Dialysis in Undocumented Patients: Death on the Doorstep of the Emergency Department

Answers to the May 2018 Journal Club Questions

Guest Contributors
Todd Schneberk, MD, MSHPM; Richelle J. Cooper, MD, MSHS

0196-0644/$-see front matter

https://doi.org/10.1016/j.annemergmed.2018.06.010

Editor's Note: *You are reading the 63rd installment of* Annals of Emergency Medicine *Journal Club. The article questions were published in the May issue. Information about journal club can be found at http://www.annemergmed.com/content/journalclub. Readers should recognize that these are suggested answers. We hope they are accurate; we know that they are not comprehensive. There are many other points that could be made about these questions or about the article in general. Questions are rated "novice" (NOV), "intermediate" (INT), and "advanced" (ADV) so that individuals planning a journal club can assign the right question to the right student. The "novice" rating does not imply that a novice should be able to spontaneously answer the question. "Novice" means we expect that someone with little background should be able to do a bit of reading, formulate an answer, and teach the material to others. Intermediate and advanced questions also will likely require some reading and research, and that reading will be sufficiently difficult that some background in clinical epidemiology will be helpful in understanding the reading and concepts. We are interested in receiving feedback about this feature. Please e-mail journalclub@acep.org with your comments.*

DISCUSSION POINTS

1. Cervantes et al[1] report on a study of a vulnerable population, undocumented immigrants with end-stage renal disease.

NOV A. Describe some of the factors that contribute to disparities in outcomes among undocumented patients.

INT B. How might some of the above factors differ among the San Francisco, Houston, and Denver study sites?

2. A. What is the insurance composition of the long-

NOV term dialysis-dependent patient population in the United States?

NOV B. How does this lack of insurance affect the ability of the undocumented to receive treatment for end-stage renal disease? What parts of the healthcare system are they dependent on for their care?

3. What are some of the detrimental effects (eg,

NOV medical, social, psychological) for patients who rely on emergency dialysis versus standard dialysis and how might they contribute to increased mortality?

4. A. What is a propensity score analysis and why might

INT an investigator use this technique?

ADV B. Briefly describe the 4 types of propensity score analysis. Which method was used in this analysis?

ADV C. In their analysis, Cervantes et al[1] report a process of giving precedence for "colinear variables statistically ($P<0.05$) or clinically associated with the exposure and outcome." What is collinearity? What is the rationale and implications of this analytic choice?

INT D. What are some of the limitations of propensity score analysis, especially compared with a randomized controlled trial?

5. Cervantes et al[1] used a propensity score analysis to compare undocumented patients receiving emergency versus standard dialysis because of state-level variations in provisions for undocumented patients.

NOV A. Which variables composed the propensity score used to match patients in this analysis?

ADV B. Knowing these vulnerable populations can be difficult to study and can have population-specific determinants that affect their health outcomes, is there additional information that would be optimal to include in the propensity score? What effect would it have on the study outcomes?

6. Despite the limitations of this study, the article depicts an important mortality disparity in dialysis-dependent patients and how undocumented status can contribute to poor health.

NOV A. At the system level, how might emergency dialysis and standard dialysis compare in terms of cost?

INT B. What logistic burden do the systems of emergency dialysis used in Colorado and Texas impose on emergency departments?

NOV C. What ethical dilemmas does this cause for emergency providers?

NOV D. What can emergency providers do about the situation?

ANSWER 1

Q1. Cervantes et al[1] report on a study of a vulnerable population, undocumented immigrants with end-stage renal disease.

Q1.a Describe some of the factors that contribute to disparities in outcomes among undocumented patients.

Undocumented immigrants face structural inequality with respect to health, meaning that categorically as a people group they have a disadvantaged status. This inequality is largely due to near total exclusion from health care coverage and is exacerbated by their fear that accessing the health care system, legal aid, or public assistance may lead to deportation. Compared with their documented counterparts, undocumented Latino immigrants are more likely to be poor, be uninsured, have fewer years of schooling, have lower English proficiency, and have lived less of their lifetime in the United States.[2] They are at higher risk of experiencing food insecurity, housing insecurity, disadvantaged social status, and decreased empowerment. In addition, undocumented individuals have higher rates of employment involving strenuous labor, unsafe workplaces, and poor access to legal avenues if they need to protect themselves or seek retribution for violations against them.[2-4] Individual, health system, and US policy barriers compound this disadvantage. Individual factors in this context include poor knowledge of the health care system, fear of deportation from using health services, acculturation issues, other communication barriers, and stigma associated with health sector use.[5] Health system barriers include lack of insurance programs, prohibitive cost of services for low-wage-earning individuals, lack of cultural competency, insufficient translation services, difficult health system bureaucracy, and baseline limitations of health care capacity.[5] US policy barriers maintain the inability to receive government insurance, and deter provisions related to food stamps and government-subsidized programs such as housing resources, although based on income many of these persons would be eligible.

Q1.b How might some of the above factors differ among the San Francisco, Houston, and Denver study sites?

There are substantial state-level differences in health insurance access for undocumented patients requiring long-term dialysis. California insures undocumented immigrants through state-level emergency Medicaid funds for dialysis. Other states and municipalities such as Arizona, New York, Washington, and North Carolina use similar funding sources. Texas and Colorado, along with many other states, do not have such programs. There are also local municipal differences in provisions for the undocumented in terms of other social services and state benefits. San Francisco, in addition to the state Medicaid program to cover the undocumented with end-stage renal disease, has programs to provide some primary care insurance coverage for all residents, regardless of documentation status. Furthermore, San Francisco provides better access to legal resources, community programs, social services, and sanctuary status, which promote a more inclusive attitude toward undocumented residents. This municipal infrastructure is designed to bolster the safety net that supports vulnerable populations such as the undocumented in San Francisco specifically by addressing the social determinants of health that are imperative for to healthy living.[6] Houston and Denver have less infrastructure in regard to these needs.[7] These disparities make it reasonable to suspect that an undocumented person in Texas who is at higher risk of being poor, homeless, food insecure, and uninsured, and with greater fear of deportation, will have markedly worse health outcomes than an employed, insured, undocumented person living with better access to social services in the sanctuary city of San Francisco.

ANSWER 2

Q2.a What is the insurance composition of the long-term dialysis-dependent patient population in the United States?

As mentioned by Cervantes et al,[1] most US citizens and 5-year permanent residents are eligible for standard hemodialysis because of the 1972 end-stage renal disease amendments to the Social Security Act. The 5.3% of dialysis patients in the United States who remain without coverage are mainly undocumented. The overlapping categories of insurance among the covered population (94.7%) include Medicaid (26.1%), Medicare (61.4%), Veterans Administration (2.1%), employer-based plans (20%), and other (18.7%).[8]

Q2.b How does this lack of insurance affect the ability of the undocumented to receive treatment for end-stage renal disease? What parts of the healthcare system are they dependent on for their care?

United States citizens and permanent residents with end-stage renal disease are managed at outpatient dialysis centers and nephrology clinics, with infrequent emergency department (ED) visits. The undocumented person, on the contrary, must use emergency dialysis as a stopgap measure because they cannot obtain regular dialysis. There was previously no legislative requirement to treat undocumented dialysis patients until the Emergency Medical Treatment and Labor Act was enacted in 1986, which mandates care of emergency conditions and allows allocation of federal Medicaid funds for emergency care.