

Managing homeless dialysis patients

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Abstract

Although our dialysis facility is located in a rural area, we noticed an increasing number of homeless patients requiring treatment. After researching the issue of homelessness in dialysis patients, we found little has been reported on the subject. We examined the characteristics of our homeless dialysis patients as well as the effects these patients have on the multidisciplinary dialysis care team. Six homeless patients were dialyzing in our in-center hemodialysis unit (monthly census averages 105–110 patients) in April 2005. All of the homeless patients were men; five of the six were African American, five had a history of substance abuse, and four a history of alcohol abuse. The mean age of these patients was 45.75 years, and the mean number of months on dialysis was 46.4. All were single (5 divorced, 1 never married), and 5 had a history of psychiatric illness. All six had Medicare coverage. The patients found shelter through local community shelters, the Salvation Army, and in their automobiles. The medical, nursing, dietary, and social aspects of the care provided by the dialysis multidisciplinary team members are discussed as it pertains to the care of homeless dialysis patients.

Introduction

The chronic dialysis population is increasingly composed of older patents with multiple comorbid conditions.¹ Since its inception, the U.S. End-Stage Renal Disease Program stipulated that multiple disciplines be engaged in the care of chronic dialysis patients, specifying that Medicare-funded dialysis programs must provide care with input from physicians, nurses, dietitians, and social workers.

The changing demographics of the dialysis population mandate flexibility from the multidisciplinary care team. While striving for overall program quality, individual patients' needs must simultaneously be addressed.

Despite being located in a rural area, we recently noted an increase in homelessness among our chronic dialysis patients, and speculated on the effect these patients have on the dialysis program's multidisciplinary team. Since a literature review showed very little published data on this patient population,² we reviewed homelessness among our patients, focusing on the specific issues these patients raise for dialysis care providers.

Methods

The University of Virginia Health System Dialysis Program includes home-based dialysis and in-center hemodialysis units throughout central Virginia. The dialysis units are all hospital owned and administered and are located in rural areas. The Kidney Center Hemodialysis Unit is a 30-station unit located in a building separate from, but connected to, the University of Virginia Hospital in Charlottesville. Patients dialyzing in this unit come from outpatient clinics operated by the University of Virginia Health System, community physicians, other dialysis units, or from the University of Virginia

Hospital. The population of Charlottesville is 40,000, and the dialysis program serves surrounding rural areas as well as residents of Charlottesville proper.

Records from patients dialyzing in the University of Virginia Kidney Center Hemodialysis Unit were reviewed to obtain demographic, medical history, and laboratory data on our homeless dialysis patients. Insurance coverage and disability income were also assessed. Members of the multidisciplinary dialysis care team reviewed their involvement with our homeless patients to illuminate the specific and unique care issues these patients raised. Each member of the dialysis care team addresses these unique issues.

Results

Diagnosis

Our six homeless dialysis patients comprise 5% of our hemodialysis unit population. All are relatively young men and all have a history of substance or alcohol abuse, and/or chronic mental illness. Two have been on dialysis for less than three months; the remainder are long-term dialysis patients. Two of the patients began chronic dialysis in our program while they were homeless. All patients are currently on hemodialysis; one has a history of continuous ambulatory peritoneal dialysis. He was transferred to hemodialysis after repeated episodes of peritonitis and after becoming homeless. For about a month, his peritoneal dialysis supplies were delivered to a motel where he lived.

Environment

Three of the homeless men were displaced when family members or a girlfriend asked them to leave their residence.

In all three cases, substance abuse by the patient was a precipitating factor. An additional patient was asked to leave his assisted living residence when he failed to follow residence restrictions about substance use and personal activities. While homeless, four of our patients lived at the Salvation Army shelter for some period of time; three of our patients were housed overnight in churches. Two patients lived in their automobiles for some time while homeless.

Medical and nursing issues

Homelessness increases the already formidable challenge of providing dialysis patients with adequate medical and nursing care. Hygiene, maintenance of medication regimens, dietary and fluid restrictions, emotional support, transportation, and compliance with treatment schedules are all made more difficult and complex by homelessness. As a result, these patients are more likely to experience ESRD complications, increased morbidity, and death. To compensate for the added burden imposed on their health by their social situation, provision of care must be not only methodical, but also creative. To actualize this approach and to bring about acceptable health outcomes for this population, a flexible, high functioning team is necessary.

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Even though it is possible to generalize about some aspects of the nursing and medical approach to homeless dialysis patients, there are elements of their care that must be individualized as well. Not every homeless patient needs the same type or intensity of support. This can differ extensively from patient to patient. Taking the time to effectively assess the appropriate level of support is crucial, given that health professional resources are scarce and should not be squandered. Monthly sit-down rounds afford an excellent opportunity to assess patients' needs. In this setting, the team is able to talk freely and privately about the specifics of a patient's plan of care and decide how to realistically accomplish goals while also remaining in compliance with patient privacy laws. During the monthly meeting, specific problems are identified and tasks are delegated to the appropriate team member for completion. Monthly sit-down rounds may lead to improved care of all dialysis patients,³ but are especially important to identify and clarify needs for social and emotional support. Such aspects of care are integral to the multidisciplinary approach to homeless dialysis patients.

