Dementia in the ED Research and Future Trends

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Background

- 1.5% of the Canadian population has dementia (Alzheimer Society of Canada, 2010)
- Dementia is a leading cause of disability in older adults (Alzheimer's Association, 2013)
- Delirium in the ED - not a "transient" event – often persists to inpatient care and is associated with worsening of function and cognition 6th months after ED visit (Han et al 2017)
- Older adults are more likely to seek medical attention in the ED, but ED is a stressful, disorientating experience (Clevenger et al., 2012)
- Caregivers can mitigate harms (Parke et al., 2013; Schnitker et al., 2013)

My assumptions and focus

- While efforts to reduce unnecessary ED visits for those living with dementia are important…..
- …….older adults living with dementia who are acutely ill have a right to appropriate care in the ED
- Older adults living with dementia and their care partners need to be empowered to be proactive
- The occurrence of avoidable physical and cognitive functional decline in hospital (including the ED) is a hospital harm

Three converging myths

- All older people in hospital have similar needs.
- The role of the acute care hospital is to only attend to acute medical conditions.
- Poor integration of functional assessment and intervention into nursing care is acceptable as long as the medical care is managed efficiently and appropriately.

(Parke & Hunter, 2014)

Understanding barriers and facilitators in the ED for older persons living with dementia

- Social ecological perspective – people cannot be understood outside of their environment (s) – social, physical, cultural

- Urban
- Rural
- KT
  - Be Ready for an Emergency Department visit
  - Photonarrative journal for RN education

The Urban ED Study

- Parke, B., Hunter. K., Strain, L., Marck, P. B., Waugh, E. R., & McClelland, A., J. (2013). Facilitators and barriers to safe emergency department transitions for community dwelling older people with dementia and their caregivers: a social ecological study. International Journal of Nursing Studies, 50(9), 1206-1218.

The Urban ED Study – Purpose and Methods

- Purpose: To understand facilitators and barriers to transitions of older persons living with dementia when coming to, being in and leaving the ED and to identify practice solutions for nurses

- Method: interpretive, descriptive exploratory design
  - 3 phases: interviews, creation of a photographic narrative journal , photo elicitation focus groups to identify factors that facilitate or impede safe transitional care for community dwelling older adults with dementia
  - Setting: 2 urban Canadian emergency departments
  - Participants: 10 older adult-family caregiver dyads (community dwelling), 10 ED RNs, and 4 NPs (geriatric services)

The Urban ED Study - Results

- 4 interconnected reinforcing consequences:
  - being under-triaged
  - waiting and worrying about what was wrong
  - time pressure with lack of attention to basic needs
  - relationships and interactions leading to feeling ignored, forgotten and unimportant
- Consequences stem from a triage system that does not recognize atypical presentation of illness
- Lead to a *cascade of vulnerability* for older people with dementia and their caregivers
- Nurses experienced time pressure challenges that impeded their ability to be responsive to basic care needs

The Urban ED Study - Conclusions/Recommendations

- The unit of care in the ED must include both the older person and their care partner
- Negative reinforcing consequences can be interrupted when nurses communicate and engage more regularly with the older adult-caregiver dyad to build trust
- System changes are also needed to support the ability of nurses to carry out best practices

The Rural ED Study

- Hunter, K.F., Parke, B., Babb, M., Forbes, D. & Strain, L. (2017). Balancing safety and harm for older adults with dementia in rural emergency departments. Rural and Remote Health, 17:4055. (online). http://www.rrh.org.au/articles/subviewnew.asp?ArticleID=4055

