



LAIDLAW UNDERGRADUATE LEADERSHIP AND RESEARCH PROGRAMME
APPLICATION – 2023 COHORT

Name	Orla Keane
Programme	Medicine
Year of Study	2 nd year
Research Project Title	Exploring knowledge and attitudes about Lewy Body dementia (LBD) in care staff in Irish nursing homes
Proposed Supervisor(s)	Prof. Iracema Leroi- School of Medicine, Geriatric Pyschiatry

Research Project Proposal 1000 words max

Introduction

Lewy body dementia (LBD) is an umbrella term for Parkinson’s dementia (PDD) and dementia with Lewy bodies (DLB). LBD is the 2nd most common form of dementia, affecting over 10,000 people in Ireland. Unfortunately, the majority of people with DLB are under- or mis-diagnosed due to lack of familiarity among health professionals about the signs and symptoms of the condition (1).

Symptoms include dementia, fluctuating cognitive levels, visual hallucinations, Parkinsonism, and sleep disruption (2), all of which significantly impact quality of life, as well as making support and care challenging.

There are a number of reasons why it is important to recognise LBD. It commonly causes changes in behaviour, characterised by hallucinations and delusions, and costs of care, quality of life, prognosis and other key dementia outcomes are significantly worse compared to Alzheimer’s (3). Two studies found that care home staff lacked knowledge required to manage dementia-related challenging behaviour, and that staff recognised their gap in knowledge (4,5); however, these studies are not specific to LBD, where care needs are greater.

There are numerous potential benefits to increasing staff knowledge about dementia, not only for residents they are care for, but also for themselves. Staff could experience better job satisfaction, potentially translating into lower staff burnout, more person-centred care, lower rates of behaviour-controlling medications, and improved quality of life.



The **aim of my project** is to explore knowledge and awareness of care staff regarding LBD diagnosis, clinical presentation, and care. The results will inform resources available for nursing homes aiming to improve quality of care.

I chose this project because although there is growing health literature on LBD, there is a gap in research, knowledge, and awareness regarding LBD in health care professionals in Ireland.

I am passionate about this project as I have worked in a nursing home for the past five years and my grandad is living with Alzheimer's disease. This sparked my interest in dementia and taught me first-hand how important it is to understand why residents might behave in the way they do, and the difference education can make to our ability to deliver person centred care.

Methodology

Research questions:

- What is the level of knowledge and awareness and practice (KAP) regarding LBD clinical presentation, care and management among care staff in Irish nursing homes?
- What are the predictors of levels of KAP among care staff?
- What aspects of LBD presentation, care and management are care staff interested in learning about?

Participants:

Care staff of different grades (i.e. nurses, healthcare assistants) drawn from the 460 nursing homes in Ireland. Based on a previous survey (6) using a similar survey tool, a sample size of 100 responses is targeted.

Procedures:

Following ethical approval I will contact nursing homes to request their support in distributing the surveys to relevant staff, as well as working alongside Nursing Homes Ireland, to contact potential participants.

This mixed methods study will consist of an anonymized cross-sectional self-reported survey, followed by a qualitative sub-study of a sub-sample of care staff exploring the issue in greater depth. A version of the Dementia Knowledge Assessment Tool Version Two (6), modified for LBD, will be used, consisting of a series of statements with YES, NO and DON'T KNOW answer options.



A draft survey will be piloted with 5-10 care staff before being finalised, and distributed via the nursing homes using TCD data management team approved software, and following GDPR guidelines. An engaging graphic will accompany the survey aiming to increase the response rate. Surveys will be available for up to 2 weeks, followed by a reminder prompt to non-respondents.

Focus groups (up to 10 participants) will also be conducted to explore key aspects of LBD KAP in greater depth, using semi-structured interviews recorded on secure software (TCD approved Teams video capture).

Data analysis:

I will apply descriptive statistics to report responses, and use regression analysis to investigate associated factors of levels of KAP. Qualitative data analysis will be undertaken using thematic or grounded theory approaches.

Dissemination:

A poster and presentation will be produced using the collected findings, and will be presented to relevant stakeholders such as Lewy Body Ireland through the TeaTime with Lewy peer support group, and shared with Nursing Home Ireland (NHI), Dementia Research Network Ireland, and the Alzheimer Society Ireland (ASI). Presentations at a national or international conference will be undertaken, supported by my supervisor. Feedback to PPI contributors will be personalised and they will be acknowledged in the manuscript as co-authors.

Project timeline:

Pre-Week 1:

- Development of a draft survey as discussed above, with PPI input.
- Apply for ethical approval and data protection approval (DPIA).
- Contact nursing homes to obtain consent to distribute the survey, and present the study at a monthly meeting of NHI.

