

# National Institute of Health Sciences Research Bulletin

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- Use of a Mobility Clinical Indicator following Major Abdominal Surgery and Does it Affect Length of Stay?
- Ilizarov Technique in Maxillary Alveolar Distraction: A Report of Three Patients
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# Research Bulletin

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# Clinical Research

## Medical

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<b>AUTHORS</b>	<i>Tobin, E., Iqbal, M., McDonnell, C., Monaghan, R., Powell, J., Skelly, M.M. Mid-Western Regional Hospital, Limerick</i>
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### INTRODUCTION

HBV infection is increasing in Ireland. Most tests for HBV in the Mid-West are analysed in our institution.

### OBJECTIVE

The objective of this study was to ascertain the number of HBV infections, the extent of patients' assessment and their contact with gastroenterology services.

### METHODOLOGY

The study population (Hepatitis B surface antigen positive (HBsAg +)) was identified from the laboratory database. Data was collated regarding HB core IgM, e Antigen, HBV DNA, Hep C and HIV status, LFTs and attendance at Gastroenterology (GI) Clinic.

### RESULTS

167 individuals had 229 positive HBsAg tests from January 2005 to June 2007.

5 acute HBV infections were excluded. 66 males and 95 females (age range, 1 to 78 years, median 29). 46% of women were detected at antenatal assessment. 42 patients were detected by STD services. 11 of 119 people (9%) had names typically Irish in origin. 149 of 162 were tested for HBeAg, 26 were HBeAg (+).

26 of 162 were tested for HBV DNA, 5 (19%) had  $> 10^5$  copies/ml, 5 people (19%) with detectable HBV DNA were HBeAg (+). 119 and 121 patients were tested for HCV and HIV respectively, 2 (1%) and 5 (3%) were positive respectively. 118 (73%) had LFTs checked, 16 (14%) were abnormal. 35 patients were scheduled for liver US; 54% were normal, 15% were abnormal (1 hepatoma) and 24% didn't attend. 15 of 162 (9%) with chronic HBV infection were referred to the GI clinic.

### CONCLUSION

Most patients with HBV are inadequately assessed. GI services need to expand and educate healthcare providers and patients about HBV.

### PRESENTED

As a poster at the Irish Society of Gastroenterology Annual Meeting in Clontarf Castle, Dublin on November 29<sup>th</sup> and 30<sup>th</sup>, 2007.



# Clinical Research

## Medical

TITLE	The Preference for Outpatient Clinic Appointment Reminders among Rheumatology Patients
AUTHORS	O'Connor, M.B., <sup>1</sup> Bond, U., <sup>2</sup> Saunders, J.A., <sup>3</sup> Casey, P., <sup>2</sup> Mohammad, A., <sup>2</sup> O'Dwyer, M., <sup>1</sup> Daly, N., <sup>4</sup> Regan, M.J., <sup>2</sup> Phelan, M.J. <sup>2</sup> Department of Medicine, South Infirmary - Victoria University Hospital, Cork Arthritis and Osteoporosis Centre, Department of Rheumatology, South Infirmary - Victoria University Hospital, Cork Department of Mathematics and Statistics, University of Limerick Department of Medicine, Mid-Western Regional Hospital, Limerick

### INTRODUCTION

Many patients do not attend their outpatient clinic appointments for one reason or another. This has many implications both for patients and the services involved. Patient care can be suboptimal and services face financial implications. Clinic reminders have been shown to be beneficial in the sexual health services, respiratory medicine services and paediatric immunisation. In this research the needs and preferences of Irish rheumatology patients are examined.

### METHODOLOGY

A cross-sectional self-administered anonymous questionnaire was administered to 166 patients attending Rheumatology - General Internal Medicine clinics at the South Infirmary-Victoria University Hospital, Cork, Ireland. Patients were recruited between September and October 2007. Consent was obtained.

