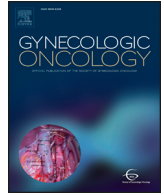




Contents lists available at ScienceDirect

Gynecologic Oncology

journal homepage: www.elsevier.com/locate/ygyno

The impact of physician burnout on clinical and academic productivity of gynecologic oncologists: A decision analysis[☆]

Taylor B. Turner^{a,*}, Sarah E. Dilley^a, Haller J. Smith^a, Warner K. Huh^a, Susan C. Modesitt^b, Stephen L. Rose^c, Laurel W. Rice^c, Jeffrey M. Fowler^d, J. Michael Straughn Jr.^a

^a Division of Gynecologic Oncology, Department of Obstetrics and Gynecology, University of Alabama at Birmingham, Birmingham, AL, United States

^b Division of Gynecologic Oncology, Department of Obstetrics and Gynecology, University of Virginia Health System, Charlottesville, VA, United States

^c Division of Gynecologic Oncology, Department of Obstetrics and Gynecology, School of Medicine and Public Health, University of Wisconsin–Madison, Madison, WI, United States

^d Division of Gynecologic Oncology, Department of Obstetrics and Gynecology, Wexner Medical Center, The Ohio State University, Columbus, OH, United States

HIGHLIGHTS

- Burnout reduces gynecologic oncologists' academic and clinical productivity.
- Early career gynecologic oncologists generate 1.6 million fewer RVUs due to burnout.
- Burnout accounted for a 14.9% decrease in manuscript authorships.

ARTICLE INFO

Article history:

Received 20 April 2017

Received in revised form 16 June 2017

Accepted 19 June 2017

Available online xxxx

Keywords:

Physician burnout

Productivity

Decision model

ABSTRACT

Objective. Physician burnout is associated with mental illness, alcohol abuse, and job dissatisfaction. Our objective was to estimate the impact of burnout on productivity of gynecologic oncologists during the first half of their career.

Methods. A decision model evaluated the impact of burnout on total relative value (RVU) production during the first 15 years of practice for gynecologic oncologists entering the workforce from 2011 to 2015. The SGO practice survey provided physician demographics and mean annual RVUs. Published data were used to estimate probability of burnout for male and female gynecologic oncologists, and the impact of depression, alcohol abuse, and early retirement. Academic productivity was defined as annual PubMed publications since finishing fellowship.

Results. Without burnout, RVU production for the cohort of 250 gynecologic oncologists was 26.2 million (M) RVUs over 15 years. With burnout, RVU production decreased by 1.6 M (5.9% decrease). Disproportionate rates of burnout among females resulted in 1.1 M lost RVUs for females vs. 488 K for males. Academic production without burnout was estimated at 9277 publications for the cohort. Burnout resulted in 1383 estimated fewer publications over 15 years (14.9%).

Conclusions. The impact of burnout on clinical and academic productivity is substantial across all specialties. As health care systems struggle with human resource shortages, this study highlights the need for effective burnout prevention and wellness programs for gynecologic oncologists. Unless significant resources are designated to wellness programs, burnout will increasingly affect the care of our patients and the advancement of our field.

© 2016 Published by Elsevier Inc.

1. Introduction

Burnout is a generalized term used to describe several conditions that frequently coexist, namely emotional exhaustion, depersonalization, and

reduced personal accomplishment [1]. Initially described in service industries such as education and healthcare, burnout is seen as a consequence of intense personal interactions between staff and clients without proper support. Physicians suffering from burnout often experience loss of enthusiasm for work and feelings of cynicism. Recently, there has been increased attention to and research documenting the increasing rates of burnout among physicians over the last ten years. Rates of burnout are increasing across all specialties, especially emergency medicine and obstetrics and gynecology (OBGYN) [2]. Burnout appears to correlate directly with time spent in patient care [3], is high among trainees [4], and is

[☆] This abstract was presented as a plenary at the SGO Annual Meeting on Women's Cancer in March 2017.

* Corresponding author at: Department of Obstetrics and Gynecology, University of Alabama at Birmingham, 1700 6th Avenue South, Room 10250, Birmingham, AL 35233, United States.

E-mail address: taylorturner@uabmc.edu (T.B. Turner).

consistently higher in female physicians [5]. A recent survey of gynecologic oncologists reported a 32% rate of burnout in respondents – 41% for females and 27% for males. Those with burnout were more likely to have depression, alcohol abuse, and suicidal ideation. Gynecologic oncologists under 50 years of age have higher rates of burnout, 41% compared to 25% of those over 50 [6]. Other studies have shown younger practitioners have more burnout with a peak in the middle of their career [4,7].

The amount and quality of data documenting physician burnout is increasing, and the most common complaints are the increasing bureaucratic tasks and amount of time spent at work. Despite this increased awareness, understanding the impact and cost of burnout is challenging. Medical errors have been positively correlated with burnout and depression [8], and evidence of suboptimal patient care was seen among internal medicine residents who experienced burnout [9]. In a large European study, burnout among physicians was associated with increased utilization of sick leave and plans to change profession [10], and burnout has been correlated with absenteeism among professionals, including physicians [11–13]. The purpose of this study is to evaluate the impact of burnout on academic and clinical productivity among gynecologic oncologists in the United States.