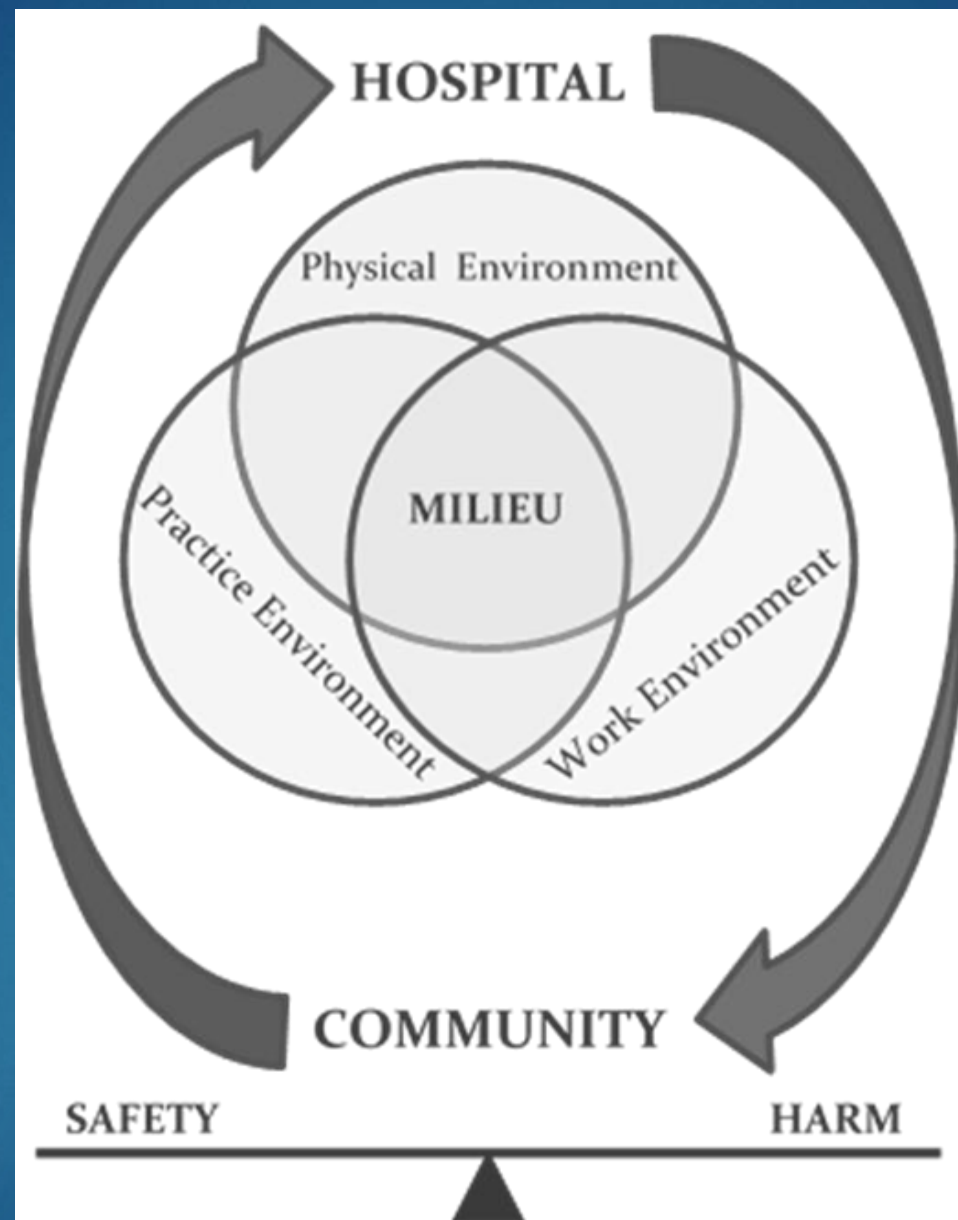
The Rural ED Study – Purpose and Method

- Purpose: to understand safety and harm in rural ED transitional care for community dwelling older adults with dementia from the perspective of healthcare professionals (HCPs)
- Method
  - Interpretive, descriptive exploratory design from a social ecological perspective using interviews - comparative analysis with thematic coding
  - Setting: 2 rural hospital EDs in two Canadian provinces.
  - Participants:
    - 12 HCPs - 7 with clinical responsibilities in the ED, 5 with consulting roles in the ED (rehabilitation/social work or community liaison services)
    - Nursing, social work, occupational therapy, physical therapy and medicine.