### RESULTS

The response rate was 98% (163/166). 33% were male and 67% female, with a mean age of 56 years.

**Table A - Some Study Findings for Return Patients**

		% ( n-value)
Has access to:	A mobile phone	64% (104)
	E-mail	16% (26)
	Landline telephone	94% (153)
Views clinic reminders as a good idea		96% (157)
Preferred type of reminder:	Text/SMS message	45% (71)
	Telephone call	26% (42)
	Letter	25% (39)
Time of reminder before clinic:	1 – 2 days	6% (10)
	3 – 4 days	20% (32)
	5 – 7 days	70% (112)



## CONCLUSIONS

A large proportion of clinic attendees view outpatient clinic appointment reminders as a good idea.

Text/SMS messaging is the most preferred method of reminder, with males preferring their text/SMS reminder < 5 days prior to the clinic and females 5-7 days prior. Older patients prefer a telephone call or postal letter reminders.

A pilot into the use of text/SMS messages as patient outpatient clinic appointment reminders would be beneficial.

## PRESENTED

As a poster presentation at the 2nd UCC/Cork University Teaching Hospitals Research Day in University College Cork on June 6<sup>th</sup>, 2008.

# Clinical Research

## Medical

<b>TITLE</b>	<b>A Low Budget Pulmonary Rehabilitation Programme may Improve Health Outcomes in COPD Patients</b>
<b>AUTHORS</b>	<i>Hussain, M., Rahman, M., Stephens, N., Curtis, S., Kavanagh, F., Morrin, S., Power J. Department of Respiratory Medicine, Naas General Hospital, Co. Kildare</i>

### ABSTRACT

Different studies have already demonstrated the benefits of a pulmonary rehabilitation programme (PRP) for patients with chronic obstructive pulmonary diseases (COPD).

This study aimed to establish a low budget comprehensive outpatient PRP in Naas General Hospital, a district General Hospital serving a population of 300,000 approximately.

Patients who failed to progress adequately (FEV1 <60%) despite optimum medical treatment were recruited prospectively from the respiratory clinic after review by a consultant physician. Those with severe heart failure and other significant co-morbidity that could impair exercise capacity were excluded.

