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Little more than tobacco, ethanol, and drugs: Internal medicine residents' documentation of social histories on an inpatient medicine unit

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ABSTRACT

Objective: Social environments play an important role in patient health. Some educators, however, have recently commented that the social history has been minimized by graduate resident physicians to the documentation of tobacco, ethanol, and drug (TED) use. To the best of our knowledge, last time, this subject was formally explored approximately 20 years ago. We therefore investigated the social histories of inpatient admission notes written by internal medicine residents at one institution from July 2014 through June 2015. **Methods:** We reviewed 153 and 103 admission notes by interns and senior internal medicine residents, respectively. Notes were compared to investigate whether the social history would differ by year of training. **Results:** The majority of notes contained information about patients' TED use, i.e. in 91.1%, 91.8%, 77.2% of intern and 94.2%, 93.2%, and 84.5% of senior residents' social histories. Other documented topics included housing environment (48.1% vs. 79.6%), marital status or children (29.7% vs. 44.7%), and occupation (28.5% vs. 35.0%). Senior residents were more likely to record housing environment and marital status or children than that of interns. Other social history topics were recorded very little if at all. **Conclusions:** Despite the important role social environments play in patients' health, interns and residents recorded very little of the social history other than TED in their admission notes. We believe that further investigation is warranted into why residents poorly document social histories and whether the lack of information affects patient care.

KEY WORDS: Medical history taking/methods/standards, physician-patient relations, quality of health care/standards

INTRODUCTION

Social environments play an important role in health, well-being, and care delivery [1]. Key components of the social history include patients' living situation, occupation, social supports, religious affiliation, income, education, diet, and exercise [2]. Some physician educators, however, have recently commented that the social history has been reduced to nothing more than questions about tobacco, ethanol, and drugs (TED) [3,4]. This is concerning considering the important role social factors play in patients' health. In fact, social factors may have a greater impact on health than more traditional risk factors such as blood pressure [5]. As a result, the Institute of Medicine has called for clinicians to increase their attention to social factors beyond TED [6].

Two of the authors (EC and RSH) are palliative medicine physicians. As palliative medicine physicians, they are keenly aware of the importance of a thorough social history for the comprehensive care of patients' physical, psychosocial, and spiritual history [7]. However, to the best of our knowledge, the topic of house staff's knowledge of their patients' social histories was last explored approximately 20 years ago [8,9]. We therefore reviewed internal medicine residents' admission notes for patients admitted to the general medicine wards of a large, university-affiliated teaching hospital. We hypothesized that TED use would be the primary component of the social history recorded in notes. We compared social histories recorded by interns and senior residents to see if the year of training was associated with the documentation of a more comprehensive social history.

METHODS

We conducted a retrospective chart review for patients admitted by residents to general medicine wards at Allegheny General Hospital, an urban, 631-bed, tertiary care hospital in Pittsburgh, Pennsylvania, USA, from July 2014 to June 2015. We reviewed up to four admission notes from an electronic medical record (EMR) written by each intern and senior (i.e., postgraduate year three, PGY3) resident. Admission notes were dictated free text (i.e., there was no structured template in the EMR).

All notes were from different patients. We randomly selected notes from the 1st month the house officer spent on the general medicine teaching service in 2014-2015 academic year. Because the common textbooks used by learners do not provide a gold standard for what to include in the social history [Table 1], we extracted from the notes the variables suggested by experts as components of a comprehensive social history [2,10-14]. We used a two-sample t-test to do an exploratory analysis for any statistically significant (i.e., $P < 0.05$) difference between residents regarding the documentation of elements of the social history.

The Allegheny Health Network Institutional Review Board waived the requirement for written consent from those patients whose charts were reviewed.

RESULTS

We reviewed the admission notes from 261 patients; 158 notes from interns and 103 notes from senior residents [Table 2]. The difference in the number of notes reviewed from interns and senior residents reflects the fact that more admission history and physical notes are written by interns than written by senior residents. The mean age of the patients was approximately 63.0 years of age for both interns and residents. The total sample was 15% African-American and 51% Caucasian. Approximately 42% of intern and 20% of senior resident notes did not document ethnicity. Approximately 70% of patients had a cardiovascular, respiratory, infectious, or gastrointestinal admitting diagnosis.

Tobacco, ethanol, and illicit drug use were documented in the majority of notes, i.e., in 91.1%, 91.8%, 77.2% of intern and 94.2%, 93.2%, and 84.5% of senior resident social histories [Table 3]. Three other elements of the social history were less frequently documented: Housing environment (48.1% intern vs. 79.6% senior resident notes), marital status or children (29.7% intern vs. 44.7% senior resident notes), and occupation (28.5% intern vs. 35.0% senior resident notes). Housing environment and marital status or children were statistically more likely to be found in the notes from senior residents ($P < 0.05$). Other elements of the social history - exercise/diet, insurance, military experience, stressors, leisure activities/hobbies, religious/spiritual beliefs, safety precautions (e.g., seatbelt or firearm use), and alternative medicine practices - were found in very few or no notes. There were no differences in social history documentation between male and female residents, between International Medical Graduates and graduates of American medical schools, or between residents with MD and DO degrees.

