



Pressure Ulcer Prevention – the role of knowledge, attitudes and behaviour



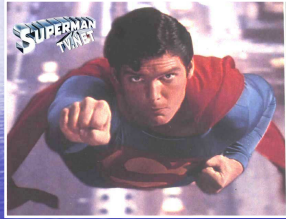
Zena Moore
RGN, MSc, FFMRCSI

Health Research Board of Ireland
Clinical Nursing & Midwifery
Research Fellow, RCSI, Dublin 2,
Ireland.



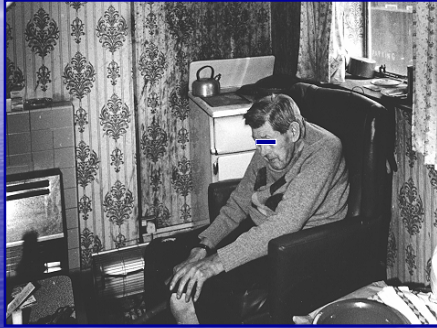
Honorary Secretary EWMA & Chair
Education Group

Why Pressure Ulcers?



"Superman" star Christopher Reeve, 52, who went into cardiac arrest at his home in Westchester County, N.Y. after developing a serious systematic infection during treatment for a bedsore

Why Pressure Ulcers?



Why Pressure Ulcers?

Alzheimer patient's bed sores extended into bone – inquest told


The report found the cause of death was sepsis, "probably septicaemia due to pressure sores".

(Irish Times: 27th January 2005)

Why Pressure Ulcers?

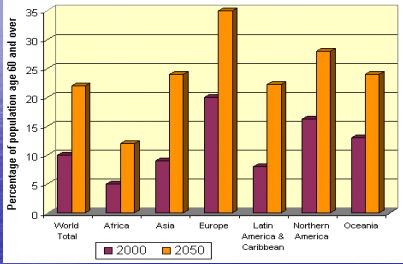
- Prevalence – Ireland 1999 – 12.9%
- Prevalence – Ireland 2002 – 21%
- Prevalence – Ireland 2003 – 12%

(Moore & Pitman, 1999; Jordan O'Brien, 2002; Moore & Jordan O'Brien 2003)




Why Pressure Ulcers?

Percentage Increase in Age 60 and Over by Region, 2000-2050



Region	2000 (%)	2050 (%)
World Total	10	22
Africa	5	13
Asia	10	24
Europe	20	35
Latin America & Caribbean	8	23
Northern America	16	28
Oceania	13	24

Department of Economic and Social Affairs, United Nations Secretariat




Why Pressure Ulcers?

Costs:

- £1,064 grade 1 pressure ulcer
- £10,551 grade 4 pressure ulcer
- Annual cost: £1.4 - £2.1 billion - 4% of total health care expenditure

(Bennett et al, 2004)

Why Pressure Ulcers?



Hopkins *et al*, (2006)
Fox, (2002)

Endless Pain,
anxiety,
sleeplessness,
worry about
healing restricted
lifestyle

Why Pressure Ulcers?

Mortality:

- Age-adjusted mortality rate, 3.79 per 100,000 population;
- 95% CI, 3.77-3.81

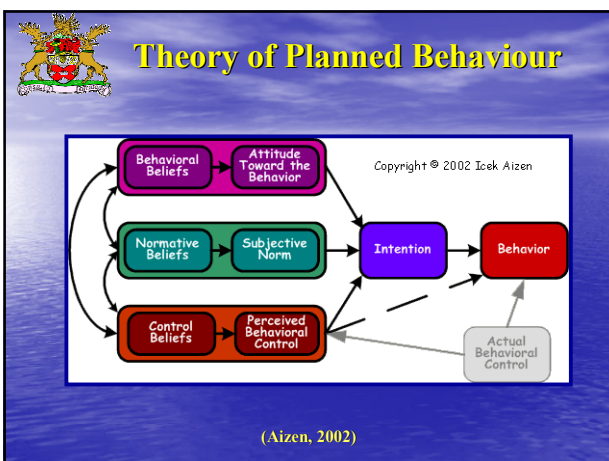
(Redelings et al, 2005)

Why Pressure Ulcers?

Mortality:


- Subjects with pressure ulcers more likely to die compared to those without pressure ulcer
- (RR=1.92; 95% CI 1.52-2.43).

(Landi et al, 2007)




Theory of Planned Behaviour

- **Behavioural belief:** links the behavior of interest to expected outcomes
- **Attitude** toward a behavior is the degree to which performance of the behavior is positively or negatively valued
- **Normative beliefs** refer to the perceived behavioral expectations of important others



Theory of Planned Behaviour

- **Subjective norm** is the perceived social pressure to engage or not to engage in a behavior
- **Control beliefs** have to do with the perceived presence of factors that may facilitate or impede performance of a behavior
- **Perceived behavioral control** refers to people's perceptions of their ability to perform a given behavior




Behavioural Belief

- **Risk assessment:** unsure of the precise role in pressure ulcer prevention
- **Repositioning:** does make a difference but rarely recorded in nursing documentation
- **Skin care:** link between incontinence and pressure ulceration but not everyone has a continence management program




Behavioural Belief

- **Pressure redistribution equipment:** has an important role to play but unsure of the best buy
- **Nutrition:** important in pressure ulcer prevention but not always in the control of the individual



Attitude


- Demonstrated a positive attitude (median = 40, range 28-50)
- 40% felt that prevalence rates were decreasing
- 41% felt that pressure ulcer prevention is time consuming
- 51% felt that pressure ulcer prevention is a low priority
- 21% admitted to being less interested in pressure ulcer prevention than other aspects of nursing care



But!!!!!!