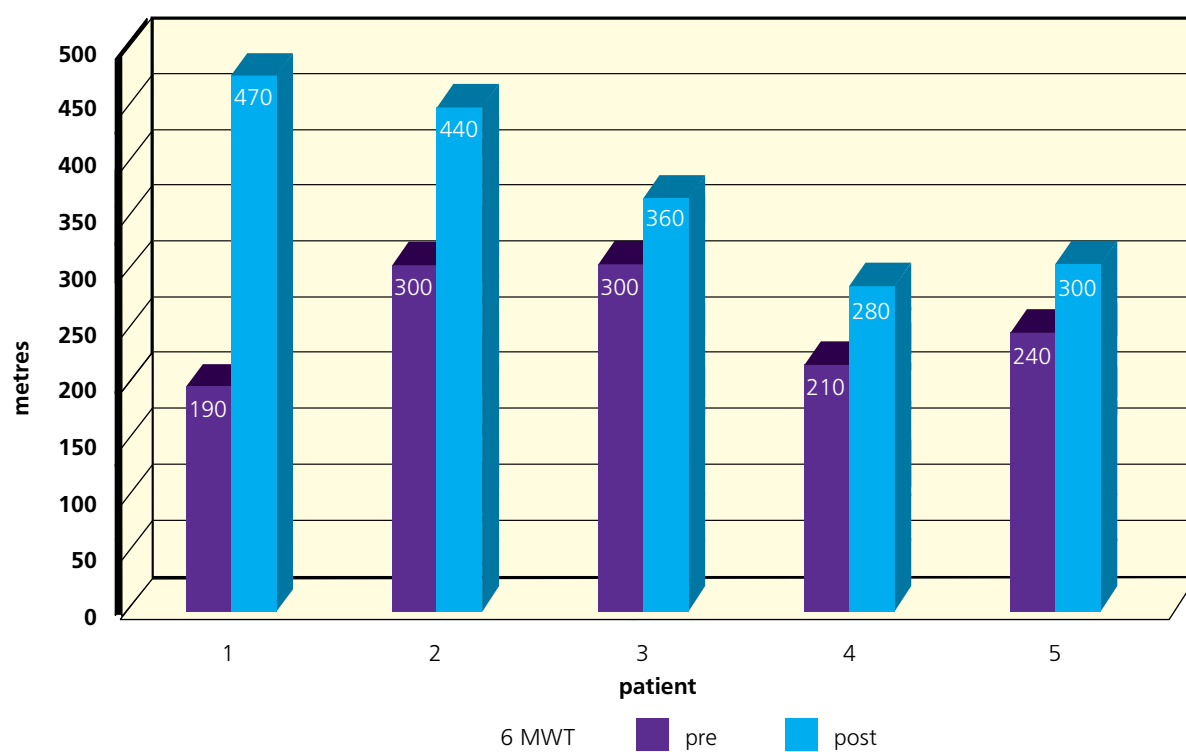
The programme involved one week of pre-assessment with Spirometry (FEV1,FVC), ECG, Quality of Life assessment with validated Questionnaire (St.George's Respiratory Questionnaire/SGRQ and Chronic Respiratory Diseases Questionnaire/CRDQ), Exercise Tolerance Tests with 6 minute walk test (6 MWT) and 3 minute step test (3 MST) (30 cm steps), and interview to assess individual needs and goal. Thereafter, a 6 week programme of graded exercise that was individually tailored and supervised was carried out in the physiotherapy department with twice weekly sessions. Each session consisted of one hour of exercise followed by one hour of education from a multidisciplinary team involving a respiratory nurse, a physiotherapist, a dietitian, a pharmacist, a social worker, an occupational therapist, a psychologist and a health promotion officer.

Patients were reassessed the week after completion of exercise with the same criteria used in baseline and changes were recorded. All of the patients were followed up for 12 months, initially with weekly a telephone call and thereafter a monthly review with a one hour exercise class. Public health nurses were contacted to monitor and encourage home exercise. Pre and post-programme hospital admissions were recorded from medical notes. Results were analysed with Microsoft Excel ME edition.

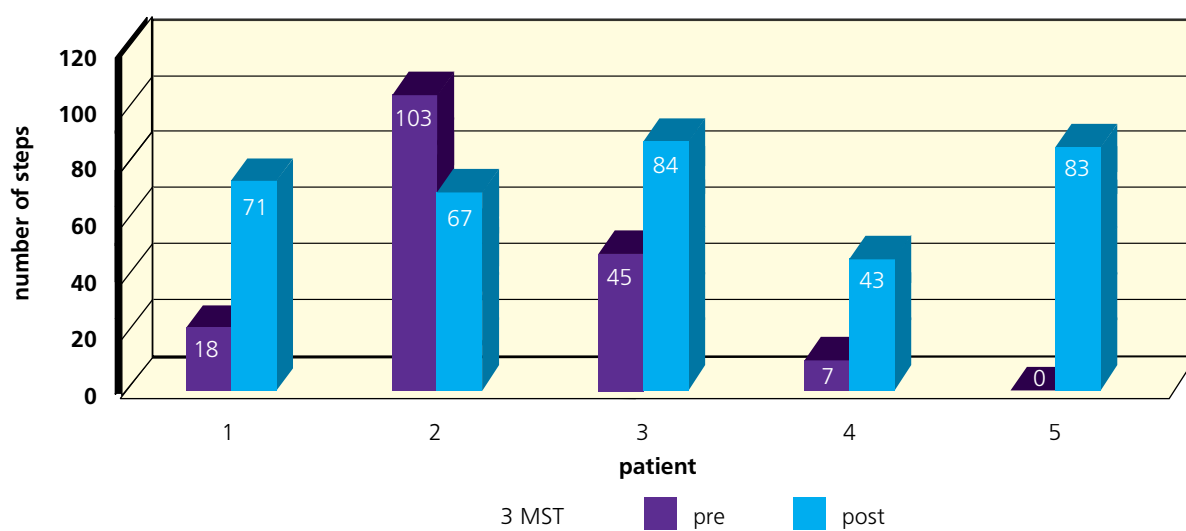
Of the initial 6 patients, 1 was withdrawn from the study following an exacerbation. Out of the 5 remaining patients, Female to Male ratio was 3:2 and mean age was 73.2 years (range 57-85). Mean increase in FVC was 6.9%. Increase in FEV1 range was 4-5.2% and FEV1/FVC ratio range was 7-36% respectively. A significant improvement in exercise tolerance was evidenced by 6 MWT (mean increase 142 meters, Figure 1) and 3 MST (Figure 2).