One aspect of care that is universally important for every homeless patient is emotional support and bolstering of the patient's wounded self-concept. This can be accomplished in a variety of different ways. One of the most important

things that the staff does is provide services with respect and warmth. Simply asking the question, “How can we exhibit respect?” often helps direct thinking towards a respectful approach. There are small things that can convey respect and worth, such as addressing homeless patients formally (Mr. or Ms. as opposed to calling them by their first name), or choosing to sit down when speaking with them, as opposed to standing while they sit for treatment. The goal of these approaches is to provide a therapeutic, professional presence and symbols of social support and respect, rather than a technical presence alone.

Dietary issues

In Charlottesville, multiple food programs are available for the homeless. The Salvation Army provides three daily meals to their residents and clients. Food banks in the community and meals prepared by local volunteers and charitable organizations support these programs. There are no set menus planned by these food centers. Food supply to these agencies comes from an emergency food bank providing a two-day supply of food up to three times per fiscal year (thereafter, by agency referral only); a food stamps program through the



Department of Social Services, for which eligibility is based on household size, income, and resources; an AIDS/HIV support group; a food pantry for emergency assistance; and On Our Own of Charlottesville Inc., which keeps a supply of groceries for emergency assistance, provides kitchen facilities to prepare and cook one's own food, and provides bag lunches for homeless persons.

Relieving hunger—and not concern about meeting the guidelines of the Food Guide Pyramid, or the Recommended

Dietary Allowance—might be the only priority of a homeless person. The few studies done on homeless persons have shown their diets to be insufficient in essential micronutrients, and long-term energy intake of this group may also be deficient, as indicated by depleted fat stores.⁴ For the homeless person with kidney disease, the needs and goals become extremely complex and critical. Based on diet recalls of the homeless dialysis patients at the University of Virginia, it is rare for a meal to include eight ounces of meat. One patient commented that he looks forward to the hunting season because that is when meat is donated to the food program he attends. Another patient joked about being invited to a barbecue cookout so he could meet his protein requirements. Some of our patients have been referred to the UVA pharmacy to obtain selected high protein supplements at a discounted price based on the patients' pay scale range. The Salvation Army of Charlottesville has helped some of our homeless dialysis patients purchase recommended oral nutrition supplements.

About 55% of UVA dialysis patients have diabetes. Managing diabetes is a difficult task for a homeless person because of their fluctuating eating and activity patterns. According to Hwang's study, 64% of their participants cited diet as a hindrance in diabetes control due to the type of food at shelters and inability to make dietary choices, whereas 18% found medications to be a hindrance due to scheduling and logistics of insulin and diabetic supplies and inability to coordinate this with meals.⁵ Although our homeless dialysis patients are grateful for the meals they receive, typically the food is starchy and the main entrée consists mostly of casserole and pasta type dishes.

Most dialysis patients have hypertension, and one of the ways to manage this is complying with a low sodium diet (2,000–3,000 mg/day). For the homeless dialysis patient, sodium restriction is futile since food at shelters and in soup lines is high in sodium.⁶ Non-perishable items stocked in food banks are generally high in sodium. In addition, this high sodium intake can result in thirst and lead to increased fluid intake, thereby aggravating high blood pressure.

The most dangerous complication of kidney disease is hyperkalemia. A patient receiving hemodialysis is advised to follow a 2,000 mg potassium diet. High potassium foods such as potatoes, oranges, banana, tomato, cantaloupe, and honeydew are commonly served in food programs. Therefore, compliance with a low potassium diet can be difficult for a homeless dialysis patient dependent on food banks for meals.

Maintaining calcium-phosphorus balance for dialysis patients dependent on food banks is also complicated and difficult. Common problems experienced by homeless dialysis patients are availability of phosphorus binding medications, timing medications with meals for effective phosphate binding, and receiving meals that may be high in phosphorus. Even dialysis

patients who live in a home find it difficult to achieve phosphorus control. Food banks commonly provide diets relatively high in phosphorus—dairy products, legumes—making phosphorus restriction very difficult for homeless dialysis patients.

A team approach to achieve nutritional goals for a homeless dialysis patient is essential. When assessing a homeless dialysis patient, it is important to distinguish poor compliance due to choice versus limited resources. A nutritionist can play an important role in educating existing food programs on kidney disease management through a renal diet. The renal diet guidelines in the "Food and Nutrition Resource Guide for Homeless Shelters, Soup Kitchens, and Food Banks" from The Food and Nutrition Information Center⁷ might be a valuable resource. Communicating with food centers about a dialysis patient's special needs without breaking HIPAA guidelines is one way to intervene. Developing a screening tool for special dietary needs may assist food centers in identifying clients with special dietary needs and considerations.

