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## Burnout, Empathy and Emotional Intelligence Amongst Incoming Residents of Various Specialties: Are the Differences Born or Made?

Bryan G. Kane MD Lehigh Valley Health Network, bryan.kane@lvhn.org

Amy B. Smith PhD Lehigh Valley Health Network, amy\_b.smith@lvhn.org

Joann Quinn PhD Lehigh Valley Health Network

Kevin Weaver DO Lehigh Valley Health Network, kevin\_r.weaver@lvhn.org

Marna R. Greenberg DO, MPH, FACEP Lehigh Valley Health Network, marna.greenberg@lvhn.org

See next page for additional authors

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#### Published In/Presented At

Kane, B, Smith, AB, Quinn, J, Weaver, K, Greenberg, M, Donoghue, EA, Barraco, R, Porter, BG, Macfarlan, J, Jacoby, J. (2016, April 27). Burnout, Empathy and Emotional Intelligence Amongst Incoming Residents of Various specialties: Are the Differences Born or Made? American College of Emergency Physicians Research Forum.

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Authors Bryan G. Kane MD; Amy B. Smith PhD; Joann Quinn PhD; Kevin Weaver DO; Marna R. Greenberg DO, MPH, FACEP; Elaine A. Donoghue MD; Robert D. Barraco MD, MPH; Bernadette Glenn-Porter BS; Jennifer Macfarlan; and Jeanne L. Jacoby MD			

# **240**

#### A Retrospective Review of Antipsychotic Medications Administered to Psychiatric Patients in a Tertiary Care Pediatric Emergency Department



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Burnout, Empathy, and Emotional Intelligence Amongst Incoming Residents of Various Specialties: Are the Differences Born or Made?



Rudolf F, Hollenbach KA, Carstairs KL, Carstairs SD/University of California San Diego, San Diego, CA; University of California San Diego and Rady Children's Hospital San Diego, San Diego, CA

Study Objectives: Increasing number of pediatric patients with psychiatric chief complaints are presenting to hospital emergency departments (EDs) nationwide. Some of these patients arrive to the ED acutely agitated or become agitated during their stay, and many of them require treatment with antipsychotic medications to treat their agitation. We reviewed the use of antipsychotic medications in pediatric patients presenting to a single tertiary-care pediatric emergency department.

Methods: We performed a retrospective review of the electronic medical record from Jan 2009-Feb 2016 to identify all patients presenting to the ED with a psychiatric chief complaint who were administered at least one antipsychotic medication during their ED stay. Data collected included age, sex, whether the patient was already on antipsychotic medications prior to their ED visit, vital signs, chief complaints, medications and dosages administered, route of administration, length of ED stay, and patient disposition.

Results: 229 patients were identified, 54.1% of whom were male. Mean patient age was 14.6±2.3 years (median 15 years; range, 4-19 years). 85.2% were already on antipsychotic medications. 18.3% were tachycardic and 5.7% were hypertensive on presentation. Presenting complaints included suicidal ideation (47.6%), aggression (27.5%), homicidal ideation (10.5%), agitation (7%), psychosis (2.6%), and hallucinations (2.2%). Medications administered included olanzapine (51.1%), aripiprazole (26.6%), haloperidol (24.0%), risperidone (11.4%), quetiapine (10.0%), lurasidone (3.9%), and ziprasidone (2.2%). Eighty patients (34.9%) were given at least 1 intravenous or intramuscular dose of antipsychotic. A total of 173 patients (75.5%) were administered 1 antipsychotic medication, 43 (18.8%) were administered 2 antipsychotics, and 13 (5.7%) were administered 3 antipsychotics during their ED stay. A total of 191 patients (83.4%) were admitted to an inpatient mental health facility; 38 (16.6%) were discharged. Median length of stay was 683 min (IQR 410-1239) for patients given 1 antipsychotic, 888.5 min (IQR 549-1496) for patients given 2 antipsychotics, and 1239 min (IQR 874-1652) for patients given 3 antipsychotics (Kruksal-Wallis χ2=7.48; p=0.024). Length of stay was shorter in patients given only oral medications (617 min, IQR 418-1194) compared to those given at least 1 parenteral dose of antipsychotic (979 min, IQR 458-1671)

Conclusion: In this retrospective series, the majority of patients were treated with newer oral antipsychotics; a substantial number required treatment with 2 or more medications. Most patients did not have objective signs of agitation (eg, hypertension or tachycardia) prior to medication administration. Administration of multiple medications was associated with a longer length of stay in the ED, as was parenteral administration of antipsychotics.