**Figure 1 - 6 Minute Walk Test Scores**



**Figure 2 - 3 Minute Step Test Scores**





The average increase of isometric hand strength for right and left hand was 3.8 and 5.2 respectively.

A significant improvement in quality of life was also observed by SGRQ (Table 1) and CRDQ (Table 2).

**Table 1 - Mean Change in SGRQ Values**

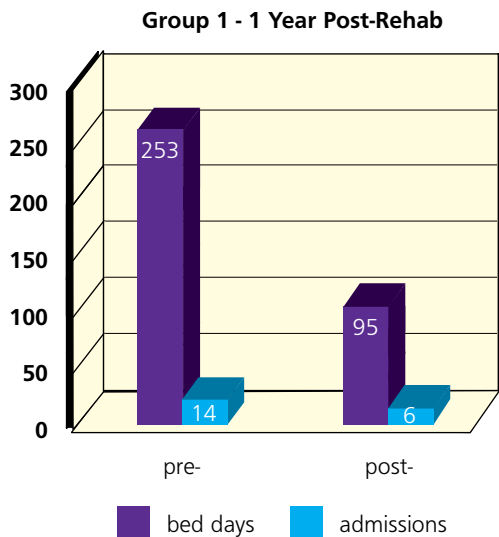
Symptoms	Activity	Impacts	Total
↓ 20.4	↓ 13.06	↓ 22.58	↓ 24.28
Clinically significant values / negative value means better outcome.			
↓ 4	↓ 4	↓ 4	↓ 4

**Table 2 - Mean Changes in CRDQ Values**

Dyspnoea	Fatigue	Emotional Function	Mastery
↑ 4.6	↑ 4.4	↑ 1.4	↑ 2.6
Clinically significant values / positive value means better outcome.			
↑ 2.5	↑ 2	↑ 3.5	↑ 2

Hospital admissions and mean length of stay 1 year pre-programme and 1 year post-programme were also reduced (Figure 3).

**Figure 3 - Comparison of Hospital Admissions**







The total amount of visible cost incurred was €1,320 euros for transportation of 3 patients (2 patients used their own transport).

This study showed a low budget out-patient PRP improved exercise tolerance and quality of life in COPD patients. This could have significant financial benefits for the already constrained health system of Ireland. Further studies are already in progress.

## REFERENCES

Available on request.

## PRESENTED

As a poster presentation at The Irish Thoracic Society Annual Scientific Meeting in Dublin, November 9<sup>th</sup> to 10<sup>th</sup>, 2007.

## SOURCE

Irish Journal of Medical Science. 2007 Nov;176 Suppl 10:S425.



