

Behavioral and work-related factors associated with secondary traumatic stress, burnout, and compassion satisfaction among health care workers at an academic-medical center

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Disclosures

The speaker has no conflicts of interest to disclose

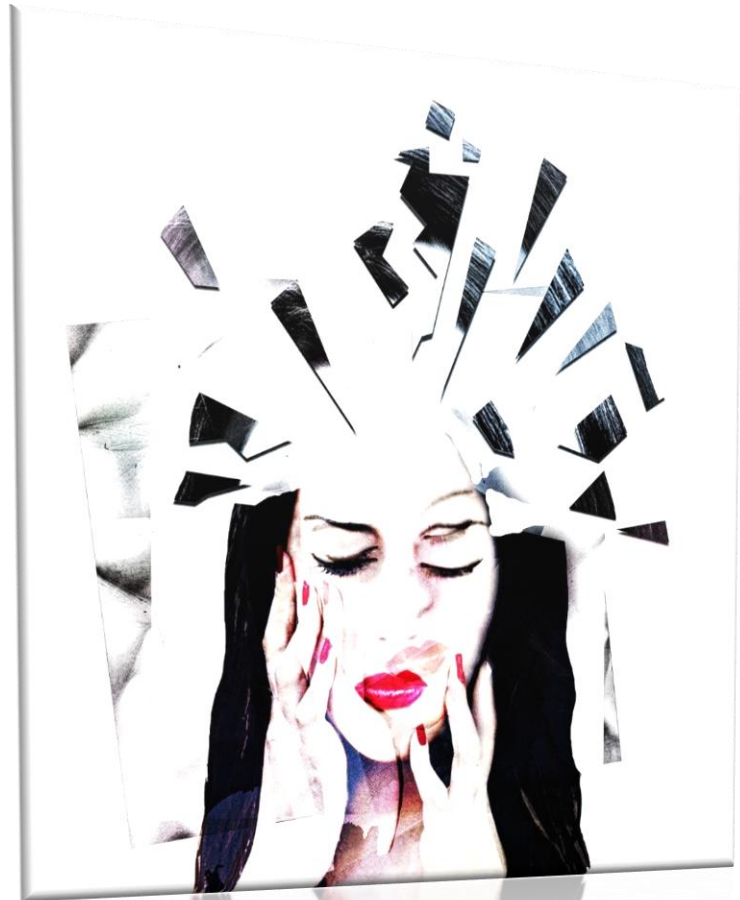
Learning Outcomes

Upon completion of this presentation, participants will be able to:

1. Define secondary traumatic stress (STS), burnout (BO), and compassion satisfaction (CS)
2. Identify behavioral and work-related risk factors for STS, BO, and CS among healthcare workers
3. Discuss solutions to mitigate STS & BO, and enhance CS among healthcare workers

Secondary Traumatic Stress (STS or Vicarious Trauma)

- Resulting from indirect contact with a traumatic event
- Characterized by physical and psychosocial symptoms such as:
 - Poor concentration
 - Anger
 - Disturbing thoughts
 - Sleep disturbances
 - Avoidance of patients or others



Hinderer, K. A., VonRueden, K. T., Friedmann, E., McQuillan, K. A., Gilmore, R., Kramer, B., & Murray, M. (2014). Burnout, Compassion Fatigue, Compassion Satisfaction, and Secondary Traumatic Stress in Trauma Nurses. *Journal of Trauma Nursing*, 21(4), 160-169.

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Burnout (BO)

- An overwhelming state of emotional exhaustion, patient depersonalization and feelings of professional insufficiency



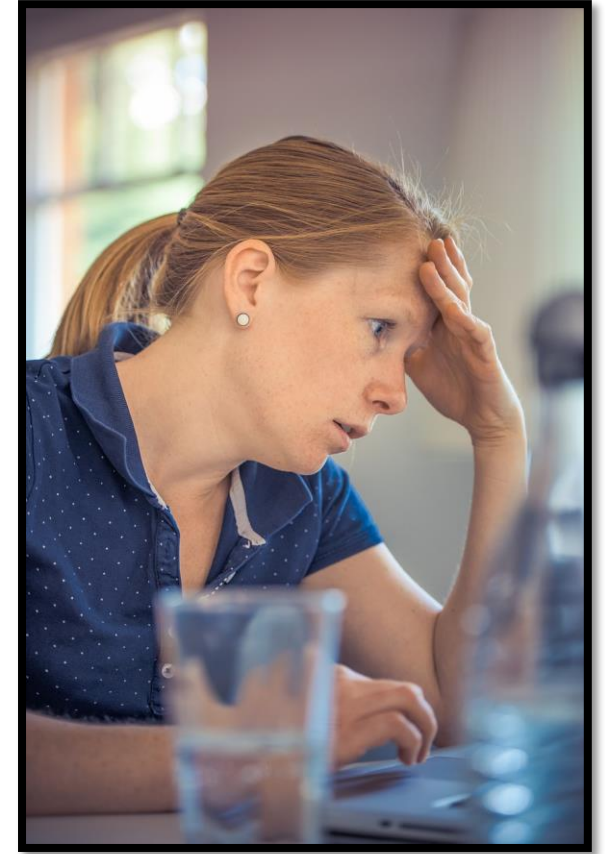
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Compassion Satisfaction (CS) & Fatigue (CF)

- CS is pleasure derived from caring for others
- CF is a loss of the ability to nurture, often defined as a combination of STS and BO



Why study STS, Burnout, & Compassion Satisfaction/Fatigue?