DISCUSSION

Our study demonstrated two key findings. First, residents recorded tobacco, alcohol, and illicit drug use more frequently than other topics; TED topics were documented in 80-90% of notes. Patients' housing environment, marital/parental status, and occupation were documented less frequently. Other topics were rarely or never mentioned. These results are consistent with older work, demonstrating that residents on the medical wards of university hospitals included few components of the social history in their notes [8,9]. Second, we found that senior residents may record a more detailed social history than interns. Specifically, senior residents were more likely to record information about patients' housing environment (79.6% vs. 48.1%) and marital status (44.7% vs. 29.7%) than that of interns.

Despite the well-known importance of social variables to patients' health and health-care delivery, why do residents document very little of patients' social histories? On reason may be that as shown in Table 1, there does not exist a gold standard for a comprehensive social history. Learners, therefore, may not have been taught nor know what aspects of the social history outside of TED may be important to obtain from patients. In addition, resident physicians may feel they lack the skills necessary to take an adequate history [9]. Another reason may be that residents view the social history as important but do not ask key questions, possibly because of the lack of time on a busy inpatient service; one study on an inpatient general medicine unit showed that internal medicine residents spend only an average of 15 min per patient per day in direct patient care [15]. Alternatively, residents may not perceive the social history as salient to their work because one of the main priorities of the hospital system is to "move things along" and discharge patients as quickly possible [16]. The push to greater efficiency at the possible expense of patient-centered care is an example of the "hidden curriculum," i.e., the behaviors and assumptions that teaching physicians implicitly role model to learners [17]. For example, although teaching attending is the primary role model for the development of the professional identity of learners, it

Table 1: Definitions of social history found in common medical textbooks

Textbooks	Definition of social history
Bates Guide to Physical Examination and History-Taking	"The personal and social history captures the patient's personality and interests, sources of support, coping style, strengths, and fears (p. 10)" [5]
The Medical Interview: The Three-Function Approach	"…Influence[s] the expression of symptoms, decisions to seek treatment, levels of functional disability, and willingness to adhere to collaborative management strategies (p. 86)" [6]
The Clinical Encounter: A Guide to the Medical Interview and Case Presentation	"The section of the medical record in which you present a brief biography of the patient" (p. 42) [7]
The Medical Interview: Clinical Care, Education, and Research	"…Who the patient is, how he or she lives, and how his or her life impacts decisions to seek medical aid, choices of help (if any), attachment to (or leaving) the doctor, cooperation with diagnosis and treatment, and compliance with medical advice-elements of illness behavior and the experience of illness (p. 147)."[8]
The Medical Interview: Mastering Skills for Clinical Practice	"The part of the medical interview in which we attempt to learn about the patient as a person" [9]

Table 2: Demographics of interns and senior residents

Demographics	Interns, *n*=41 (%)	Senior residents, *n*=31 (%)
Gender		
Male	20 (48.8)	18 (58.1)
Female	21 (51.2)	13 (41.9)
Medical school attended		
United States	21 (51.2)	6 (19.4)
International medical graduate Caribbean	3 (7.3)	14 (45.2)
IMG non-Caribbean	17 (41.5)	11 (35.5)
Degree		
MD	27 (65.6)	28 (90.3)
DO	14 (34.1)	3 (9.7)

Table 3: Social history topics found in admission notes

Components of social history	Interns, *n*=158 (%)	Senior residents, *n*=103 (%)
Tobacco	144 (91.1)	97 (94.2)
Ethanol	145 (91.8)	96 (93.2)
Drugs	122 (77.2)	87 (84.5)
Housing environment	76 (48.1)	82 (79.6)[a]
Marital status or children	47 (29.7)	46 (44.7)[a]
Occupation	45 (28.5)	36 (35.0)
Exercise/diet	3 (1.9)	2 (1.9)
Education	2 (1.3)	0 (0.0)
Type of insurance	2 (1.3)	0 (0.0)
Military experience	1 (0.6)	1 (1.0)
Recent and long-term sources of stress	1 (0.6)	0 (0.0)
Leisure activities/hobbies	0 (0.0)	0 (0.0)
Religious affiliations/spiritual beliefs	0 (0.0)	0 (0.0)
Safety precautions - seatbelt/firearms	0 (0.0)	0 (0.0)
Alternative medical practices	0 (0.0)	0 (0.0)

[a]Indicates a statistically significant ($P<0.05$) difference between intern and senior resident notes

often minimizes the social aspects of care [18-21]. Learners may therefore perceive that documenting a social history is impractical and unnecessary. Finally, although medical schools' have historically emphasized taking a detailed social history in all clinical settings, it is not out of the realm of possibility that house officers believe taking a detailed social history in the inpatient setting has no bearing on patient outcomes. Future work should explore whether or not that is indeed the case.