- Incidence UK; 2.2% - 66%
- Incidence USA & Canada; 0% - 65.6%
- National Incidence USA; 1999-2004 8% - 7%
- Incidence Turkey; 2007 – 1.6%

(Kaltenthaler et al, 2001; NPUAP, 2001; Whittington & Briones, 2004; Leblebici et al, 2007)



Behaviour


- 93% indicated that they carried out pressure ulcer prevention
- Not all patients at risk would have a prevention care plan
- Where care plans existed, 21% said this would be updated only when the nurse remembered to



So???

- Attitude does not seem to be linked to behaviour
- Less than 10% of those at risk are receiving adequate pressure ulcer prevention interventions

(EPUAP, 2002)



Knowledge

Behavioural Control?

- Nurses not always sure of the best methods of pressure ulcer prevention
- Many cannot access, read or understand research


(Panagiotopoulou & Kerr, 2002)



Education & Training

- 76% qualified for 2-10 years
- 67% no formal training in pressure ulcer prevention & management since qualifying
- 85% of pre-registration education is one lecture of approximately 1 hour
- Most of post registration education is in house education

(Moore & Price, 2004; Strapp & Cowman 2007)



Knowledge

Behavioural Control?

- Nurses with higher education have better knowledge
- Nurses with specific education in pressure ulcer care more knowledgeable
- Taking part in research also improved knowledge implementation

(Pancorbo-Hidalgo et al, 2007)



Knowledge

Importance of Education?

- 460 nurses
- Certified in wound care/ certified in other specialities/ no certification
- Pieper pressure ulcer knowledge tool
- Certification significantly affected knowledge (89% vs. 76.5%)


Zulkowski *et al.*, (2007) *Advances in skin and wound care.* 20(1):34-38



Knowledge

However, not implemented in practice


- Bostrom & Kenneth (1992)
- Hill (1992)
- Russell (1996)
- Maylor (1999)
- Halfens & Eggink (1995)
- Tolmie (2000)



Results - Barriers

Control Beliefs


- The patient
- Lack of time
- Lack of staff
- Lack of training, education, resources and guidelines were rarely cited as barriers



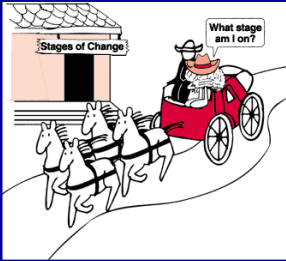
Barriers

Control Beliefs

- Ability linked to more positive attitude (Ehrenfeld & Eckerling (1991))
- Availability linked to use of interventions (Champion & Leach 1989)
- Organisational Culture (Funk et al, 1995; Omery & Williams 1999; Parahoo 2000; Royle et al, 2000)



Change



Prochaska & Di Clemente (1984)

The
Transtheoretical
Model and Stages
of Change



Self liberation


Behavioural Control?

- Ability to choose
- Need to have more than one alternative
- Need to take responsibility for choice




How does this fit?

Pre-Contemplation	Contemplation	Determination/Preparation	Action	Maintenance	Relapse/Recycle
	 Fence				
No: Denial	Maybe: Ambivalence	0-3 Months Yes, Let's Go: Motivated	3-6 Months Doing It: Go	Over 6 months Living It	Ugh!!



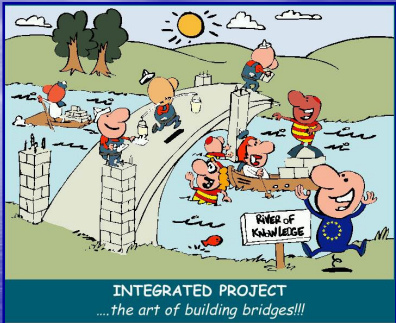
Change

- Are accountable for actions in pressure ulcer prevention
- Fear of change due to a lack of knowledge or opportunity to implement findings into practice
- Need to be provided with the means, through both good guidelines and cost effective strategies & corporate input



Conclusion

- Pressure ulcer prevention remains a challenge in clinical practice
- It is not just a matter of education & training
- Investment is needed into overcoming the barriers to change
- Pressure ulcer prevention needs to be an integral component of the strategic policy of institutions & health care as a whole



INTEGRATED PROJECT
...the art of building bridges!!!


Building Bridges



Remember




Pressure Ulcer Prevention – the role of knowledge, attitudes and behaviour



Zena Moore
RGN, MSc, FFNMRCSI

Health Research Board of Ireland
Clinical Nursing & Midwifery
Research Fellow, RCSI, Dublin 2,
Ireland.



Honorary Secretary EWMA & Chair
Education Group