- Estimates of STS experienced by health care workers are high
 - 70% among social workers
 - 85% among critical care nurses
- The World Health Organization has classified 'Burnout' as an occupational health problem in the ICD-10
- CF is associated with increased mental health problems, low work productivity, absenteeism, low morale
- These problems combined are known to:
 - Increase rates of medical errors
 - Malpractice claims
 - Greater work turnover
 - Poor patient care



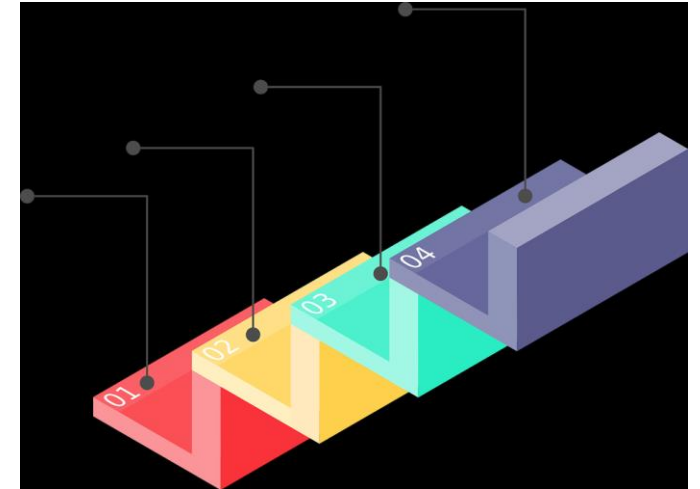
Study AIMS

The **aims** of this study were to:

1. Examine differences in STS, BO, and CS by discipline and work setting
2. Assess work-related and behavioral factors associated with STS, BO, and CS

Design & Procedures

- **Correlational study design** using on an electronic survey
- Participants from **UK Healthcare enterprise**
 - UK Chandler (inpatient and Outpatient)
 - Kentucky Clinic
 - UK Children's Hospital
 - Good Samaritan
 - Eastern State Hospital
 - Central Kentucky Recovery Center
- Procedure:
 - IRB Approval (# 46822), October 2018
 - Eligibility: ≥ 18 years of age, employed full/part-time, directly involved in patient care
 - Surveys distributed between November 2018 to April 2019 (5 months)
 - Anticipated 900 participants (i.e., 10% of approximately 9,000 employees)
 - Obtained responses from 1006
 - Useable data from 764 (75.9%)



Measures

- **Demographics**

- Age categories
- Gender & Sexual Orientation
- Marital status
- Education level
- Marital Status
- Having children living with them

- **Behavioral/Lifestyle factors**

- Current tobacco use
- Perceived Secondhand Smoke Exposure
- Alcohol Consumption
- Average sleep & Quality of Sleep
- Physical activity
- Having a behavioral health diagnosis
- Ever received professional trauma treatment

- **Work-related variables**

- Discipline: Advance Practice, Nursing staff, Social work/Psychology, Nursing care assistants, Therapists, Pharmacy, Other (i.e., clerical staff)
- Primary service setting: Intensive care, Emergency, General Wards, oncology, psychiatry, outpatient services, ancillary services, other (i.e., administrative)
- Work shift & Length of work day
- Time worked in setting & discipline

