Care-related outcomes of minority populations in residential long-term care

An International Systematic Review

Scott M, Menard A, Sun A, Ramzy A, Rasaputra P, Murmann M, Cooper-Reed A, Hsu AT

Presented by: Mary Scott, BA MSc
Bruyere Research Institute
Ontario, Canada

PAIN MEDICINE
Volume 4 • Number 3 • 2003

REVIEW ARTICLE

The Unequal Burden of Pain: Confronting Racial and Ethnic Disparities in Pain

Carmen R. Green, MD,[a] Karen O. Andersor
Lisa C. Campbell, PhD,[d] Sheila Decker, PhI
Donna A. Kaloukalani, MD, MPH,[g] Kathyrn
Raymond C. Tait, PhD,[j] Knox H. Todd, MD,

29 January 2021

Study reveals huge ethnic minority health inequalities

England's most extensive ever study of ethnic minority health in the over-55s ever has revealed huge inequalities across most groups, compared with white British people.

articularly
surgery.

h inequalities

Eurohealth OBSERVER

7

Racism and
Americans

SHARON B. WYATT,
ROSIE CALVIN, RN, D
KAREN WINTERS, RN,

INEQUALITY AND INEQUITY IN THE USE OF LONG-TERM CARE SERVICES IN EUROPE: IS THERE REASON FOR CONCERN?

By: Ricardo Rodrigues, Stefania Ilinca and Andrea E. Schmidt

reducing ethnic

ational action on ethnic

From: Public Health England
Published 6 August 2018

ETHNIC REVIEW

Access to health

A Szczepura

Postgrad Med J 2005;81:141–147. doi: 10.1136/pgmj.20

Minority Status

“[is] based on national or ethnic, cultural, religious and linguistic identity” and is dependent on the cultural, geographic, and linguistic area within which each group lives. - United Nations

Sexual and gender minorities, any individuals that identify as non-cis-gendered (e.g. male or female)

Intersectionality

“Interacting power relations that influence social relations across diverse societies as well as individual experiences” – Collins & Bilge, 2020, *Intersectionality*

- Connected dynamics (e.g. class, race, gender) that can have multiplicative effect on disparities, including adverse health outcomes
- Minority status is not static and power dynamics intersect beyond healthcare

Reflexivity statement

I want to acknowledge my position as a paid researcher with only limited lived experience as a linguistic minority.

I am privileged to work on this project and understand this topic relies on the experience of many individuals who have more insight into the challenges minority populations face.

I believe this is an important area to study and am passionate about reducing inequality and actively participating in providing equitable healthcare for all.

Evidence exists that minority populations have disparities in health, including in health outcomes and reduced access care.

Significant variation across the international landscape:

- Minority populations and their specific needs and preferences.
- How congregate care is funded, organized, and delivered.

Literature on care-related outcomes of minority populations living within residential long-term care has yet to be synthesized

Research questions

1. **Are there differences in care-related outcomes** (e.g. clients or patients' symptoms, healthcare use, medical data, quality of life, satisfaction with care) **for minority populations in residential long-term care compared to non-minority populations receiving care in the same setting**?
2. **What are the factors** (e.g. socio-economic, language or cultural discordance, other barriers to communication, as well as the intersection among multiple contributing factors) **contributing to differences in care-related outcomes experienced minority populations in residential long-term care**?

Protocol registered with PROSPERO ID: CRD42021269489

Search strategy

Design: Information scientist + team

Peer review: Third-party review

Breadth: 10 databases

Dates: January 1, 2000 to September 03, 2021

Total articles dual screened: 9,109

Inclusion – Exclusion Criteria

INCLUSIONS

- Observational and experimental peer-reviewed literature
- Residents of 24-hour nursing care facilities
- Minority populations or those who identify as belonging to a minority population.

EXCLUSIONS

- Case reports
- Research solely comparing two minority populations without a comparison to majority population.
- Minority populations access to or preferences for residential care facilities.