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Social work, insurance, and disability issues

Unlike nondialysis homeless people, homeless dialysis patients enjoy the benefits of Medicare health insurance under the ESRD Program. However, these dialysis-covered benefits do not extend to basic needs like food and shelter. Thus, homeless dialysis patients depend on the same programs as the nondialysis homeless population in order to obtain shelter and food. Some federal, state, and local community funding opportunities to feed and shelter the homeless exist under limited grants or donation programs. Unfortunately, such programs do not begin to meet the needs of most communities. Housing for the homeless often falls to temporary shelters and is available on a first-come, first-serve, often time limited basis. Shelters generally refuse patients who fail to adhere to shelter policy and/or those with active substance abuse. Shelter staff may assist in locating permanent housing in federal or state subsidized housing programs, but convicted felons and illegal aliens are not eligible for such housing opportunities. Many individuals are therefore left on their own to seek shelter in "room for rent" or "roommate style" facilities that are often substandard.

Individuals who find shelter in "room for rent" or "roommate style" facilities must pay rent and utilities. In the chronic dialysis population, disability income is common and contributes a substantial portion to the total income of many dialysis patients. However, a limited employment history or

a work history in low-paying, menial jobs significantly limits payments made under disability income programs. The presence of substance abuse and/or mental illness also likely contributes to poor work opportunities and employment and consequently limits potential income from disability for many patients. Like most communities, ours has agencies and organizations willing to provide tangible items such as clothing and food to our homeless dialysis patients, but assistance with monies to pay transportation, utilities, medications, and shelter are very limited. The Department of Social Services provides some assistance, but these funds are usually limited and often exhausted early in the fiscal year.

For a dialysis social worker, it is difficult assisting the homeless patient adjusting to a new treatment modality and trying to obtain basic needs. Both are overwhelming obstacles that create anxiety and depression, and the difficulty lies in obtaining services in a timely manner so that the person can be compliant with their treatment plan. Not only does the patient need shelter, food, and clothing, but they now require



transportation to the dialysis unit and additional medications, incurring a financial burden. The social worker is often identified as the gatekeeper to community services for the patient. However, frustration and even anger can arise when attempts to coordinate these two entities are futile. Often, the social worker is caught in the middle of trying to help the person obtain resources and agencies demanding specific and often, nonexistent information (i.e. an address or telephone number to access their services). True advocacy occurs when the social worker is able to convince an agency to step outside of their realm to provide services. When services are not coordinated within the time frame that the patient believes this should occur, the patient will often become angry and frustrated with the social worker. In addition, pressure comes from the treatment team to provide services and resources that are not available. So often the social worker then has three entities to keep in balance—the homeless patient's feelings and needs, the community agency's requirements, and the treatment team's wants for the patients.

Summary

Our homeless dialysis patients generally mirror the homeless population in general—they are relatively young men, and most belong to a minority ethnic group.^{8,9} They are younger than the general dialysis population and have been on dialysis for a fairly long time. As in the general homeless population, substance and alcohol abuse and mental illness are prominent issues in our patients.^{8,9} All are socially isolated. One of our patients came in with uremia, and we initiated dialysis. He was homeless at the time and remains homeless to date. The other five patients became homeless sometime after starting dialysis. It does not appear that ESRD per se is a risk factor for homelessness, but rather, that the growing dialysis population reflects our society at large, including the social factors leading to homelessness.

Because of their ESRD, our homeless patients have better access to health care than the general homeless population.^{2,8,9} Furthermore, by virtue of their ESRD, they have (or will have) Medicare health care coverage, and five of the six have some disability income. None of our patients are active on a transplant waiting list, in part due to exclusion because of substance abuse. The patient with bipolar disease has no history of substance abuse and has been referred for transplant evaluation.

Even in a rural area, homelessness is an increasing problem for dialysis providers. The nurses, physicians, dietitians, and social workers caring for these patients must employ innovative strategies to provide quality care in the face of the patient's lack of permanent shelter. Community programs are integral to the care of the homeless and will vary by location. Homelessness among dialysis patients seems to be increasing and is worthy of additional study. ♦

References

1. US Renal Data System: Excerpts from the USRDS 2004 Annual Data Report. *Am J Kidney Dis* 45:S1–S280 (suppl 1), 2005
2. Wellington MR. Hemodialysis and homelessness: A literature review and a call for research. *Neph Nurs J* 27:305–310, 2000
3. Plantinga LC et al. Frequency of sit-down patient care rounds, attainment of clinical performance targets, hospitalization, and mortality in hemodialysis patients. *J Am Soc Neph* 15:3144–3153, 2004
4. Silliman K, Yamanoha M, Morrissey A. Evidence of nutritional risk in a population of homeless adults in rural Northern California. *J Am Diet Assoc* 98:908–910, 1998
5. Hwang S, Bugeja A. Barriers to appropriate diabetes management among homeless people in Toronto. *Can Med Assoc J* 163:161–165, 2000
6. Fleischman S, Farnham T. Chronic Disease in the Homeless. In Wood, D. (Ed), *Delivering Health Care to Homeless Persons*. New York: Springer Publishing Company, 1992
7. <http://www.nal.usda.gov/fnic/pubs/bibs/gen/homeold.html>
8. Hwang SW. Homelessness and health. *Can Med Assoc J* 164:229–233, 2001
9. Power R et al. Health, health promotion, and homelessness. *Brit Med J* 318:590–592, 1999

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