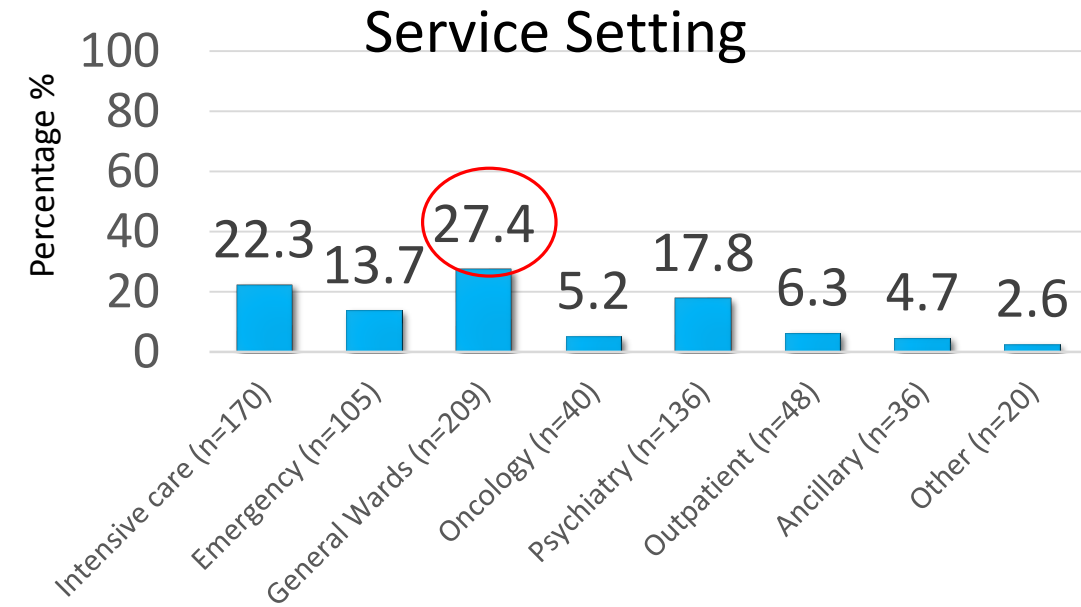
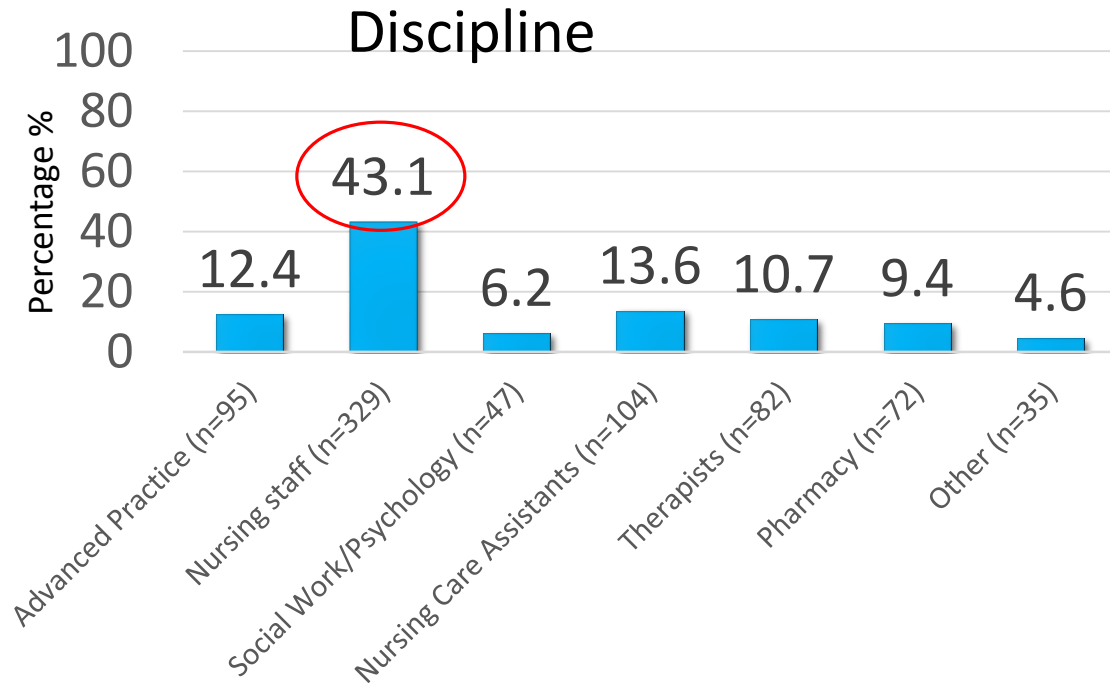
- **Witnessed or Experienced Workplace violence**

