

Ramifications of a Nephrology Workforce Shortage on Dialysis Patient Care

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Disclosures

- I have no financial interests or relationships to disclose.

Objectives

Identify	Identify factors straining the dialysis workforce.
Explain	Explain how a diminished workforce impacts dialysis care.
Discuss	Discuss the near-term future of the dialysis workforce.

Stressors

Burnout/Turnover
Staff Shortages

Decreased quality
of patient care

Exposure to Abuse

(Ulrich & Kear, 2018)

Survey of 1,070 nephrology nurses

Source	Sexual Harassment		Discrimination		Verbal Abuse	
	Percentage of Participants Reporting Abuse	Number of Incidents Reported	Percentage of Participants Reporting Abuse	Number of Incidents Reported	Percentage of Participants Reporting Abuse	Number of Incidents Reported
Patients	17%	501	20%	734	57%	2,758
Patients' Families/SOs	3%	53	11%	294	30%	891
Other RNs	2%	25	12%	408	21%	480
PCTs/UP	3%	53	8%	417	14%	354
LVNs	0%	1	2%	62	4%	58
Physicians	2%	33	6%	223	21%	447
Nurse Managers	0%	5	9%	217	10%	227
Administrators/Execs	1%	17	7%	176	7%	150
Other Healthcare Personnel	1%	14	5%	153	7%	150
Total Incidents		702		2,684		5,515

Source	Physical Abuse		Threats	
	Percentage of Participants Reporting Abuse	Number of Incidents Reported	Percentage of Participants Reporting Abuse	Number of Incidents Reported
Patients	9%	237	22%	491
Patients' Families/SOs	1%	17	6%	183
Other RNs	1%	7	2%	31
PCTs/UP	1%	6	2%	23
LVNs	0%	1	0%	4
Physicians	0%	1	1%	20
Nurse Managers	0%	1	1%	8
Administrators/Execs	0%	13	1%	5
Other Healthcare Personnel	1%	5	1%	6
Total Incidents		288		771

Ulrich, B. T., & Kear, T. M. (2018). The health and safety of nephrology nurses and the environments in which they work. *Nephrology Nursing Journal*, 45(2), 117-139.

Workforce Demographics

- A 2019 report projected a shortage of RNs through 2030 (Juraschek et al., 2019).
- AACN (2022) survey showed continued growth in entry level nursing programs (3.3% increase in 2021).
- 2020–2021 the total supply of RNs in the U.S. decreased by more than 100,000 (Auerbach et al., 2022).
 - Constitutes the largest decrease in over 4 decades.
 - A significant number of nurses were under the age of 35.

Pandemic Stressors

Suboptimal conditions
and resources

In-center dialysis
couldn't be delayed or
put on hold during the
pandemic

Shortages of medical
supplies and PPE

Increased workload due
to co-worker illness and
exposure

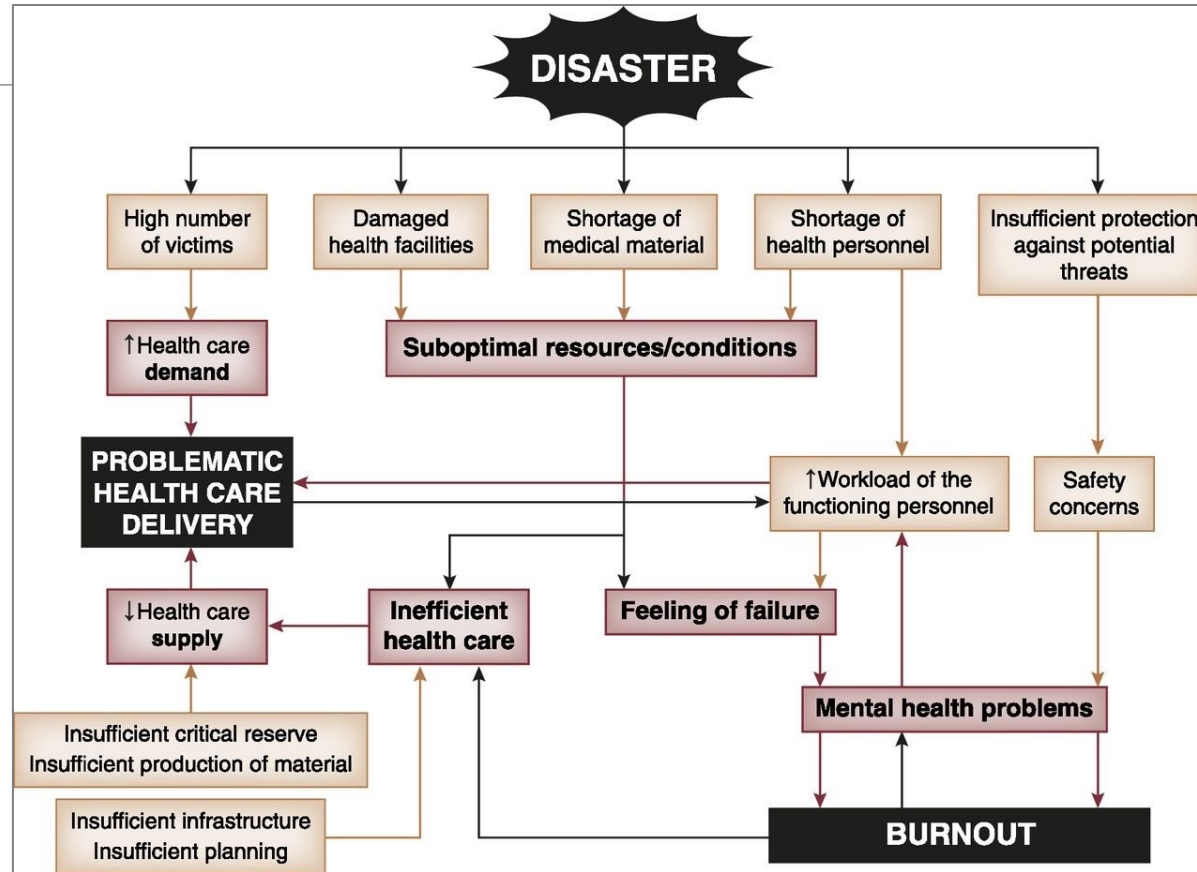
Chronic dialysis patients
with COVID-19 had
worse outcomes with a
mortality rate >20%

