

Background

Women in medicine

- Although women continue to make up increasing percentages of medical school classes across the United States, women in medicine continue to fall behind significantly in leadership roles particularly in academic medicine. In 2018, 50% of medical students and 50% of residents and fellows in training were women, however women consistently make up < 20% of US medical school deans and clinical department chairs with little change over the past decade. (3) Women are more likely to leave academic medicine, fail to reach leadership positions, and be undercompensated. (9) Despite the improving representation of women holding public office and leadership roles across the United States, overall American society continues to place higher expectations on women in both professional and personal roles.
- Research has shown that females in medicine, from students to attending physicians, have higher rates of depression and anxiety, unrefreshing or inadequate sleep, increased emotional and physical fatigue, and ultimately higher rates of burnout, with some studies indicating that female physicians have twice the rate of burnout. A meta-analysis of physician suicide from 2020 showed that the suicide risk for female physicians is higher than for other women and higher than for their male physician counterparts of the same age. The percentage of women who leave academic medicine has increased steadily each year, up to 41% in 2019 (3).
- Previous studies have shown that mentorship is associated with increased career satisfaction, faculty retention, productivity, and promotion of medical faculty (9). Nonetheless, women are less likely to have a mentor compared to male colleagues, with recent studies have shown that 34% of female faculty do not currently have a mentor and 13% have never had one at all. (3). An extensive survey of female physicians in the United States found that 73% of respondents indicated that gender discrimination has diminished their career satisfaction and professional morale. Over recent years, the burnout among physicians has increased, and female physicians have a higher burnout rate (84.8%) compared to male physicians (74.1%) (6).
- At Arnot Ogden Medical Center, female physicians that work directly with resident physicians are in short supply. For example, in the Emergency medicine program, only 2 of 9 faculty are female. In Family medicine, only 2 of 15 faculty are female. In General surgery, all 3 primary faculty are male. Of the 16 hospitalists that work with internal and family medicine residents, only 2 are female. In the Psychiatry program, 2 of 9 are female. Among the primary faculty in Radiology, all 6 are male. Overall this comes to 8 of the 58, or 13%, of faculty physicians that work closely with residents are female. This provides female residents with a very limited opportunity to develop close professional relationships with female physicians and ultimately makes it difficult to set up a mentor.

Mentorship

- A recent systematic review of literature and published studies on mentorship among females in academic medicine has revealed several important themes emphasizing the significance of mentorship especially among female physicians.
- Mentoring benefits career development by helping generate professional growth and fostering women's careers via structured process for career planning professional development.
- Access to successful role models promotes psychological empowerment, assertiveness, self-efficacy, self-esteem, confidence, job related well-being, and problem solving. Having a mentor also provides space for women to reflect on core values and reconcile those with their academic and personal goals.
- Mentorship has been shown to facilitate scholarly productivity, academic promotion, networking, and collaboration in academics, ultimately helping mentees improve skills in academic teaching, research, writing, publication and grant writing.
- Mentors foster psychosocial support through positive encouragement, motivation, while instilling confidence, assertiveness, sense of caring, inspiration, and guidance.
- The mentor-mentee relationship seems to be most valuable when mentor is available and willing to provide adequate time and consistent communication and is experienced with clinical practice, teaching, and research. Mentors who are respectful and value the mentee and are matched with mentees with mutual interests and backgrounds and shared understanding facilitate maximum benefit from this relationship as well. Finally, mentors need to be able to respond to shifting needs of the mentee and understand that this relationship is dynamic and may change based on mentee's needs and access to other mentors with different skills.
- Nonetheless, there are several barriers to mentoring that impede development of mutually advantageous relationships. Often it is difficult to find mentors which share similar interests and have similar experiences, cultural backgrounds, medical experiences, and age. Conversely, if a suitable mentor is matched with a mentee, the former may not have much experience in this new role and approaches toward mentoring may be counterproductive. Finally, shortage of mentors and time among female physicians plays a significant role, especially among resident physicians who consistently work 80 hours per week during intern year.
- Ultimately, inadequate mentoring or lack of mentors leads to decreased job satisfaction, reduced academic productivity, limited career development, and ultimately lead to increased risk of burnout. (2)
- With this survey we can obtain a comprehensive picture of the current residents and Arnot and develop a better understanding of the desire and need for mentors, particularly among female physicians. Ultimately we hope to extend this survey to medical students as well to provide access to both resident and attending physicians as mentors