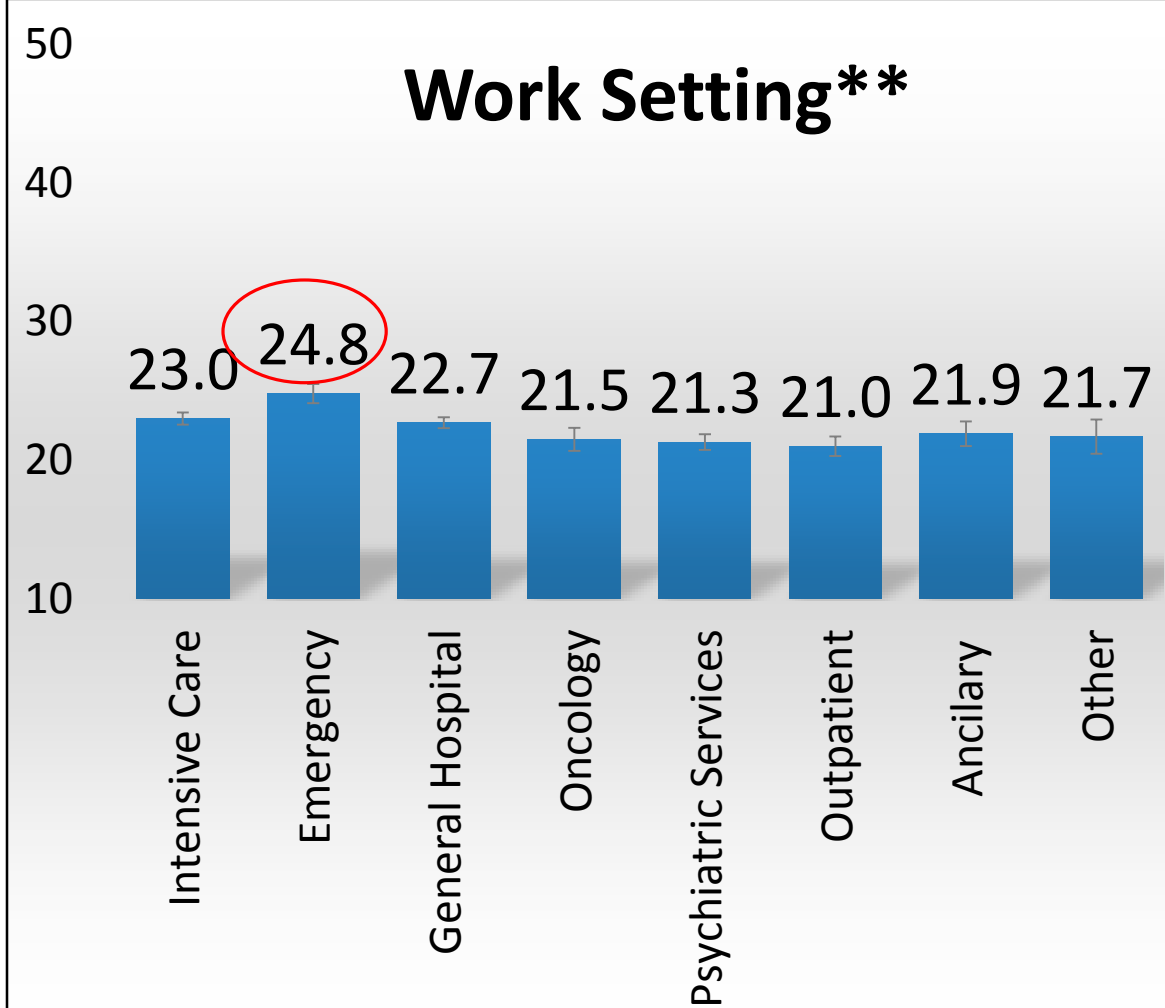
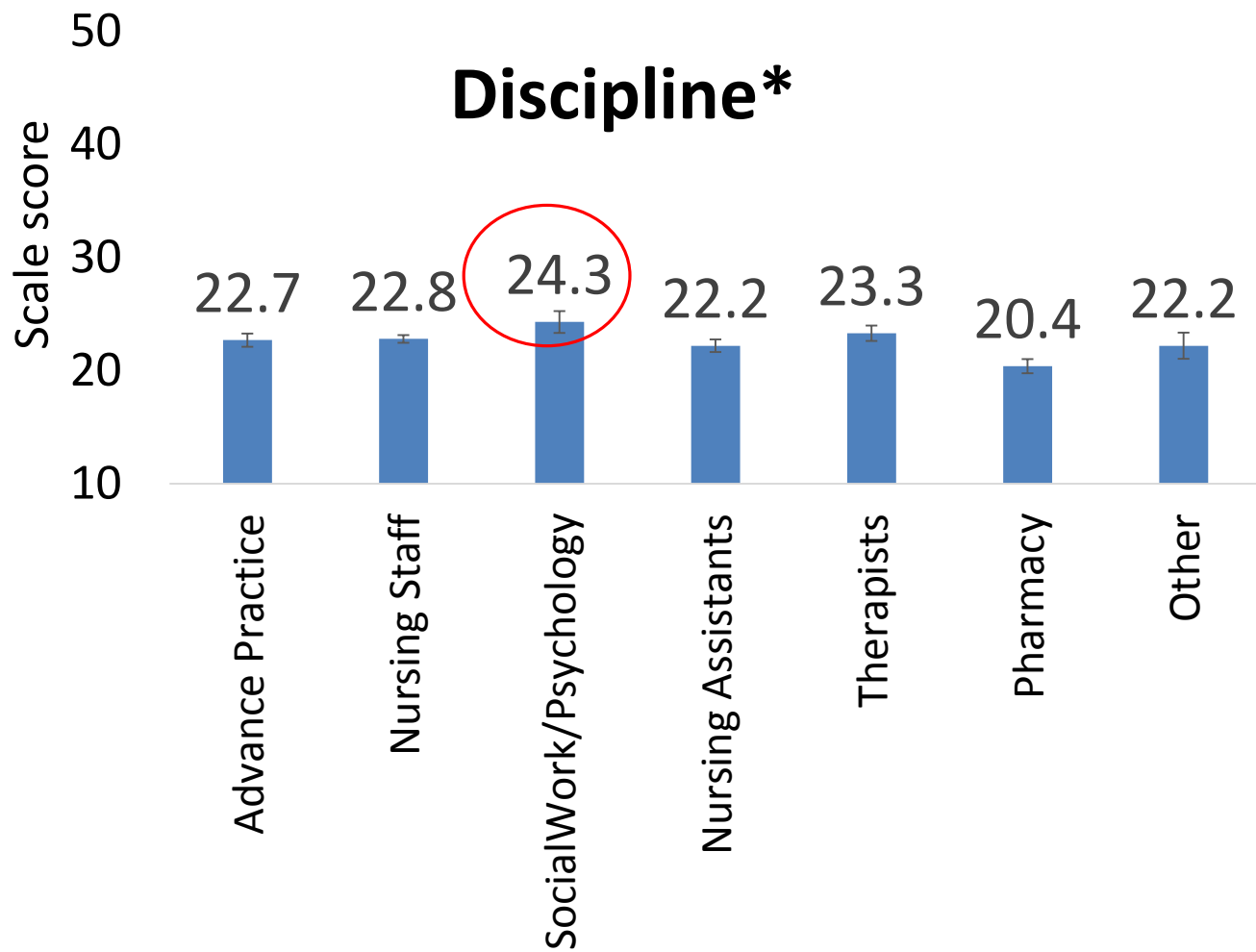
- Patient assault, co-worker bullying, physical/sexual/verbal abuse (Yes vs. No)