Changing public
sentiment

Hsu, C. M., Weiner, D. E., Awah, G., Miskulin, D. C., Manley, H. J., Stewart, C., . . . Lacson, E. (2021). COVID-19 among US dialysis patients: Risk factors and outcomes from a national dialysis provider. *American Journal of Kidney Disease*, 77(5), 748-756.

Sever, M. S., Ortiz, A., Maggiore, U., Bac-Garcia, E., & Vanholder, R. (2021). Mass disasters and burnout in nephrology personnel: From earthquakes and hurricanes to COVID-19 pandemic. *Clinical Journal of the American Society of Nephrology*, 16(5), 829-837.

Figure 1.



[Mass Disasters and Burnout in Nephrology Personnel: From Earthquakes and Hurricanes to COVID-19 Pandemic](#)

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The Pandemic and our Mental Health

- Increased stress/anxiety/fear for the well being of ourselves, our families, and our patients during the pandemic.
 - McKeaveny et al (2021) found 40.3% renal health care providers experienced fear about attending work and 49.8% experienced mental health distress.
 - 35.9% had severe levels of emotional exhaustion, 16.7% had severe levels of depersonalization, and 21.1% had low levels of personal accomplishment.

Burnout

“Psychologic syndrome emerging as a prolonged response to chronic interpersonal stressors of the job” (Maslach and Leiter, 2016)



Burnout is compromised of three domains.

Overwhelming
Exhaustion

Depersonalization
(feelings of cynicism
and detachment)

Personal
Accomplishment (lack
of accomplishment)



Impact on Patient Care

- Staff with poor well being, worse mental health, and moderate to high levels of burnout are associated with worse patient safety outcomes and a higher likelihood of medical errors (Hall et al., 2016; Melnyk et al., 2018; Mohr et al., 2015).
- Higher levels of emotional exhaustion in renal healthcare providers has been associated with decreased patient satisfaction (Argentero et al., 2008).
- High staff turnover limits long term relationships/trust with patients.
- High staff turnover is expensive in time and money.
- Insufficient staffing was significantly correlated with shortened dialysis treatments, skipped dialysis treatments, and patient complaints (Thomas-Hawkins et al., 2008).

Impact on Patient Care

- Decreased staff perception of patient safety in dialysis units has been associated with increased risk of medication errors, patient hospitalization, vascular access infection, and patient complaints (Thomas-Hawkins & Flynn, 2015).
- Decreased access to social workers in dialysis units has been associated with decreased quality of life and higher depressive symptoms (Beder, 2008).
- Dialysis unit staffing shortages have resulted in (Brown & Ogren, 2022).
 - Delayed hospital discharge while trying to find a unit with room
 - Placement at a unit farther from home (increased cost in time and money)
 - Transfer to another hospital

What Lies Ahead

- Continued increases in nursing school enrollment is promising.
- Recent decrease in nursing supply is concerning especially in nurses <35.
- Current low unemployment rate provides easier access to other alternatives.
- How do we improve
 - Recognize that current staff are valuable resources and all reasonable efforts should be made to retain them.
 - Efforts to decrease burnout can improve patient care and improve retention.
 - Generate interest in renal healthcare among younger nurses (exposure/mentoring).

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