The Shanley Pressure Ulcer Prevention Programme (SPUPP) for older adults at risk of pressure ulceration.

Dr. Emer Shanley\textsuperscript{1}, Prof. Zena Moore\textsuperscript{1}, Dr. Declan Patton\textsuperscript{1}, Dr. Tom O’Connor\textsuperscript{1},
\textsuperscript{1}School of Nursing & Midwifery, RCSI
Pressure Ulcer

• The European Pressure Ulcer Advisory Panel defines a pressure ulcer as “a localised injury to the skin and/or underlying tissue, usually over a bony prominence, resulting from sustained pressure (including pressure associated with shear)\(^1\).

• A number of contributing factors are also associated with pressure ulcers; the primary of which is impaired mobility.

• Pressure ulcers have a significant impact on patient’s lives with quality of life studies demonstrating that compared with similarly aged people; patients living with these wounds have a lower quality of life.
Impact of Pressure Ulcer

- The prevalence of pressure ulcers in an Irish acute setting is in keeping with international studies which record prevalence at between 12-38%.
- Pressure ulcers were the wounds most commonly managed by community nurses with prevalence rates of 4%.
- The financial costs of pressure ulcers are difficult to gauge but it has been estimated to cost €119,000 to successfully treat one patient with a grade 4 pressure ulcer.
- Furthermore, between 2000 and 2010 global mortality due to pressure ulcers has increased by 32.7%.
Background

- Pressure ulcer prevalence rates increase significantly with age and in Ireland the highest rate of growth in age groups is among older people.
- Given the relationship between ageing and reduced mobility, it is reasonable to assume that there is a potential for increase in the incidence of pressure ulceration in this age group.
- Prevention of pressure ulcers is a key issue for enhancing health in the older population.
Pressure Ulcer To Zero Campaign

• Within the hospital setting many campaigns such as the Pressure Ulcer to Zero (2013)\(^2\) initiative have been used to good effect to ensure that patients needs are met by using care bundles such as the SKIN bundle\(^3\)

• Improved outcomes have been achieved by using multi-faceted approaches to prevention such as staff education, risk assessment and provision of appropriate pressure relieving equipment.

• However, patient involvement in pressure ulcer prevention needs to be standardised and evaluated to ensure the full potential of patient involvement in their own care is realised
Aims & Objectives of Patient Education

• The aim of patient education is to engage patients to develop their competence in the skills necessary to undertake health behaviours that are congruous with their life plans and underpin their independent decision-making. Fundamental objectives must be specified, as patient education must improve patient outcomes by accomplishing valid objectives.

• This ensures that the patient is receiving an intervention that will ultimately improve their health-related quality of life, by enabling them to make fully informed decisions about their health and well-being, thereby increasing self-efficacy and self-management.
European Patients Forum

- Patients need to have easy access to relevant understandable information if they are to make informed decisions about their health. Accordingly, their campaign for patient empowerment features education as one of its cornerstones.
- Self-management skills are crucial to patients as a person living with a chronic condition will spend approximately three hours per year with a health professional. This means that they alone are managing their own health for 8,757 hours per year.
Self management

• For individuals at risk of pressure ulceration, self-management education is essential, as they will have to manage their risk on a daily basis and incorporate healthy behaviours into everyday life

• Self-management demands a level of health literacy in order for patients to implement strategies in the home setting. It is not intended as an alternative to medical care, rather it intends to allow the person to engage with the healthcare provider in an active way

• Cognitive challenges, such as difficulty in concentration and short-term memory, also require consideration and strategy.
Patient Involvement

• Many health care commissioners recognise pressure ulcer rates as quality indicators and are requesting a reduction in PU prevalence rates\(^5\).
• Patient involvement through education, in targeting this reduction is an essential factor and is recognised as such by International guidelines such as NICE\(^6\) and NPUAP\(^1\) and our own HSE 2018 Wound Management guidelines.
Patient Involvement

- An expert group produced a best practice document (2016)\textsuperscript{7} which defines patient involvement as “For patients, it means being active in the management of their own health and health care, and in any decisions made about available treatment options” (p 1).
- This distinguishes the term patient involvement as it relates to clinicians as it provides this definition to clarify the difference “For clinicians, it means knowing who their patients are and developing a partnership that facilitates a transparency of information for both parties” (p1).
Older Adults

- Older adults are not only living longer, they are living with many co-morbidities, such as diabetes, hypertension and kidney disease.
- Using kidney disease as an example, in 2012 almost 10% of Americans aged between 60-69 years and more than 20% of those aged 70 years and older, were affected by chronic kidney disease.
- Chronic illness can lead to reduced mobility and thereby increase the risk of pressure ulceration.
- Health and well being are recognised as key quality of life indicators and chronic disease poses a threat to this.
Adult education – Andragogy and Geragogy

Malcolm Knowles, who is recognised as an expert educator, in describing Andragogy (2015) states that adults:

• Need to be self-directed
• Need to understand why they need to learn
• Draw on past experiences to use as resources
• Use personal stress or pressure as motivation
• Learning is usually problem or task oriented

Geragogy describes the management of teaching and learning for older adults and enables empowerment of individuals by the development of skills and maintenance or enablement of independence
Geragogy

• A critical perspective within Geragogy is how to enable older learners to engage in education after a potential absence from education of five decades or more and to ensure that the learners independence is maintained within the educational process without the individual returning to how they experienced and engaged with education in their youth.