- **Professional Quality of Life Scale (ProQOL)**

- Secondary Traumatic Stress (Cronbach's alpha= **.81**)
- Burnout (Cronbach's alpha= **.83**)
- Compassion Satisfaction (Cronbach's alpha= **.92**)

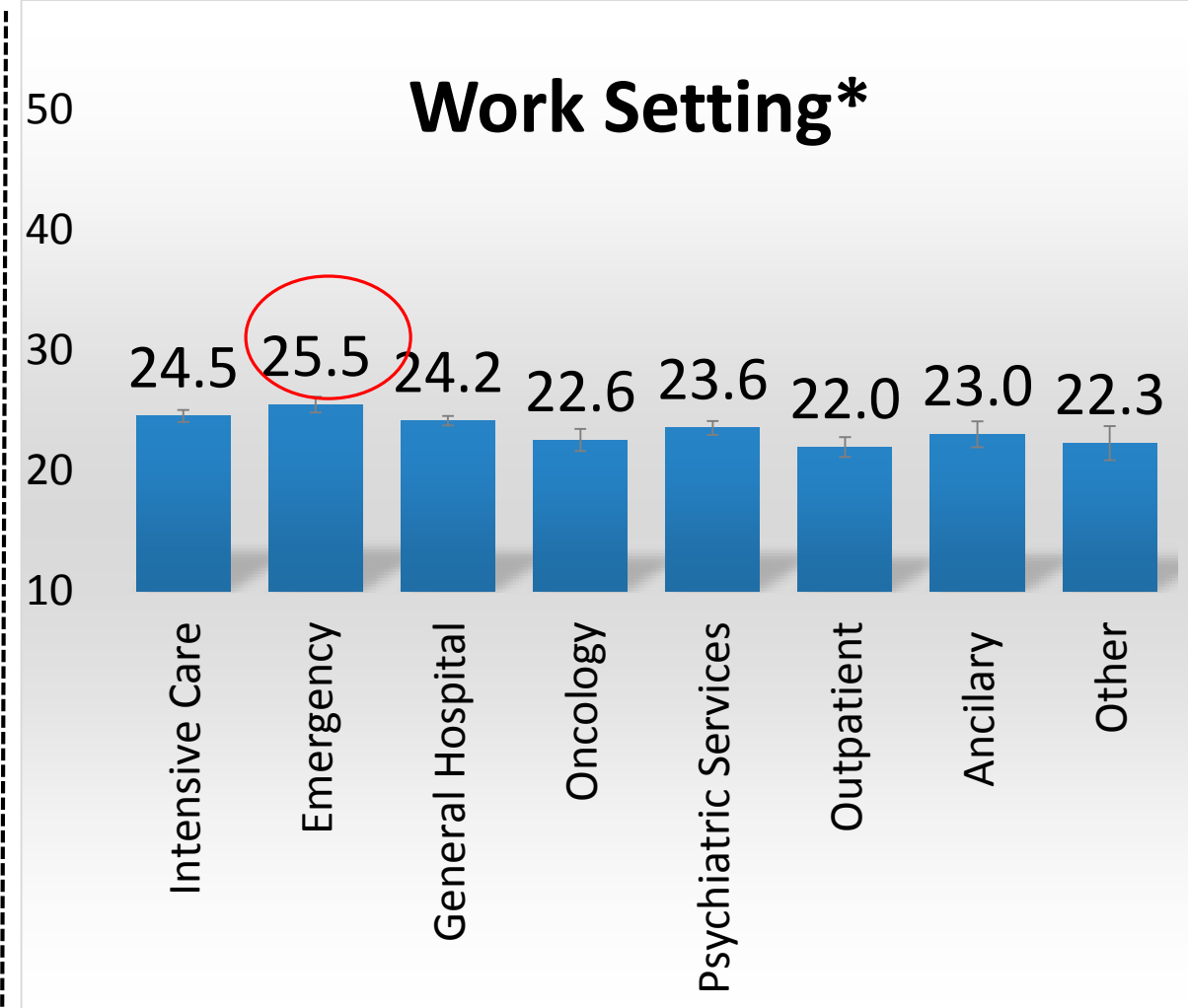
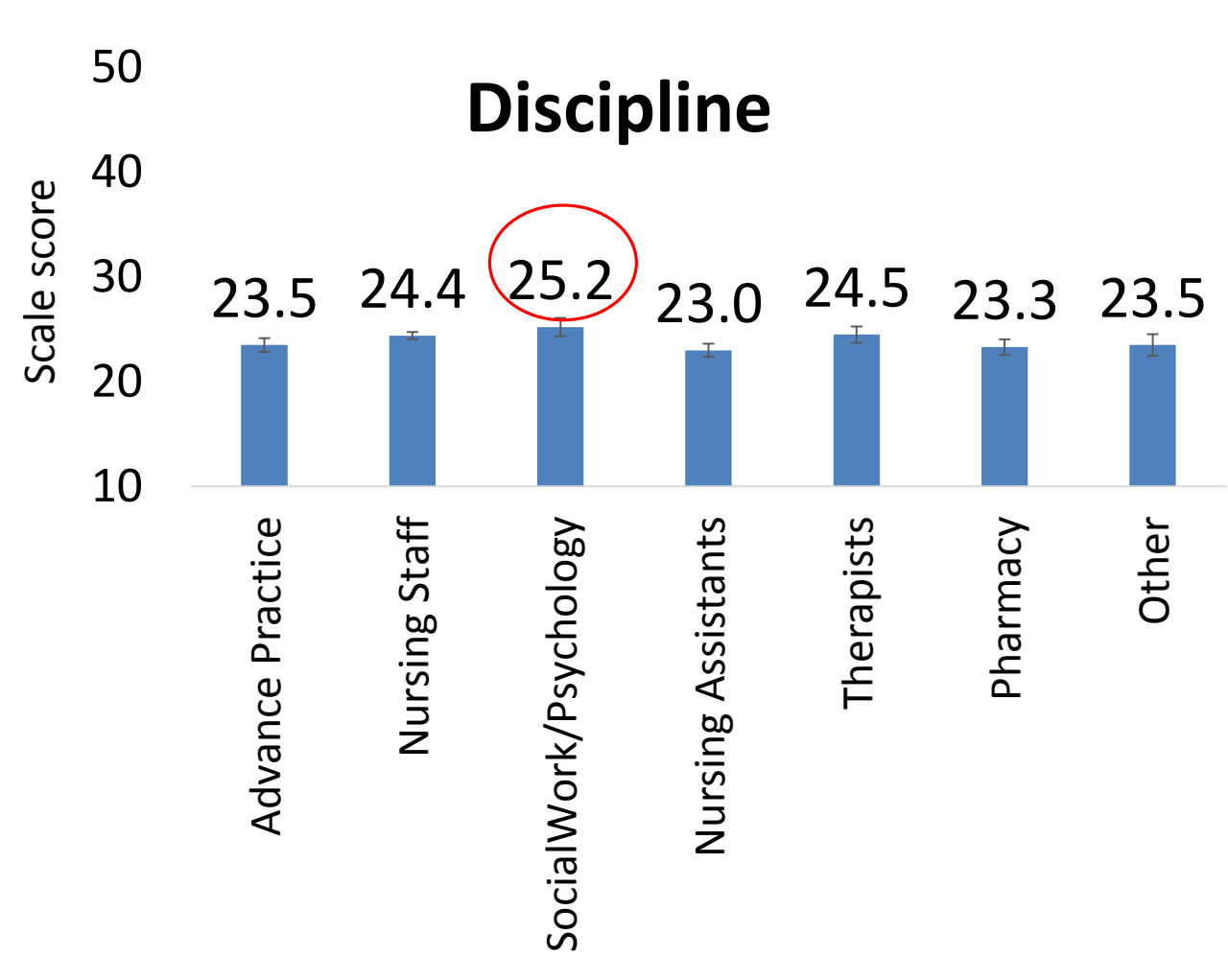
Sample Discipline, Service Setting, Experience of Workplace Violence