The Rural ED Study - Results

- Three themes
  - physical environment (space, design and equipment)
  - work environment (pressure to perform)
  - practice environment (family, knowledge and processes)

- Conceptual model was developed to illustrate how HCPs worked to balance safety and harm for older patients with dementia within a milieu created by the overlapping and synergistically interacting environments.



Balancing safety and harm for older adults with dementia in rural EDs

The Rural ED Study - Conclusions

- HCPs in rural EDs constantly attempt to balance promoting safety and avoiding harm for older adults with dementia
- Safety perceived broadly
- Milieu created by physical, work and practice environments interaction created consequences to the physical, cognitive and emotional wellbeing of older adults with dementia and their caregivers.
- Practice environment - participants identified a 'rural advantage' tied to their knowledge of community and the patients/caregivers but familiarity can be a double-edged sword
  - HCPs need to seek input from caregivers regarding altered functional status,
- Policy change needed - triage to include gerontological perspectives

The Rural ED Study - Limitation

- Set out to recruit dyads of older persons living with dementia and their care partners
- Unable to recruit – Why?
  - Later diagnosis of dementia in rural settings
  - Stigma of having a dementia diagnosis

Knowledge Translation

- Parke, B., Hunter, K. F., Schulz, M. E., & Jouanne, L. (Epub 2016). Know Me – A new person-centered approach for dementia-friendly Emergency Department care. Dementia: The International Journal of Social Research & Practice. Epub ahead of print Nov 3, 2016 DOI: 10.1177/1471301216675670

Parke, B., Hunter. K., Strain, L., Marck, P. B., Waugh, E. R., & McClelland, A., J. (2013). Facilitators and barriers to safe emergency department transitions for community dwelling older people with dementia and their caregivers: a social ecological study. *International Journal of Nursing Studies,* 50(9), 1206-1218.

Other work

- Australian research group
- SR –research-based studies to identify practices designed to meet the specific care needs of older cognitively impaired patients in ED
- Little work in the ED setting
  - interventions to improve cognitive impairment recognition (n = 9)
  - approaches to reduce falls (n = 1)
  - approaches to reduce delirium incidence and prevalence (n = 2)
- Some potentially relevant studies in acute care (delirium prevention, reduction of prescribing drugs that precipitate delirium, reducing behavior symptoms, improving nutritional intake)

Schnitker et al (2013)

Structural Quality Indicators for older persons with cognitive impairment in the ED

The ED has a policy outlining

- management of older people with cognitive impairment during the ED episode of care
- issues relevant to carers of older people with cognitive impairment (including inclusion of the (family) carer
- assessment and management of behavioral symptoms, with specific reference to older people with cognitive impairment
- delirium prevention strategies, including the assessment of patients' delirium risk factors
- pain assessment and management for older people with cognitive impairment.

Schnitker et al (2015a)

Process Quality Indicators for older persons with cognitive impairment in the ED

- cognitive screening
- delirium screening
- delirium risk assessment
- evaluation of acute change in mental status
- delirium etiology
- proxy notification
- collateral history
- involvement of a nominated support person
- pain assessment,
- postdischarge follow-up
- ED length of stay

Schnitker et al (2015b)

Characteristics of older people with cognitive impairment in the ED

- Australian, multisite – 88.7% of older patients with CI presenting to the ED lived in the community
- 33% had prior hospital admissions, 57% were admitted
- 53% experienced pain while in ED
- Premorbid function (ED needs)
  - 34% had incontinence (40% needed help toileting in ED, 5% catheter)
  - 43% were dependent in some ADL, but 81% independent in mobility (36% deemed high risk for falls in ED)
  - 15% needed assistance with eating/drinking (40% had decreased intake 3 days before ED, 60% CG reported no fluids offered in ED)
  - 93% had vision impairment
  - 26% had hearing impairment

Schnitker et al (2016)

Where do we need to focus the ED research in the coming years?