• Within Geragogy, due consideration is given to the factors which may impede learning, such as visual, or auditory impairment, or cognitive decline.

• Strategies include use of larger font for written materials, clear audio files and short sessions, with potential for repetition.

• Attention is also necessary to respond to cognitive decline and poor short-term memory, which can be associated with older age.
Education

Education is a means to empower people to take an active role in health promotion, with this in mind the SPUPP\textsuperscript{8} was developed to address the key tenets of pressure ulcer prevention as described by the SKIN\textsuperscript{3} bundle. These are:

- Skin assessment
- Keep moving
- Incontinence
- Nutrition
Shanley Pressure Ulcer Prevention Programme (SPUPP)

• The SPUPP is a multimedia programme that is delivered using electronic media, hard copy materials, activities and patient diaries.
Multimedia

- Multimedia refers to information delivery via a variety of formats and can include text, audio, graphics and video. Benefits include it can be used as a means to overcome the issues associated with poor literacy and to reinforce the information provided.
- Content can be delivered at a pace that suits the viewer, and repeat viewing is easy⁹.
- Multimedia education also enables the family or carer to become involved with the education programme which facilitates wider dissemination of the educational content¹⁰,¹¹.
Shanley Pressure Ulcer Prevention Programme (SPUPP)

- Multidisciplinary team involved in development phase - tissue viability, physiotherapy, dietetics, researchers and professional video photographers, in association with the Royal College of Surgeons in Ireland
- The Flesch-Kincaid Grade Level was computed to be 6.3 which equates to reading age of most 11-12 year olds, whilst the Flesch-Kincaid reading ease is 73 which means it is assessed to be fairly easy to read.
Shanley Pressure Ulcer Prevention Programme (SPUPP)

- SPUPP is made up of 5 sessions, each one consisting of a short multimedia programme which lasts 5-7 minutes.
- A written version of the presentation in the form of a booklet was also provided.
- A session summary sheet was included to reinforce the main message in each presentation, and there were relevant activities associated with each session such as nutrition diaries, activity sheets and skin care samples for the participant to test, such as moisturiser and soap substitutes.
• Particular attention paid to sentence structure, use of imagery and graphics and readability

• Visual and auditory challenges addressed
Shanley Pressure Ulcer Prevention Programme (SPUPP)

Session 1: Introduction

• Overview of the programme and the role of the skin and potential risks to skin integrity. Brief description of a pressure ulcer and who is at risk of developing them.

Session 2: Skin

• Skin care, including when and what to check the skin for, and some practical tips for keeping the skin in good condition. Samples of soap substitutes and moisturisers are provided.
Session 3: Keep Moving

Focuses on ways to prevent pressure ulceration by “keeping moving” and describes how to move safely. It also discusses how to prevent pressure ulceration whilst lying in bed. An activity sheet is provided to complete over the following week.
Preventing pressure ulcers while seated

Mr Menno van Etten
School of Nursing & Midwifery
Session 4: Nutrition

Nutrition and how the food that is eaten in addition to the fluids consumed affects general health. The food pyramid is introduced and some examples of typical servings from each shelf provided. A food diary is provided to complete over 4 days.

Session 5: Incontinence

Incontinence, its causes, and skin care advice for people who are incontinent. Samples of products that can be used for cleansing and protecting the skin from incontinence are also provided.
Methods

• The design was a multi-centre RCT.
• Following ethical approval, older adults, at risk of a PU, living in the community setting, were invited to participate in the study.
• Using stratified random sampling, 64 older adults, living in the community who attend either day care centre or retirement groups were randomised to control and intervention groups.
• All participants completed a pre-validated knowledge questionnaire (KPUPP\textsuperscript{12}) pre and post intervention, in addition to an attitude and behavioural survey.
Patient Knowledge of Pressure Ulcer Prevention-KPUP

How do you measure the impact of a structured pressure ulcer prevention education programme (SPUPP), on older persons’ knowledge of, and attitudes and behaviours towards, pressure ulcer prevention?
Knowledge of Pressure Ulcer Prevention (KPUP) Questionnaire