# Clinical Research

## Medical

<b>TITLE</b>	<b>A Study of Needle Stick Injuries among Non-Consultant Hospital Doctors (NCHDs) in Ireland</b>
<b>AUTHORS</b>	<p>O'Connor, M.B.,<sup>1</sup> Hannon, M.J.,<sup>2</sup> Cagney, D.,<sup>3</sup> Harrington, U.,<sup>4</sup>  O'Brien, F.,<sup>5</sup> Hardiman, N.,<sup>5</sup> O'Connor, R.,<sup>5</sup> Courtney, K.,<sup>6</sup> O'Connor, C.<sup>7</sup>  Department of Surgery, Cork University Hospital<sup>1</sup>  Department of Medicine, Cork University Hospital<sup>2</sup>  Department of Surgery, Mercy University Hospital, Cork<sup>3</sup>  Department of Surgery, South Infirmary – Victoria University Hospital, Cork<sup>4</sup>  Department of Surgery, Mid-Western Regional Hospital, Limerick<sup>5</sup>  Department of Surgery, Bon Secours Hospital, Cork<sup>6</sup>  Department of GU/STD Medicine, Mid-Western Regional Hospital, Limerick<sup>7</sup></p>

### ABSTRACT

In a time of increasing blood borne infection prevalence and global travelling, Non-Consultant Hospital Doctors (NCHDs) are being exposed to a greater number and wider variation of blood borne infections. Needle stick injuries (NIs) are possibly the main route of acquiring such infections from the perspective of an NCHD. This study examines NCHDs' experiences surrounding NIs, blood/needle handling training received, infection fears and NCHD demographics. A cross-sectional self-administered anonymous questionnaire survey was conducted on 185 NCHDs working in a clinical setting among 7 teaching hospitals in Ireland. Implied consent was obtained. The data was analysed using Excel spreadsheets. Ethical approval was received. A response rate of 85.4% (158/185) was achieved.

**Table A - Findings of the Study**

	Medical	Surgical	Total
<b>n</b>	<b>91 (58%)</b>	<b>67 (42%)</b>	<b>158 (100%)</b>
<b>Male Sex</b>	49 (54%)	36 (54%)	85 (54%)
<b>Mean Age (Range)</b>	28.2 (22 – 46)	27.3 (22 – 47)	27.7 (22 – 47)
<b>Grade: Intern</b>	31 (34%)	42 (63%)	73 (46%)
<b>SHO</b>	38 (42%)	15 (22%)	53 (33%)
<b>Registrar</b>	22 (24%)	10 (15%)	32 (20%)
<b>Past NI</b>	45 (49.5%)	47 (70%)	92 (58%)
<b>Mean number of NIs (range)</b>	2.4 (1 – 10)	2.77 (1 – 13)	2.7 (1 – 13)
<b>Venopuncture NI</b>	23 (51%)	20 (43%)	43 (47%)
<b>Recapping NI</b>	4 (9%)	13 (28%)	17 (18%)
<b>Always wear gloves</b>	29 (32%)	20 (30%)	49 (31%)
<b>Sharps handling training</b>	39 (43%)	40 (60%)	79 (50%)
<b>Report NI reporting training</b>	48 (53%)	35 (52%)	83 (53%)
<b>Infection most feared from NI: HIV</b>	53 (58%)	42 (63%)	95 (60%)
<b>HBV</b>	10 (11%)	8 (12%)	18 (11%)
<b>HCV</b>	28 (31%)	16 (24%)	44 (28%)

NCHD = Non-Consultant Hospital Doctor. SHO = Senior House Officer.

NI = Needle Stick Injury. HIV = Human Immunodeficiency Virus.

HBV = Hepatitis B Virus. HCV = Hepatitis C Virus.



A NI history is greater among surgical NCHDs than among medical NCHDs.

The level of disposable glove usage is worryingly poor. Training in sharps handling and in dealing with an NI needs to be addressed. HIV is the blood borne infection most feared of being contracted as a consequence of an NI.