Residential Long-Term Care

24-hour, non-acute, nursing care facilities

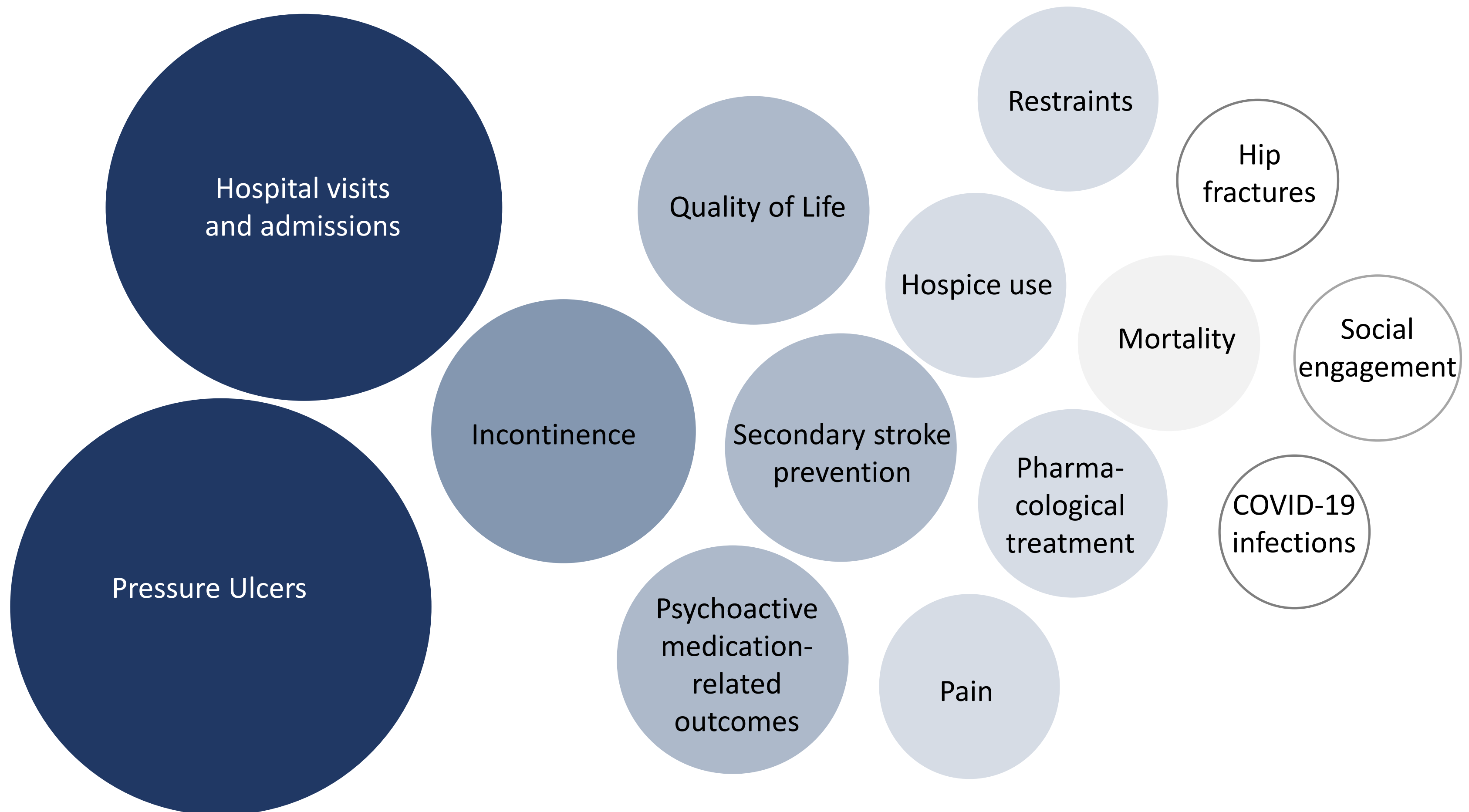
Home-like environment with additional support for people with significant health challenges and cognitive impairment

- Long-term care for irreversible conditions and short-term respite care for rehabilitation

Results

- 54 included studies
  - 51 observational studies
  - 3 qualitative studies – care of patients who were linguistic minorities (caregiver interviews)
- United States (n=49), Canada (n=3), Sweden (n=1), Western Europe (n=1)
  - Most minority populations defined according to racial-ethnic categories (often combined)
- 13 care-related outcomes
  - Hospitalizations and Emergency visits, Pressure ulcers, Incontinence, Medication-related outcomes, Stroke prevention, Quality of Life, Restraints, Pain, Hospice Use, Mortality, Hip Fractures, COVID-19 infections, Social engagement.