Section 1 Participant Pressure Ulcer Questionnaire – Participant to complete Q1-Q20

Section 2 – Participant Health Care Practices – Researcher to complete Q21-Q33

Section 3 – Participant Attitudes towards pressure ulcer prevention Q34-Q41

SPUPP
SHANLEY PRESSURE ULCER PREVENTION PROGRAMME
Patient Knowledge of Pressure Ulcer Prevention-KPUP

Section 1 of the questionnaire-Knowledge
20 items relating to knowledge-Questions 1-13: multiple choice questions:
e.g. The most common cause of a pressure ulcer is?:
a) Pressure, Friction or Shear, b) Burn from hot water bottle, c) Itchy skin or d)Fall
Questions 14-20: True/False
e.g. The best way to prevent pressure ulcers is to keep moving?

Section 2 of the questionnaire-Health behaviours
13 questions relating to health behaviours e.g.
Does the participant usually reposition regularly when sitting?
a)Yes or b)No

Section 3 of the questionnaire-Attitudes
8 questions relating to participants attitudes to pressure ulcer prevention
e.g. Pressure ulcer prevention is not necessary for me
1) Strongly agree, 2) Agree, 3) Neither agree nor disagree, 4) Disagree, or 5) Strongly disagree
Results of RCT

- SPUPP was delivered to 64 older adults at risk of pressure ulcer prevention, living independently in the community setting.
- Participants ranged in age from 70-96 years, 75% (n=48) were female.
- Knowledge was scored out of 20.
- Pre-intervention mean knowledge scores: 11.68 (SD: 3.09, intervention) / 11.68 (SD: 3.60, control).
Demographics

• No significant difference at baseline;

• 68.8% (n=44) were either overweight or obese;

• 40.6% (n=26) were incontinent of urine;

• 75% (n=48) were mild risk of PU according to Braden;

• Mobility scores indicated impairments in activity/mobility;
Results

- Post intervention mean knowledge score intervention group - 16.87 (SD: 1.87);

- Control group 12.40 (SD: 3.2), mean difference 4.47 (95% CI: 3.19 to 5.75; p=0.00001).

- Positive changes in the intervention group, for self-reported health behaviours and attitudes towards PU prevention.
Results

• The intervention group saw an increase in the proportion that rated their nutritional intake as excellent and reported an increase in fluid intake, whilst the control group did not report a change in these variables.
• The intervention group rated the SPUPP very highly.
Discussion

• One of the strategies of the health service in regard to older persons, is that they should be enabled to live active and healthy lives, participate in society and facilitated to remain in their own homes for as long as possible.

• In order to ensure this, individuals need to take more responsibility for their own health and the concept of empowerment really relates to the individual feeling that they have the knowledge skills and attitudes to participate in their own healthcare, their own health and maintenance of health.
Discussion

• This study challenges the myth pertaining to older persons and their supposed lack of willingness to access education, as the participants in the study actively engaged with, and highly rated the SPUPP.

• Patient involvement in healthcare and the rights of patients to have a central part to play in the healthcare process have long been seen as an important aspect of health care provision, and the benefits are believed to include enhanced motivation and knowledge about health and illness resulting in an increased ability to monitor and care for themselves.
Discussion

• This study contributes to the concept of active and healthy ageing; patient empowerment and enhancing the capacity and capability of individuals living within the community care setting.

• So, how do we ensure that this education programme can be made available and implemented to this patient cohort?
Dissemination

• St James’ Hospital commenced pilot last week in Rialto ward, which is a 29 bed rehabilitation ward. The aim is that all patients admitted to Rialto are suitable for discharge home once a home care package has been secured. Feedback is positive and they have requested a one day/ half day seminar for family members / carers in conjunction with SPUPP.

• Transitional care unit, Mount Carmel Hospital to deliver SPUPP to all patients once staff training is complete. CNMs in LTC wards are nominating champions (Nurses and Health care assistants) to train in SPUPP and deliver education throughout the hospital.
Remember…

Skin
Keep Moving
Incontinence
Nutrition

Email: emershanley1@gmail.com
Thank you

• Thank you for the opportunity to speak to you all today
• Special thanks to my eternally patient supervisors, Professor Zena Moore and Dr. Declan Patton
• This research is kindly funded by a grant from the School of Nursing and Midwifery, Royal College of Surgeons in Ireland.
References

2. HEALTH SERVICE EXECUTIVE. 2013a. Pressure Ulcers to Zero Supported by the Quality Improvement Division Health Service Executive (HSE) and the Royal College of Physicians Ireland (RCPI) through the National Quality Improvement Programme.
10. SHANLEY, E. 2012. A cluster randomised trial of the leg ulcer prevention programme (LUPP) in venous leg ulcer patients within an Irish Community Care setting. MSc Thesis, Royal College of Surgeons in Ireland.