### PRESENTED

1. As a poster presentation at 14<sup>th</sup> Annual Conference of the British HIV Association in Belfast, Northern Ireland, April 23<sup>rd</sup> to 25<sup>th</sup>, 2008.
2. As a poster presentation at the 15<sup>th</sup> International Symposium on HIV and Emerging Infectious Diseases in Toulon, France from May 28<sup>th</sup> to 30<sup>th</sup>, 2008.

### SOURCE

HIV Medicine. 2008 May;9(S1):46.

# Clinical Research

## Medical

<b>TITLE</b>	<b>An Audit on In-Patient Initiation of Warfarin Therapy</b>
<b>AUTHORS</b>	<i>Mohamed, A., Sohail, A., Hamid, E. Naas General Hospital, Co. Kildare</i>

### INTRODUCTION

The use of warfarin has increased significantly in the last few decades due to an increasing prevalence of Atrial Fibrillation (AF) and thromboembolic diseases. The safe and effective maintenance dose of warfarin differs considerably between individuals. Also, warfarin has a narrow therapeutic window and carries potential life threatening complications. These problems are very true on initiation of anticoagulation therapy. National and local guidelines<sup>1, 2, 3, 4, 5</sup> have been developed to ensure that the effective maintenance dose is reached within a reasonable time. However, several audits and reviews revealed shortcomings in several aspects of initiation of warfarin therapy.<sup>6, 7, 8, 9, 10</sup>

### OBJECTIVES

The main aim is to assess the compliance of prescribing doctors with a local guide.<sup>5</sup> Other objectives are to calculate the average number of days needed to attain both therapeutic and stable International Standardised Ratios (INRs) and the incidence of over-anticoagulation (INR>4).

### METHODOLOGY

This study took place in Naas General Hospital, Co. Kildare and involved medical in-patients. It is a prospective audit including patients initiated on warfarin from November 2006 to the end of March 2007. Patients were identified from the anticoagulation referral book (a referral form to the hospital anticoagulation clinic). Patients' demographics, medical background, medications and indications for anticoagulation were reviewed. Actual dosing is compared to the protocol suggested doses.

### RESULTS

Day 1 and Day 3 INR tests, which are very crucial to loading doses, were done in only 73% and 47% of patients respectively. 67% of patients with Venous Thromboembolism (VTE) and 55% of those with AF had their loading doses as recommended by the guideline. Therapeutic INR was achieved in 40% of patients on Day 4, 53% by Day 5 and 67% by Day 6. The percentage of patients achieving a stable INR (defined as therapeutic INR for 2 consecutive days, was 27% by Day 5, 43% by Day 6, 53% by Day 7 and 60% by Day 8. Post Day 3 discordance between actual and protocol doses, taken as > 1 mg deviation from the protocol doses, was significant.



## CONCLUSION

Overall compliance with the protocol for in-patient initiation of warfarin therapy is poor both for loading and post-loading doses. To ensure full compliance INR testing especially on Day 1 and Day 3 is mandatory. Post Day 3 INR results should be used efficiently in adjusting warfarin doses as recommended by the guide.

It is recommended that there should be full compliance with the protocol and that any significant deviations should be justified to ensure safe effective and cost-effective in-hospital warfarinization. Such compliance, obviously helps to assess the performance of this protocol. It is also recommended that a re-audit should occur after 4 months.

## REFERENCES

Available on request.



# Clinical Research

## Palliative Medicine

<b>TITLE</b>	<b>Staff Nurses' Experience of Providing Palliative Care for Elderly Patients in Hospital</b>
<b>AUTHORS</b>	<i>Trimble, B. Practice Development, Milford Care Centre, Limerick</i>

### INTRODUCTION

The provision of effective terminal care in hospital has been compounded by a number of demographic and health related trends. An increase in the older population, advancements in medical and pharmaceutical technology, socio-economic changes and the dispersing, disintegrating family along with a higher percentage of chronic diseases have contributed to an increased proportion of elderly dying in hospital.<sup>1</sup> Given the increasing older population and a growing recognition that non-malignant diseases require periods of palliation, it is envisioned there will be rising numbers of patients in hospital wards in need of palliative care.

