overview of the 3GT was provided. Participants were emailed a survey with the Two Question Maslach Burnout Inventory, the Professional Quality of Life Scale (ProQOL), and the Harvard Flourishing Index that served as their baseline [14-16]. The two question Maslach Burnout Inventory asks: "How often do you feel burned out from your work?" and "How often do you feel you've become more callous toward people since you took this job?" [14]. Participants respond on a Likert scale from "never" to "every day." The two question Maslach has good psychometric properties with the 22 item Maslach Burnout Inventory [14]. The Professional Quality of Life scale (ProQol) has been used in more than 200 studies and evaluates three domains - burnout, compassion satisfaction, and compassion fatigue - with 30 items on a 5-point Likert scale from "never" to "every day" [15]. The Harvard Flourishing Index is a 12-item instrument that explores broad domains of happiness, mental and physical health, meaning and purpose, character and virtue, social relationships, and material stability [16]. Each item is scored from 0-10.

Throughout the 14-day study, all enrolled participants were sent daily Qualtrics surveys through text message to submit their 3GT for the day. Participants could opt-out of having their 3GT messages shared during the weekly family dinners. Each week, all participants met for a family style dinner at which participants reflected upon the 3GT and completed the three validated instruments. One month after the family dinners, all participants were invited to complete the instruments again. To de-identify the data, participants submitted their surveys with an individualized code comprising of the first two letters of their mother's name and the numerical representation of their birthday. Participation was voluntary. They received no financial compensation. All surveys were otherwise confidential and anonymous. The Yale University Institutional Review Board approved this study protocol (IRB# 2000034336).

Results

Participant Characteristics

Seven residents enrolled and five completed the project, of which four completed at least two surveys (enrollment and mid-point, or mid-point and post-project surveys) and three respondents completed all three of the surveys. Survey data from the three participants that completed all three surveys was used. One hundred percent of the participants were female with an average age of 30 years old (+/- 5.7 years). Forty percent were married, forty percent were in long term relationships (defined as longer than 1 year), and 20% were neither (single, short-term relationship, dating). Twenty percent of the residents were PGY1 and 80% were PGY2.

Survey Results

According to the Two-Question Maslach Burnout Inventory, burnout decreased in 1 (33%) of participants at the midpoint of the study and in 3 (100%) after one month. The ProQOL survey has three components: compassion satisfaction, burnout, and secondary trauma stress. In the compassion satisfaction survey, 2 (67%) of participants improved their scores both midway through the study and at one month follow up. ProQOL burnout decreased in 1 (33%) of participants after one week of the intervention and 67% at one month follow up. ProQOL secondary trauma stress decreased in 2 (67%) of participants at midpoint of the study and at one month

follow up. The Harvard Flourishing Index showed improvement in flourishing in 1 (33%) of participants at one week and 2 (67%) at one month post study completion. When comparing raw scores, there was no statistical difference between the pre- and post- scores of the burnout, ProQol, and Flourishing instruments. However, due to the small sample size, the sample was not adequately powered.

Three Good Things and Family Dinners Qualitative Data

An average of 3.5 3GT responses were collected daily. The five most common themes found in the 3GT responses were gratitude surrounding food (cooking a meal, receiving food); completing patient related tasks well; fulfilling conversations with friends, family, and patients; spending time with loved ones; learning a new skill; and having free time. Some participants found it difficult to think of 3GT on particularly hard rotations such as the Intensive Care Unit. All participants, however, acknowledged increased awareness of positive experiences after beginning 3GT exercises.

The family style dinners took place at a local restaurant with an eclectic atmosphere that allowed for casual conversations about the 3GT. Several responses, which participants had given permission to share, were read and discussed among the participants. Several participants highlighted the isolating effects of residency and the importance of social connection on their wellbeing. All participants expressed desire to expand family dinners to the entire program and found them helpful to build community.

Discussion

Fostering eudaimonia is challenging during residency where the work demands are grueling, and the prevalence of burnout and other mental health issues are high. Reflecting upon 3GT is a simple activity which, by itself, has been shown to be an effective approach to increase wellbeing and resilience [8,9]. Similarly, family-style dinners have been shown to reduce burnout [10-13]. We believe that combining 3GT and family-style dinners compounds the beforementioned effects by integrating both an intrinsic and extrinsic, community-oriented activity.

Some limitations are to be considered. First, the small sample size precludes robust statistical analysis. Only three completed all three surveys, reflecting the real-world nature of resident schedules. Although subjectively all participants believed this was a positive intervention which should be expanded. Second, the short-term follow-up of one month demonstrates that the effect of this intervention endures, but longer-term follow-up would be helpful to track these effects. Third, all participants identified as women. The efficacy of this intervention may or may not be different among those who identify as other genders.

Summary

This intervention was simple, effective, and showed an enduring impact at one month follow-up. Participants expressed that expanding these exercises across the institution would be helpful. This project entailed two weekly dinners with the intrinsic, meditative activity of 3GT. Might the impact be similar with a monthly or quarterly dinner? Given the challenging work schedules, would the intervention be similarly effective with different attendees each meal? We believe that sharing the 3GT in a family-style dinner enhanced community bonding and established a culture of encouragement and hope.

Declarations

Data Availability

Data is available upon request

Conflicts of Interest

The authors have no conflicts of interest.

Funding Statement

This project received no external funding.

Authors' contributions

Both authors contributed to the design, data-collection, analysis, writing, and editing of the manuscript.

Acknowledgments

None

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