Purpose

- To evaluate the quality of life among resident physicians at Arnot
- To evaluate mental and emotional well being of resident physicians
- Investigate the need and desire for mentorship among resident physicians
- Ultimately help develop a program to assist in helping medical students and resident physicians set up mentors to guide and support through the medical training experience
- Discover ways to improve female resident retention, emotional and mental well-being, and advocacy at Arnot



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Quality Improvement Project: Assessing Mental and Emotional well-being of Female Resident physicians at Arnot Ogden Medical Center in an effort to Understand Need and Desire for Female Mentorship

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Methods

- A. Demographics
 - Age, Sex, Marital status, Medical school , Residency program, Year of program
 - On average how many hours do you work in relation to your residency, including hours on call and additional time for completing outpatient clinic notes?
 - Do you plan on staying at Arnot after completion of your residency program?
- B. Stress
 - When thinking about amount of stress in your life, would you say that most days are?
 - When thinking about the past 12 months of residency, would you say that most days are...
 - 1 - not at all stressful, 2 - not very stressful, 3 - a bit stressful, 4 - quite a bit stressful, 5 - extremely stressful
 - In general, how would you rate your ability to handle unexpected and difficult problems, such as family or personal crisis
 - In general, how would you rate your ability to handle day-to-day demands in life - handling work, family, personal responsibilities
 - In your day-to-day life, how much do you feel each of the following conditions is a source of stress?
 - 1 - not at all stressful, 2 - not very stressful, 3 - a bit stressful, 4 - quite a bit stressful, 5 - extremely stressful
 - Time pressures / not enough time
 - Own physical health problem or condition
 - Financial situation - debt
 - Own work situation - work hours, conditions
 - Residency program
 - Employment status
 - Caring for - own children if applicable
 - Caring for - others
 - Other personal or family responsibilities
 - Personal relationships
 - Discrimination
 - Personal and family's safety
 - Other (specify)
- Which one of the above would you say is the MOST important thing contributing to feelings of stress you may have?
- Stress directly related to residency in past 12 months
 - 1. Strongly agree, 2 - Agree, 3 - Neither agree or disagree, 4 - Disagree, 5 - Strongly disagree
 - Residency required that you learn new things
 - Residency required high level of skill
 - Allowed you freedom to decide how you did your job
 - Required that you do things over and over
 - Residency was very hectic
 - You were free from conflicting demands that others made
 - You had a lot to say about what happened in your residency
 - You were exposed to hostility or conflict from people you work with
 - Your supervisor was helpful
 - There was pressure to conduct research / public
 - There was pressure of examinations and evaluations
 - There was insufficient sleep
 - There was excessive / frequent call
 - Pressure from the clinical workload - excessive medical records work, patient load, documentation requirements
 - Stress of high rates of death among patients
 - Stress of working with fellow residents
 - Stress of working with attending physicians
- Dealing with stress - how often do you engage in the following to help with stress?
 - 1 - often (>3 x week), 2 - sometimes,(>3 x month), 3 - rarely (>3 x year), 4 - never
 - Talk to and socialize with friends, peers, family
 - Talk with therapist
 - Avoid being with people
 - Sleep more than usual
 - Try to feel better by eating more or less than usual
 - Try to feel better by smoking cigarettes
 - Try to feel better by drinking alcohol
 - Try to feel better by using drugs or medication
 - Exercise alone
 - Exercise with others
 - Pray or seek spiritual help
 - Relax by doing something enjoyable - hobby
 - Journal or write down feelings
 - Try to stay positive and look on bright side of things
 - Blame yourself
 - Wish situation would go away or somehow be finished
- If possible, I would consider changing my residency program
- If I had to do it all over again, I would pursue another career
- C. Intimidation and harassment
 - During your residency, have you ever experienced intimidation or harassment from.. Yes or No
 - Program director, Program coordinator, Staff physician, Other residents, Nursing staff, Residents in your program, Residents in other programs, Patients, Other - specify
 - In what form did you experience intimidation or harassment? Check all that apply
 - Inappropriate verbal comments, Inappropriate or unwanted physical contact, Sexual harassment, Additional work as punishment, Privileges / opportunities threatened to be taken away, Recrimination for reporting, Other - specify