STS

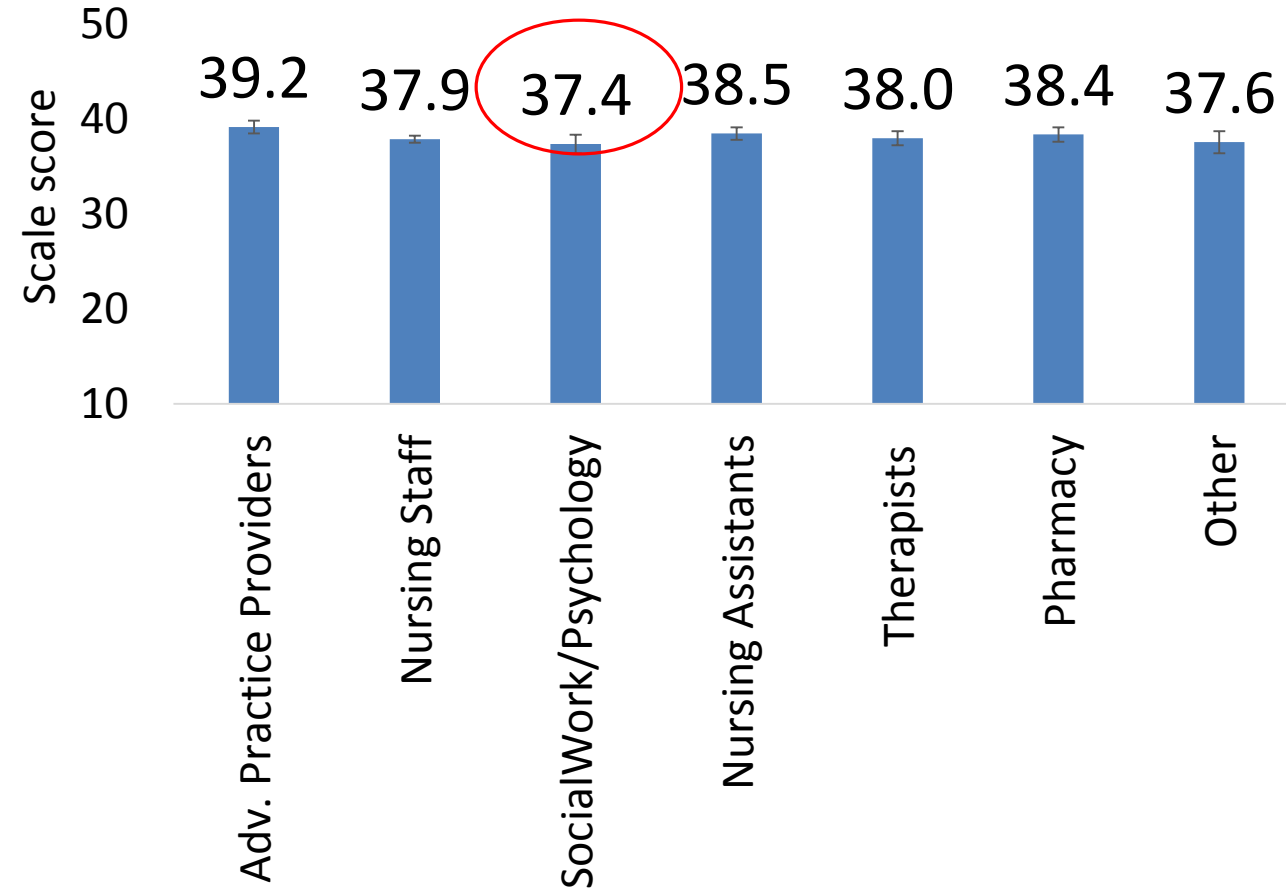
*P<.05; **p<.01



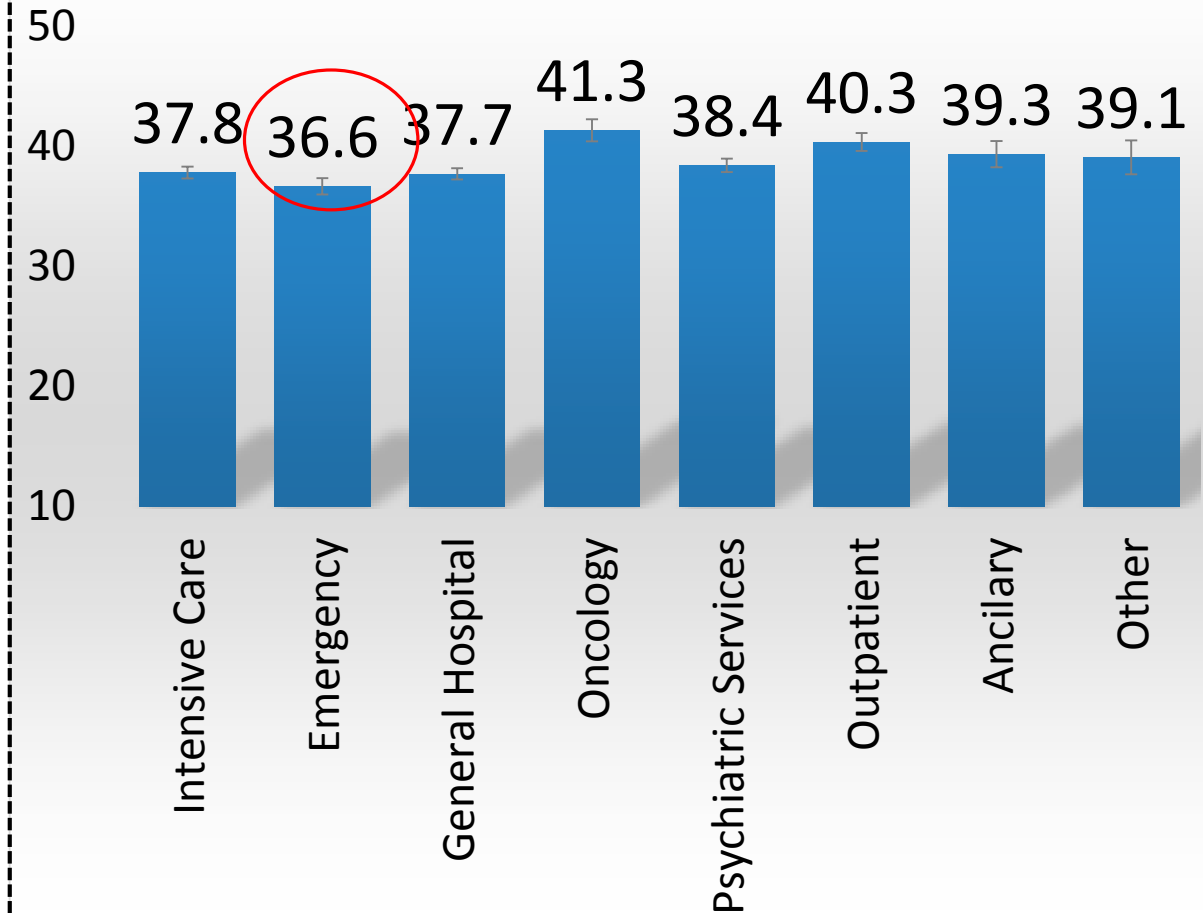
BO

*P<.05

Discipline



Work Setting**



CS

**p<.01

Hierarchical Multivariate Regression Analysis of Factors Associated with CS, BO, and STS

STS

(AdjR²=.18, F=4.92, p<.0001)

- **Demographics**
 - Younger age
- **Behavioral/Lifestyle factors**
 - Poorer quality of sleep
 - Non-current tobacco user
 - Greater SHS exposure
 - Received trauma treatment
- **Work-related variables**
 - Social worker/psychologist
- **Workplace violence**
 - Ever witnessed
 - Ever experienced

BO

(AdjR²=.26, F=7.01, p<.0001)

- **Demographics**
 - Younger age
- **Behavioral/Lifestyle factors**
 - Poorer quality of sleep
 - Alcohol use in past 7 days
 - Diagnosed with behavioral health problem
- **Work-related variables**
 - Social worker/psychologist
 - Serving adult population
 - Working > 10 hours per day
- **Workplace violence**
 - Ever experienced

CS

(AdjR²=.12, F=3.32, p<.0001)

- **Demographics**
 - Being female
- **Behavioral/Lifestyle factors**
 - Better quality of sleep
- **Work-related variables**
 - Serving pediatric population
- **Workplace violence**
 - No experience

Highlights of Findings

- STS and BO are relatively low among our sample in the UK Healthcare enterprise.
 - Similar to rates from national survey of physicians, nurses, and nursing assistants (Smart et al., 2014)
- Differences in rates vary by discipline (i.e., STS) and service setting (i.e., STS, BO, CS)