Week 1:

- Field testing of the draft survey with 5-10 participants.
- Create a graphic to accompany the survey to enhance engagement.
- Begin skills training in statistics and qualitative methods (free Coursera courses).



Week 2:

- Use feedback from participants, supervisors, and stakeholders to finalise survey.
- Draft the qualitative study interview schedule.

Week 3-4:

- Distribute surveys to consented care homes across Ireland.
- Conduct focus groups for sub-study.

Week 4-6:

- Data analysis
- Produce a poster and presentation displaying the results.:
- Present results to stakeholders (LBI, DRNI, NHI, ASI)
- Plan information/education mini-course for stakeholders for leadership development.

Intended Outcomes

Specific objectives and intended impact of the project:

- Collect quantifiable data on the level of knowledge and awareness on LBD of care staff in nursing homes in Ireland.
- Produce a poster and presentation to share findings with key stakeholders.
- Develop skills in research methods.
- Use the data collected to develop training resources in my LiA project, as discussed below.

Planning for expected additional project costs

I may require funding for software for survey development, for travel expenses over Ireland and to Northern Ireland, and for incidental expenses.

References (excluded from word count)

1. Laura J E Brown, Zena Aldridge, Amy Pepper, Iracema Leroi, Karen Harrison Dening, 'It's just incredible the difference it has made': family carers' experiences of a specialist Lewy body dementia Admiral Nurse service, Age and Ageing, Volume 51, Issue 10, October 2022, afac207, <https://doi.org/10.1093/ageing/afac207>
2. Hansen LA, Samuel W. Criteria for Alzheimer's disease and the nosology of dementia with Lewy bodies. Neurology 1997;48:126e132. <https://doi.org/10.1016/j.jamda.2013.07.009>
3. <https://www.lenus.ie/bitstream/handle/10147/306721/CreatingExcellenceinDementiaCare2012.pdf?sequence=1>



4. O'Donnell, E 2022, 'Exploring how care home staff manage responsive behaviours, associated with dementia, in care homes in Ireland, during the Covid-19 pandemic', PhD, Lancaster University. <https://doi.org/10.17635/lancaster/thesis/1806>
5. Islam, M.S., Baker, C., Huxley, P. et al. The nature, characteristics and associations of care home staff stress and wellbeing: a national survey. *BMC Nurs* 16, 22 (2017). <https://doi.org/10.1186/s12912-017-0216-4>
6. Toye C, Lester L, Popescu A, McInerney F, Andrews S, Robinson AL. Dementia Knowledge Assessment Tool Version Two: Development of a tool to inform preparation for care planning and delivery in families and care staff. *Dementia*. 2014;13(2):248-256. doi:10.1177/1471301212471960.



Leadership-in-Action experience proposal (500 words max.)		
LiA Category Insert x as appropriate	Category A: Central Laidlaw Foundation Project	
	Category B: Leadership Placement	
	Category C: In-field application of research	x
<p>For my Leadership in Action project, I plan to use the research from my survey in Summer 1 as the foundation for a three-pronged approach to improve staff awareness of LBD.</p> <p>The first phase would be to develop a booklet and poster raising awareness for LBD. I intend for this booklet and poster to be accessible and practical. These materials could be distributed to nursing homes in Ireland and Northern Ireland to be given to staff and displayed. Using my experience of nursing homes, I will apply key principles that will enhance knowledge uptake among care home stakeholders.</p> <p>The second proposed element of my LiA project is to create a workshop to improve knowledge of LBD, which can be delivered in nursing homes. This workshop will be engaging, informative, and concise to ensure that it can be delivered in an afternoon, as I am aware of the time and resource constraints in care homes currently. This will be an example of knowledge translation (KT) from my investigative work.</p> <p>The final aspect of my leadership project would be a case study, testing how efficient the workshop is at improving LBD awareness and knowledge of staff. The workshop will be delivered to staff in one nursing home. Levels of knowledge and awareness will be assessed before and after the workshop (using a validated measure of pre-post training), allowing me to analyse the effectiveness of the training. The end goal is for the workshop to be submitted to stakeholders such as Lewy Body Ireland, for approval and publication, so it can be used as training nationwide.</p> <p>I intend to apply the skills gained in Summer 1 such as, data collection and analysis to this project. I believe that this LiA project would allow me to learn more about LBD in a very practical manner from frontline staff experience. It would give me the opportunity to enhance the leadership skills learned from the Laidlaw sessions, along with valuable experience of being part of a research project.</p>		



Trinity College Dublin
Coláiste na Tríonóide, Baile Átha Cliath
The University of Dublin