Mc Donnell et al<sup>2</sup> claim that nurses are the healthcare professionals dying patients have the most contact with. However, a number of studies conducted outside of Ireland reveal a number of challenges facing nurses when caring for dying patients in hospital which consequently contribute to an insufficient level of care being provided. There have been no research studies conducted within the Irish HSE that can support or rebuke the above statement. This has prompted the need for this research to be undertaken.

### OBJECTIVE

The aim of the study was to gain a deeper understanding of the nurse's experience in providing palliative care to elderly patients in an Irish hospital.

### METHODOLOGY

A qualitative design using the phenomenological approach of Husserl<sup>3</sup> was chosen to enable the exploration of nurses' experience in providing palliative care to elderly patients and to give meaning and insight into those experiences. Individual, unstructured, tape recorded interviews with n=6 nurses, who had experience of working with dying older people in an acute hospital were conducted. The interviews were tape recorded and data analysis was conducted using the Colaizzi<sup>4</sup> method of thematic analysis.

### RESULTS

Findings revealed some similarities to previous studies. Several nurses felt ill equipped to fully provide palliative care in hospital due to:-

1. Lack of time and resources
2. Lack of specialist knowledge and education
3. Insufficient medical team support



### **New findings from this study:-**

1. Good communication exists between nurse and patient although communication was poor between members of the multidisciplinary team in relation to diagnosis
2. There is a need for palliative care teams to be more involved in the care of patients with non-malignant, chronic conditions
3. Considerable consideration is given to families in the dying process
4. There is a lack of support in the community care services for patients who wish to die at home
5. Religious support is a vital factor for nurses when caring for dying patients, although nurses are not confident in providing end of life care for non-catholic patients

### **CONCLUSIONS**

In this study, nurses outline several challenges in caring for dying patients in hospital. The need for education in palliative care and improved clinical support are stressed if the recommended level of palliative care is to be provided to elderly patients in the hospital environment. This study has added to our knowledge on the provision of palliative care in Ireland and will assist the future direction of education, research and practice in palliative care. Nurse Educators, Curriculum Developers, Heads of Department, Clinical Managers and Practitioners must acknowledge and take heed of the above experiences when planning future care for dying elderly patients in hospital and when deciding on the educational needs of nurses so that a high standard of palliative care can be delivered. Future research needs to include male nurses' experiences and also the experience of nurses of a different religious background. A review of the current nursing educational curriculum needs to address the issue on whether there is adequate provision given to palliative education pre and post-nurse registration.

### **REFERENCES**

Available on request.

### **PRESENTED**

1. At the 8<sup>th</sup> Annual Research Conference in Trinity College Dublin on November 8<sup>th</sup>, 2007 by Breda Trimble.
2. As a poster presentation at The National Council Practice Development Association Conference in the Galway Bay Hotel on March 22<sup>nd</sup>, 2007.

*This research is currently awaiting publication.*



# Clinical Research

## Palliative Medicine

<b>TITLE</b>	<b>Tackling Barriers to Palliative Care - A Health Promoting Approach</b>
<b>AUTHORS</b>	<i>McLoughlin, K.,<sup>1,2</sup> McGilloway, S.<sup>2</sup></i> <i>Department of Education, Research and Professional Development, Milford Care Centre, Limerick<sup>1</sup></i> <i>Department of Psychology, National University of Ireland, Maynooth<sup>2</sup></i>

### INTRODUCTION

A recent World Health Organisation report<sup>1</sup> highlighted an urgent need for research on barriers to accessing palliative care as well as, amongst other things, the psychological aspects of such care. The small number of studies conducted, to date, support this view. For example, it has been shown that referral to palliative care services can often evoke reactions of fear and stigma, both in patients and health professionals and that this may threaten the traditional hospice model of palliative care.<sup>2,3</sup>

### OBJECTIVE

**This study has two principal aims:-**

1. To examine and compare the attitudes and personal constructs of patients receiving palliative care services with a number of other key patient, carer and health professional groups.
2. To subsequently design, implement and evaluate a pilot health education programme that focuses on the health promoting benefits of palliative care and which will target cancer patients not receiving palliative care and also health professionals. This will attempt to address any negative attitudes or constructs relating to issues of palliative care and death/dying.