 - Social workers/Psychologists may be at greatest risk for STS as are those working in the Emergency care settings
- Common factors associated with STS, BO, CS were sleep quality and experience of workplace violence
 - 45.4% witnessed, nearly 32% have experienced

Limitations

- Cross-sectional Analysis
 - No causality can be inferred
- Convenience sample of an estimated 10% of health care workforce
 - May not be representative of the setting
 - Findings cannot be generalized beyond the setting of the study
- Survey did not obtain information on interpersonal factors (e.g., empathy, resilience, mental health status) known to influence main outcomes
 - These factors may have explained more variance in the regression model.
(STS Adjusted $R^2=.18$, BO Adjusted $R^2=.26$, CS Adjusted $R^2=.12$)

Implications

- Sleep quality is a modifiable variable
 - Sleep hygiene and fatigue management may be supported as a health promotion intervention
 - Workplace environment modifications (e.g., light supplementation, access to windows)
- Adoption of tailored evidence-based interventions to reduce exposure to violence
 - Consumer/Patient risk assessments
 - Staff education and training
 - Aggression/violence management teams
- Future studies needed to understand reasons for increased STS & BO among high risk discipline groups (e.g., Social Workers/Psychologists) and service settings (e.g., Emergency Department and Psychiatric Services).

Questions?