There are several limitations to our study. First, we examined the documentation of social histories from internal medicine resident admission notes in one program. Different settings (e.g., community-based hospitals, outpatient settings) and different medical specialties (e.g., family medicine, pediatrics, surgery) could produce different results. Second, we could only review the social history content recorded in the admission note. It is possible that residents actually obtained more information than they documented in the medical record. For example, a study of videotaped interviews in an internal medical ambulatory practice demonstrated that only approximately half the history obtained was documented in the medical record [22]. Recent initiatives to encourage the use of structured templates for the social history in EMRs may improve this situation [23]. Third, we have no data on whether residents have been taught the important elements of the social history, nor do we have data on what components of the social history they believe are important to patient care. Our findings must be taken in light of the fact that our small study was descriptive/exploratory in nature. Therefore, future work needs to be done to confirm or refute our findings, to delve more deeply into why TED seems to be recorded in house officer notes more than other components of the social history, to determine whether certain characteristics of residents are associated with history taking, and to determine whether recording a comprehensive social history has any impact on the processes or outcomes of care.

CONCLUSION

Despite the important role social environments play in patients' health and the emphasis medical educators place on taking a thorough social history, we found that residents at one institution record very little of the social history in their admission notes. While this may not be representative of a larger trend, it is concerning that residents may not see social information as important for patient care. We suggest further investigation into why residents poorly document social histories, whether the lack of information affects patient care, and what these findings imply for medical education.

REFERENCES

1. Braveman P, Egerter S, Williams DR. The social determinants of health: Coming of age. Annu Rev Public Health 2011;32:381-98.
2. Behforouz HL, Drain PK, Rhatigan JJ. Rethinking the social history. N Engl J Med 2014;371:1277-9.
3. Arora V. The Social History: Going Beyond TED. Future Docs; 2012. Available from: http://www.futuredocsblog.com/2012/02/07/the-social-history-going-beyond-ted. [Last accessed on 2015 Sep 26].
4. Anderson RA, Schiedermayer D. The social history matters! Acad Med 2010;85:1103.
5. Pantell M, Rehkopf D, Jutte D, Syme SL, Balmes J, Adler N. Social isolation: A predictor of mortality comparable to traditional clinical risk factors. Am J Public Health 2013;103:2056-62.
6. Institute of Medicine. Primary Care and Public Health: Exploring Integration to Improve Population Health. Washington, DC: National Academies Press; 2012.
7. Puchalski C, Romer AL. Taking a spiritual history allows clinicians to understand patients more fully. J Palliat Med 2000;3:129-37.
8. Griffith CH, Haist SA, Wilson JF, Rich EC. Housestaff social history knowledge. Correlation with evaluation of interpersonal skills. Eval Health Prof 1996;19:81-90.
9. Griffith CH, Rich EC, Wilson JF. Housestaff's knowledge of their patients' social histories. Acad Med 1995;70:64-6.
10. Bickley L, Szilagyi P, Bates B. Bates' Guide to Physical Examination and History-Taking. 11th ed. Philadelphia, PA: Wolters Kluwer Health/ Lippincott Williams and Wilkins; 2013.
11. Cole SA, Bird J. The Medical Interview: The Three Function Approach. 3rd ed. Philadelphia, PA: Elsevier; 2014.
12. Billings J, Stoeckle J. The Clinical Encounter: A Guide to the Medical Interview and Case Presentation. St. Louis: Mosby; 1999.
13. Lipkin M, Putnam S, Lazare A. The Medical Interview: Clinical Care, Education, and Research. New York: Springer-Verlag; 1995.
14. Coulehan J, Block M. The Medical Interview: Mastering Skills for Clinical Practice. 5th ed. Philadelphia, PA: F. A. Davis Company; 2006. Available from: http://www.r2library.com.libproxy.temple.edu/resource/title/080361246X. [Last accessed on 2015 Oct 14].
15. Alromaihi D, Godfrey A, Dimoski T, Gunnels P, Scher E, Baker-Genaw K. Internal medicine residents' time study: Paperwork versus patient care. J Grad Med Educ 2011;3:550-3.
16. Kaufman SR. And a Time to Die: How American Hospitals Shape the End of Life. Chicago: University of Chicago Press; 2006. p. 96.

17. Hafferty FW, Franks R. The hidden curriculum, ethics teaching, and the structure of medical education. Acad Med 1994;69:861-71.
18. Doja A, Bould MD, Clarkin C, Eady K, Sutherland S, Writer H. The hidden and informal curriculum across the continuum of training: A cross-sectional qualitative study. Med Teach 2015:1-9.
19. Witman Y. What do we transfer in case discussions? The hidden curriculum in medicine. Perspect Med Educ 2014;3:113-23.
20. Weber EJ. Practicing what we teach: In order to teach patient-centered care, we need to deliver it. Acad Med 2015;90:14-5.
21. Gaufberg EH, Batalden M, Sands R, Bell SK. The hidden curriculum: What can we learn from third-year medical student narrative reflections? Acad Med 2010;85:1709-16.
22. Moran MT, Wiser TH, Nanda J, Gross H. Measuring medical residents' chart-documentation practices. J Med Educ 1988;63:859-65.
23. Adler NE, Stead WW. Patients in context – EHR capture of social and behavioral determinants of health. N Engl J Med 2015;372:698-701.

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