2. Methods

2.1. Model probabilities

A conceptual decision model was created to evaluate the impact of burnout on the clinical and academic productivity of gynecologic oncologists entering the workforce from 2011 to 2015 (Fig. 1). Productivity of each gynecologic oncologist was calculated during their first 15 years of practice. This time period was chosen due to the availability of data on productivity of gynecologic oncologists during the early portion of their career. The Society of Gynecologic Oncology's (SGO) 2015 State of the Subspecialty practice survey was used to estimate physician demographics and mean annual relative value units (RVUs) for gynecologic oncologists in academic positions and private practice [14]. Salaried employees were considered to be in academic positions for the purpose

of this model. Data from a survey of gynecologic oncologists were used to estimate probability of burnout for male and female gynecologic oncologists, as well as the rates of alcohol abuse and depression [6]. A Canadian survey evaluating burnout was used to estimate the rate of early retirement within the first 15 years of practice. In this study the rates of planned early retirement or career change were low in the <45 age group, and only 33% of those planning to leave actually did so, resulting in a small overall loss of productivity [15]. Given this, the loss of productivity due to early retirement in this population was estimated at only 2%.

2.2. Outcome estimates

The outcomes of interest were relative value unit (RVU) production and number of peer-edited journal publications. Published data were used to estimate the impact of alcohol abuse, depression, and early retirement on these outcomes (Table 1). Depression was estimated to lead to a 20% loss in productivity [16,17]. Notably this value does not account for lost productivity due to absenteeism, but as physicians have low rates of absenteeism compared to non-physicians, this is unlikely to have a significant effect [18]. The effect of alcohol abuse is typically calculated for entire populations, and most recently the Centers for Disease Control (CDC) reported a 180 billion dollar loss in workplace productivity due to alcohol abuse [19]. Alcohol abuse has been estimated to decrease the probability of working by 7 to 31% [20]. For purposes of this study, the impact of alcohol abuse was estimated to result in a 10% decrease in productivity. To estimate the predicted academic productivity for private practice and academic gynecologic oncologists, a PubMed search of a sample of fellowship graduates from the University of Alabama at Birmingham was performed. The number of publications per year was determined by averaging their total number of PubMed cited works over the time period since they graduated from fellowship. The mean number of publications per year since finishing fellowship for those in academic medicine was 8.6 compared to 1.1 for those in private practice.

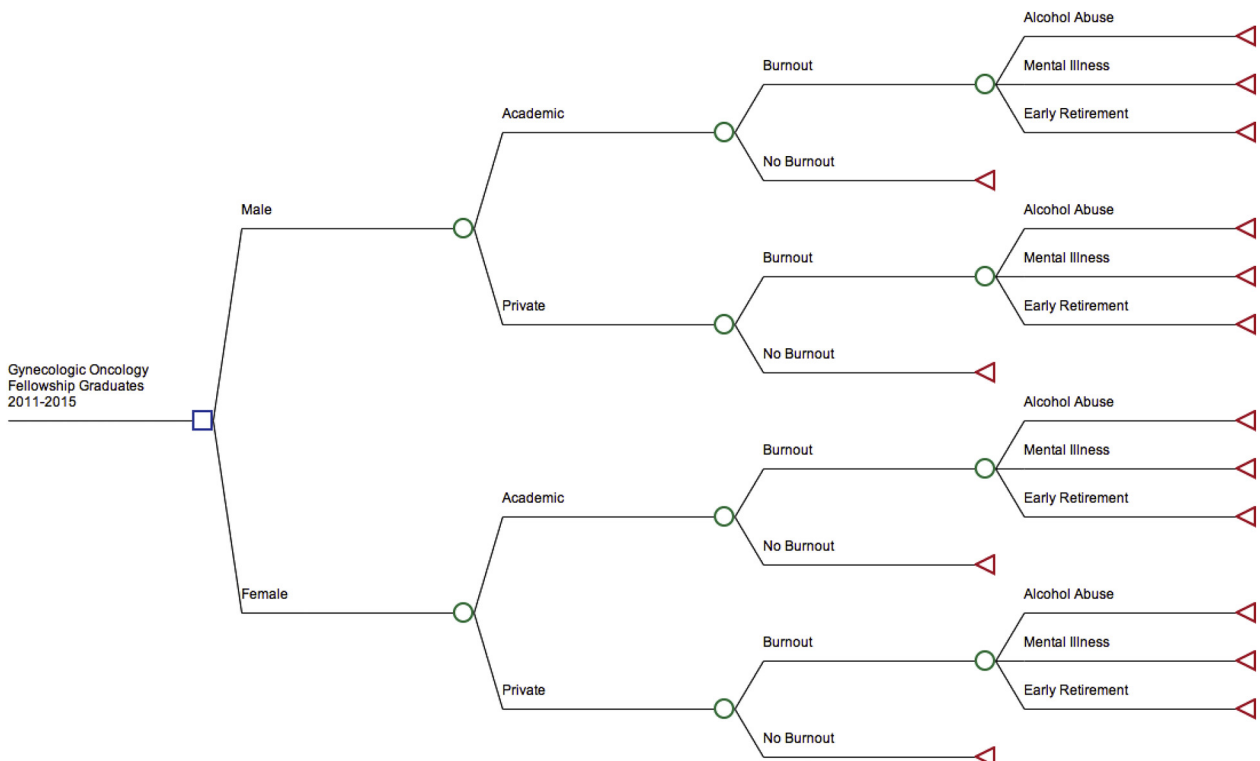


Fig. 1. Productivity model.

Download English Version:

<https://daneshyari.com/en/article/5695390>

Download Persian Version:

<https://daneshyari.com/article/5695390>

[Daneshyari.com](https://daneshyari.com)