 - What do you believe was the basis for the intimidation or harassment? Check all that apply
 - Gender, Language, Culture, Ethnicity, Sexual orientation, Other - specify
 - How often did intimidation or harassment occur?
 - Once
 - More than once
 - Are you aware of process to address issues of intimidation and harassment in your residency?
 - Do you feel that the process is adequate, fair, and independent?
- D. Well-being
 - How satisfied are you with your life in general
 - 1 - very satisfied, 2 - satisfied, 3 - neither satisfied nor dissatisfied, 4 - dissatisfied, 5 - very dissatisfied
 - In general, would you say your physical health is
 - 1 - excellent, 2 - very good, 3 - good, 4 - fair, 5 - poor
 - In general would you say your mental health is
 - 1 - excellent, 2 - very good, 3 - good, 4 - fair, 5 - poor
 - Do you have a primary care / family physician?
 - Have you had an appointment with your family physician in past 12 months or since starting residency
 - Have you ever had emotional or mental health problems?
 - If Yes, have you sought or received help for this?
 - 1 - Had emotional or mental health problems of no importance
 - 2 - Have not sought help, though I have been in need of this
 - 3 - Have consulted general practitioner
 - 4 - Have consulted psychologist/psychiatrist/therapist
 - 5 - Have been admitted to hospital
 - 6 - Attended self-help group (e.g. AA)
 - 7 - Received complementary or alternative therapy (e.g. rehab)
 - Have you had emotional or mental health problems during residency?
 - If Yes, have you sought or received help for this?
 - During your life, have you ever had attack of fear or panic when you suddenly felt very frightened, anxious, or uneasy?
 - Have you ever had attack when you suddenly felt very uncomfortable and became short of breath, dizzy, nauseous, heart pounding / palpitations, or thought you might lose control, die, or go crazy?
 - Have you ever had a period lasting several days or longer when most of the day felt sad, empty, depressed, or tearful?
 - Have you ever had a period lasting 2 years or longer when most days you felt either sad or depressed about how things were going in your life?
 - Have you ever had a period lasting several days or longer when most of the day you were very discouraged about how things were going in your life?
 - Have you ever had a period lasting 2 years or longer when most days you felt either very discouraged about how things were going in your life?
 - Have you ever had a period lasting several days or long when you felt much more excited and full of energy than usual, racing thoughts, talking a lot, restless, excessive spending?
 - Have you ever had a period lasting several days or longer when most of the time you were very irritable, grumpy, or in a bad mood?
 - Have you ever had a period lasting several days or longer when most of the time you were so irritable that you either started arguments, shouted at, or hit people?
 - Did you ever have a time in your life when you were a "worry" and worried a lot about things than other people with the same problems as you?
 - Have you ever had a period lasting 6 months or longer when you were anxious and worried most days?
 - Was there ever a time in your life when you felt very afraid or shy with people, such as meeting new people, going to parties, going on a date, or using a public bathroom?
 - Was there ever a time in your life when you felt very afraid or uncomfortable when you had to do something in front of a group of people, like giving a speech or speaking in class?
 - Was there ever a time in your life when you became very upset or nervous whenever you were in social situation or had to do something in front of a group?
 - Because of fear did you ever stay away from social situations / situations where you had to do something in front of a group whenever you could?
 - Do your fear was ever stronger than it should have been?
 - Was there ever a time in your life when you felt very uncomfortable or afraid of either being in crowds, going to public places, traveling by yourself, or traveling far away from home?
 - Was there ever a time in your life when you became very upset whenever you were in crowds, public places, or traveling?
 - Because of your fear, did you ever stay away from these situations whenever you could?
 - Do you think your fear was ever much stronger than it should have been?
- F. Mentorship
 - Have you ever had a mentor?
 - Do you currently have a mentor?
 - If yes, how often are you in contact with your mentor?
 - Do you feel comfortable being open and discussing both personal and professional concerns with your mentor?
 - If not, why not?
 - If mentors were available to residents would you be interested in being matched up with a mentor?
 - Do you find it difficult to find time to talk to a mentor?
 - Do you feel that having access to a mentor would be helpful to guide you through your professional life?
 - What factors are most important to you in a mentor?
 - Gender, area of practice, age, religion, culture, goals