LOS (minutes) Characteristics of Patients Treated with Antipsychotic Medications

	Median	(25 <sup>th</sup> , 75 <sup>th</sup> )
LOS patients currently on antipsychotic meds		(474, 1593)
Not currently on antipsychotic meds	995	(421, 1379)
Currently on antipsychotic meds	771	
LOS by number of antipsychotic meds administered in ED*		
1	683	(410, 1239)
2	888.5	(549, 1496)
3	1239	(874, 1652)
LOS by IM or IV administration**		
Oral only	617	(418, 1194)
At least one dose IM or IV	979	(458, 1671)

\*  $\chi$  <sup>2</sup>= 7.48; p = 0.024. Post-hoc testing (p values not adjusted for multiple comparisons): 1v2  $\chi$  <sup>2</sup>= 3.38; p = 0.066, 1v3  $\chi$  <sup>2</sup>= 4.80; p = 0.028, 2v3  $\chi$  <sup>2</sup>= 1.56; p = 0.212.

\*\*z = -2.47; p = 0.014

Smith A, Donoghue E, Quinn J, Greenberg M, Weaver K, Barraco R, Kane B, Porter B, Macfarlan J, *Jacoby JL/*Lehigh Valley Health Network, Bethlehem, PA; University of South Florida Morsani College of Medicine, Tampa. FL

Study Objectives: Although considerable attention has been paid to the issues of empathy, emotional intelligence (EI) and burnout among medical learners, there is limited published information quantitating the status of incoming residents. Such data would be valuable in assessing the changes in these metrics as residents in each specialty progress through their post-graduate training. The objective of this portion of an ongoing longitudinal study was to determine the initial levels of empathy, emotional intelligence (EI) and burnout in the incoming classes of interns in our hospital network. We hypothesized that there would be no significant initial differences among specialties.

Methods: This was an IRB-approved assessment study of incoming emergency medicine, internal medicine, family practice, pediatrics, surgery and dentistry interns at an 1100-bed small urban health network in Pennsylvania. Three previously validated survey instruments: the Jefferson Scale of Physician Empathy (JSPE), the Maslach Burnout Inventory (MBI) and the Emotional and Social Competency Inventory (ESCI), were presented as a single 125-question survey instrument at resident orientation in June, 2015. Anonymity was assured.

Results: 59 of 61 entering residents responded, yielding a response rate of 97%. Initial mean scores of the new residents did not differ by specialty on any of the three survey instruments (all p>0.5). The JSPE mean score was 121 (the total possible range is 20-140, with increasing scores connoting higher empathy levels). Incoming residents empathy scores by specialty were: emergency medicine (120.85), internal medicine (118.21), family practice (129.33), pediatrics (123.83), surgery (123.50) and dentistry (121.00). Maslach burnout scores did not differ among specialties and all scores in all three categories (emotional exhaustion, depersonalization, and personal accomplishment) were in the low burnout range. There was no difference in any of the 12 self-reported ESCI competencies. Overall, the 34 females scored higher in empathy on the JSPE (124 versus 117 p<.05) and rated themselves higher on the ESCI competencies of emotional self-awareness (4.28 vs 3.86; p<.01) and achievement orientation (4.65 versus 4.42; p<.03). There were no differences when analyzed according to marital status.

Conclusions: While there were some sex specific differences, incoming residents scored relatively well on factors widely associated with empathy, emotional intelligence, and burnout and these initial scores are similar across all specialties studied.

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#### Current Practices Regarding Wellness Curriculum in Emergency Medicine Residency Programs



Weichenthal LA, McCullough S, Manternach S/UCSF-Fresno, Clovis, CA; UCSF Fresno, Fresno, CA

Study Objectives: Physician wellness has become a matter of increasing concern as studies have demonstrated a large burden of burnout on physicians, especially for those who practice emergency medicine (EM). Related studies have suggested that burnout begins early in training, as early as the third year of medical school and continues to develop during residency training. Experts have suggested that early intervention may be key to preventing burnout in medical trainees but limited literature exist on the wellness education provided to trainees, specifically in the field of EM. The purpose of this studies it to assess the current practice of EM residencies regarding wellness education for their trainees.

Methods: An eight-question survey was sent to the Council of EM Residency Directors (CORD) listserv in September 2015. The listserv includes representation from all of the 150 accredited EM residency program in the United States. The program leadership present on this listserv were queried on their coverage of the core