Care-related outcomes in LTC



Heterogeneity or low numbers of outcome measures prevented a meta analysis of results

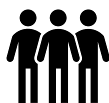
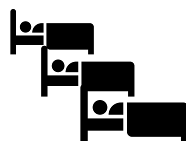
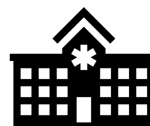
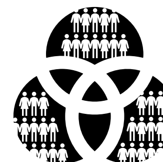
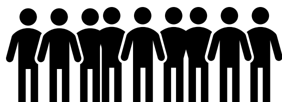
Results

- Higher rates and prevalence of adverse outcomes were found for minority populations
- These were reduced or insignificant when relationship modelled with confounding variables (individual-level and home-level)

Crude rates versus adjusted

Pressure Ulcers in LTC Residents

Cai et al. 2010

CRUDE	ADJUSTED			CONCLUSION
Minority: Black Americans 18.2% for Blacks	Individual-level characteristics	Facility Fixed-effects	Facility race-mix Random-effects	Higher PU presence among Blacks is associated with greater facility-specific concentration of Black residents
	OR=1.203,* p< 0.01	OR=0.970,* p 0.47	OR= 1.04,* p< 0.01	
Majority: White Americans 13.8% for Whites				
				

Majority: reference group

Reference:

1. *Cai S, Mukamel DB, Temkin-Greener H. Pressure ulcer prevalence among black and white nursing home residents in New York state: evidence of racial disparity?. Medical care. 2010 Mar;48(3):233.*

**no confidence interval reported*

More advanced ulcers in minority residents

Higher-grade ulcers (II–IV) were consistently higher in blacks than whites, and even greater disparities were seen when only the highest-grade (IV) ulcers were compared.

Reference:

Lapane KL, Jesdale W, Zierler S. Racial differences in pressure ulcer prevalence in nursing homes. Journal of the American Geriatrics Society. 2005 Jun;53(6):1077-8.

Main findings: Disparities and Gaps

1. Prevalence of adverse outcomes are disproportionately higher for racial and ethnic minority populations living in LTC in the U.S.

2. Homes with higher proportions of minority residents were more likely to have higher rates of poor outcomes.

3. Research on the experience of minority populations in LTC is needed

Significant Gaps & Heterogeneity Exist

The relationship between minority status and long-term care is complex

Methodology

- Ecological studies (home-level)
  - Homes with high proportions of minority populations = poor outcomes
- Observational studies
  - Minority populations had higher prevalence and rates of adverse outcomes
  - Covariates were different

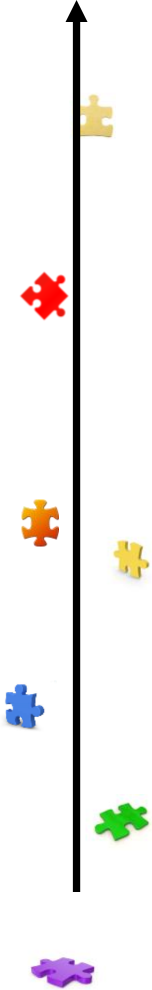
Minority populations

- Racial groups – U.S. focused blended definitions
  - Language and culture not as prominent – nuances are not described in detail

International congregate care settings are organized differently

- Similar to the definition of minority populations, local systems are different and may impact the problem and the subsequent solution

Equitable care – where do we start?



- Given the gaps in knowledge, how do we identify target populations?
  - Greatest improvement (worst outcomes)?
  - Greatest number of population impacted (largest group that would see improvements)?
  - Cost effectiveness (most cost savings achieved)?

- How do we start mitigating these inequalities?
  - Research – targeting outcomes of interest, important sub-populations
  - System-level changes (e.g. standardization of staffing-patient ratios, availability of community services, equalization of funding structures, etc.)
  - Individual-level changes (e.g. training modules, language support or tools, etc.)
  - Evaluation built into implementation

Thank you!

ILPN for the opportunity to present and all of you for engaging with this important topic

Institutional oversight: Bruyere Research Institute, Ottawa, Ontario, Canada

Principal Investigator: Dr. Amy Hsu

Funding: Health Canada - Santé Canada

Contact info: Mary Scott – mscott@bruyere.org

INSTITUT DE RECHERCHE
BRUYÈRE
RESEARCH INSTITUTE

Health Canada Santé Canada