- Differentiating delirium from dementia, recognizing delirium on dementia
- Appropriate use of antipsychotics and understanding of responsive behaviours
- Pain assessment and management
- Continence care and avoiding unnecessary catheterization
- Mobilization and prevention of deconditioning
- Changes to the CTAS criteria
- Empowering people living with dementia and their care partners

Differentiating delirium from dementia, recognizing delirium on dementia

- Many different delirium screening tools – work is being undertaken to identify the most appropriate tools for ED use
- SR of delirium screening tools in ED
  - "best" stand alone measure not established
  - Need to assess inattention and arousal

Tamune & Yasugi (2017)

- Example comparison of mCAM- ED to mRASS (Richmond agitation and Sedation Scale – assesses altered level of consciousness)
  - mRASS can be scored from patient observation only
  - Weaker performance of mRASS in those with dementia

Grossman et al 2017

Appropriate use of antipsychotics and understanding of responsive behaviours

- All studies included in Schnitker's 2013 SR were in acute care
- Little is known about preventing/reducing responsive behaviours in the ED as a specific environment.
- Many provincial health ministries working on appropriate use of antipsychotics in older persons
  - Pressing need for knowledge translation studies in the ED setting

Pain assessment and management

- Review of pain assessment in older persons with cognitive impairment in the ED
  - pain scores frequently not recorded older pts with CI in ED
  - this leads to poor pain management in this group (wait time for analgesics, use of strong opioids)

Jones et al (2017)

- Need for research on most appropriate pain scales to use in ED for this group and appropriate interventions.

Continence care and avoiding unnecessary catheterization

- Inappropriate use of catheters remains a problem s in the ED – being older and confused are risk factors
- Little Canadian data – small study 58.7% inapproappriate (24% incontinence, 18% to manage confusion) Ma et al (2014)
- Harrod et al (2013) identified barriers to reducing unnecessary catheters in the ED:
  - **normative work** -competing demands, priority on medical management;
  - **loosely coupled errors -** as CAUTI was not immediately observed, seen as not serious
  - **process weaknesses -** in policy/policy implementation – criteria seen as not applicable
  - **workarounds** - finding ways to bypass processes and continue normal work patterns
- Need for KT research on effection reduction of IUC use in ED

Changes to the CTAS triage system

- Changes to the CTAS system have been proposed to integrate:
  - Atypical presentations of illness in older patients
  - Cognitive impairment
  - Polypharmacy

Bullard et al (2017)

- Will the proposed changes to CTAS interrupt the cascade of vulnerability and improve the ED experience for older persons living with dementia and their care partners?

Mobilization and prevention of deconditioning

- New "senior friendly" EDs focus on getting older patients off the stretchers, using easy chairs
- Will the new ED physical environments for older adults be successful in addressing this?
- Can changing the physical environment alone change practice?
- What else will need to be put in place to prevent deconditioning in the ED?

Empowering people living with dementia and their care partners

- The system will not change until the public demands it change.
- Can tools such as "Be ready for an emergency department visit" help older persons living with dementia and their care partners have a more successful ED visit?
- What other strategies help empower them?

