

Analysis of Social Determinants of Health in Medical Dramas to Enhance Emergency Medicine Training

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INTRODUCTION

- Social determinants of health (SDOH) significantly affect emergency department (ED) patient outcomes and access to care.
- Television medical dramas often reflect societal issues, including SDOH, shaping public perception and understanding of healthcare challenges.
- These television shows can illustrate the human side of medicine, including ethical dilemmas and the emotional challenges faced by healthcare professionals.
- This study aims to analyze how medical dramas portray the impact of SDOH on patients presenting to EDs.

METHODS

- A systematic content analysis of consecutive episodes of ten prime-time TV programs using a standardized coding framework was conducted.
- The most recent, complete season of each TV program was analyzed to identify the portrayal of the impact of SDOH on ED patients.
- Our coding scheme was based on eleven Z codes used in the International Classification of Diseases, 10th Revision (ICD-10) to document factors influencing a patient's health status or reasons for seeking healthcare services (Z55-Z65).
- After coding, all SDOH incidents were characterized by how well they were addressed in the ED encounter.
- One investigator performed a blinded critical review of a random sample of 10% of the episodes to determine coding reliability using kappa statistics.

Table 1. Lessons from Medical Dramas

- Screen for and address social needs in ED
- Use interdisciplinary teams for referrals/resources
- Train staff to advocate for vulnerable patients
- Foster empathy and professionalism
- Educate staff and public on social health issues
- Support provider well-being and self-care

RESULTS

- A total of 172 episodes were viewed, and 233 incidents of SDOH were portrayed.
- The TV dramas with the most depictions were Grey's Anatomy, ER, Chicago Medicine, Hawthorne, 911, Trauma, and Night Shift
- Frequent Z codes portrayed were related to the social environment (18%), housing and poverty (16%), family circumstances (13%), and unemployment (12%).
- In addition, 9% of SDOH were linked to ethical situations and issues of professionalism in the ED.
- The SDOH incidents were successfully addressed in 16% of episodes, partially addressed in 52%, recognized but not addressed in 22%, and ignored in 10%.
- SDOH that were not addressed or neglected generally had poor patient outcomes. The reliability of data collection ($k = 0.76$) showed good agreement.

Table 2. Social Determinants of Health (N=233)

Problems related to social environment (Z60)	42 (18.0%)
Problems related to housing and economic circumstances (Z59)	37 (15.9%)
Problems related to certain psychosocial circumstances (Z64, Z65)	31 (13.3%)
Problems related to employment and unemployment (Z56)	29 (12.5%)
Problems related to upbringing (Z62)	29 (12.5%)
Problems related to education and literacy (Z55)	19 (8.2%)
Occupational exposure to risk (Z57)	16 (6.9%)
Other problems related to primary support group (Z63)	13 (5.6%)
Problems related to physical environment (Z58)	11 (4.7%)
Problems related to negative life events in childhood (Z61)	6 (2.6%)

DISCUSSION

- This analysis reveals that medical dramas are not only a form of entertainment but also a potent educational tool for illustrating the multifaceted impact of SDOH on patient care and outcomes in the ED.
- Television shows like Grey's Anatomy, ER, and Chicago Medicine frequently depict real-world issues such as homelessness, poverty, family instability, and unemployment—all of which are critical SDOH that influence health disparities and drive ED utilization.
- While SDOH are often portrayed, they are only successfully addressed in a minority of episodes.
- This mirrors the real-world challenges faced by EM professionals, where structural and social factors are frequently recognized but not always acted upon due to systemic barriers or lack of resources.
- The emotional and ethical dilemmas presented in these dramas provide a unique opportunity for medical education.
- By analyzing and discussing these scenarios, students and residents can develop a deeper understanding of the challenges their patients face, extending beyond acute medical conditions.
- Integrating these real-life scenarios into emergency medicine curricula can foster empathy, enhance clinical decision-making, and promote advocacy for patients affected by SDOH.
- Such educational approaches can help future physicians recognize the importance of interprofessional collaboration, community partnerships, and policy change in addressing health inequities.



CONCLUSIONS

- By leveraging these narratives, educators can create more engaging, relevant, and impactful learning experiences that prepare trainees better to serve diverse and vulnerable populations in the ED.
- This approach not only broadens the scope of traditional medical education but also promotes a more holistic and compassionate model of care.