A final thought

- Jen: …. *we don't often think of them [caregivers] as being the primary recipient of our care but they go together, right. You have, they have to go together as a unit and so if we, if we fail the caregiver, we fail the client.*

Hunter et al. (2017)

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References

- Alzheimer Society of Canada. (2010). Rising tide: The impact of dementia on Canadian society. Toronto: Alzheimer Society of Canada. Retrieved from http://www.alzheimer.ca/docs/RisingTide/Rising%20Tide_Full%20Report_Eng_FINAL_Secured%20version.pdf
- Alzheimer's Association. (2013). Alzheimer's disease facts and figures. Alzheimer's & Dementia, 9(2). Retrieved from http://www.alz.org/downloads/facts_figures_2013.pdf
- Bullard, M., Melady, D., Emond, M., Musgrave, E., Unger, B., Van der Linde, E., . . . Swain, J. (2017). Guidance when Applying the Canadian Triage and Acuity Scale (CTAS) to the Geriatric Patient: Executive Summary. CJEM, 19(S2), S28-S37. doi:10.1017/cem.2017.363
- Clevenger, C. K., Chu, T. A., Yang, Z., & Hepburn, K. W. (2012). Clinical care of persons with dementia in the emergency department: A review of the literature and agenda for research. Journal of the American Geriatrics Society, 60(9), 1742-1748.

References

- Grossman, F.F., Hasemann, W., Kressig, R.W., Bingisser, R. Nickel, C.H. (2017). Performance of the modified Richmond Agitation Sedation Scale in identifying delirum in older ED patient. American Journal of Emergency Medicine, 35, 1324-1326.
- Han, J.H., Vasilevskis, E.E., Chandrasekhar, r., Liu, X., Schnelle, J.F.….Ely, E.W. (2017). Delirium in the Emergency Department and its extention into hospitalization (DELINEATE) study: Effect on 6 monthe function and cognition. JAGS, 65, 1333-1338.
- Harrod M, Kowalski CP, Saint S, Forman J, Krein SL. (2013). Variations in risk perceptions: a qualitative study of why unnecessary urinary catheter use continues to be problematic. BMC Health Services Res.earch, 13, 151.
- Howie, P. (2012), A new strategy for patients with dementia. Emergency Nurse, 20(4), 12-16.

References

- Hunter, K.F., Parke, B., Babb, M., Forbes, D. & Strain, L. (2017). Balancing safety and harm for older adults with dementia in rural emergency departments. Rural and Remote Health, 17:4055.
- Ma AY, Hunter KF, Rowe B, Wagg A. (2014). Abstract 318: Appropriateness of indwelling urethral catheter insertions in the emergency department. Neurourology Urodynamics , 33:756-755.
- Parke, B., & Hunter, K. (2014). The care of older adults in hospital: If it's just common sense why isn't it common practice? Journal of Clinical Nursing, 23, 1573-1582.
- Parke, B., Hunter. K., Strain, L., Marck, P. B., Waugh, E. R., & McClelland, A., J. (2013). Facilitators and barriers to safe emergency department transitions for community dwelling older people with dementia and their caregivers: a social ecological study. International Journal of Nursing Studies, 50(9), 1206-1218.

References

- Schnitker, L., Martin-Khan, M., Beattie, E., & Gray, L. (2013). What is the evidence to guide best practice for the management of older people with cognitive impairment presenting to emergency departments? A systematic review. Advanced Emergency Nursing Journal, 35(2), 154-169.
- Schnitker LM, Martin-Khan M, Burkett E, Brand CA, Beattie ER, Jones RN, Gray LC. (2015). Structural quality indicators to support quality of care for older people with cognitive impairment in emergency departments. Academic Emergency Medicine 22(3):273-84.
- Schnitker LM, Martin-Khan M, Burkett E, Beattie ER, Jones RN, Gray LC (2015). Process quality indicators to support quality of care for older people with cognitive impairment in emergency departments Academic Emergency Medicine. 22(3):285-98.

References

- Schnitker LM, Martin-Khan M, Burkett E, Beattie ER, Jones RN, Gray LC (2016). Characteristics of older people with cognitive impairment attending emergency departments: A descriptive study. Australasia Emergency Nursing Journal, 19(2), 118-26.
- Tamune, H. & Yasugi, D. (2017). How can we identify patients with delirium in the emergency department?A review of available screening and diagnostic tools. American Journal of Emergency Medicine 35, 1332–1334