### METHODOLOGY

This research involves two phases in line with each of the above principal aims. Phase One of the study, involving a health professional postal survey and a series of patient and carer interviews, is almost complete. The postal questionnaire, the Health Professional Attitudes Questionnaire (HPAQ), was administered to a purposive sample of Irish health professionals (n=700) across a range of disciplines. Interviews with 25 participants from each of the following groups are also in progress:-

1. Patients receiving palliative care
2. Carers of these patients
3. Cancer patients not yet referred to palliative care services

**The interviews aim to:-**

1. Identify attitudes toward palliative care using both quantitative and, (for a considerably smaller sub-sample), qualitative techniques.
2. Allow for an examination and comparative analysis of the personal constructs of a reduced sub-sample of participant representatives across each of the above groups (n=20) using the Repertory Grid Technique.<sup>4</sup>



The personal constructs of these participants in relation to palliative care will be analysed with a particular emphasis on those relating to fear and stigma. All participants will also be asked to complete a short Background Questionnaire (including information on religiosity). In addition, both patient groups (n=50) will be invited to complete the Quality of Life Patient/Cancer Survivor Version (QOL-CS)<sup>5</sup> and the Fear Subscale of the Death Attitude Profile-Revised.<sup>6</sup>

## RESULTS

The survey findings revealed considerable variation in respondents' (n=182) knowledge of service availability and training received. Attitudes toward palliative care were significantly associated with age and training and different health professional groupings also differed in their attitudes to some HPAQ items. Responses to the open-ended questions revealed high levels of fear and stigma associated with palliative care. A principal component analysis of the data revealed a five factor solution, explaining approximately 36% of the variance in attitudinal scores. From the interviews, it is hypothesised that fear and stigma will emerge as key attitudes and constructs in relation to palliative care especially amongst cancer patients (i.e. who are not receiving palliative care).

The results of Phase One will be used during Phase Two to inform the development of a pilot health education programme aimed at reducing fear and stigma and addressing (where appropriate) other emergent psycho-oncological issues. This will incorporate two elements aimed at cancer patients not in receipt of palliative care and health professionals respectively (n  $\cong$  15 per group). Two matched comparator groups (i.e. who do not receive the programme) will also be included. A health-promoting framework will be considered when designing the programme, but it is anticipated that death and dying will also be covered extensively. The programme will be modelled on earlier work undertaken in Australia by Allan Kellehear<sup>7</sup> but informed by collaboration with HSE management and key personnel including relevant health professionals and service providers. Phase Two will also include a brief comparative pilot evaluation of the programme within the context of a prospective follow-up design (baseline and post-programme) and incorporating some of the measures used in Phase One as well as an evaluation questionnaire and a small number of one-to-one interviews.

Participants will be recruited as far as possible from Phase One of the study. It is hoped that the findings of both stages of the study will be used to inform the development of palliative care policies and practices within Ireland and elsewhere.

## REFERENCES

Available on request.



## PRESENTED

1. At "The Journey to End of Life Care: More than a Dead End", Science Speak Regional Final at NUI Maynooth on April 4<sup>th</sup>, 2008 by Kathleen McLoughlin and Sinéad McGilloway. (3<sup>rd</sup> Prize Winner).
2. As a poster presentation at "Working to Improve Palliative Care and End of Life Care: Challenging the Attitudes of Health Care Professionals", European Association of Palliative Care Conference, Budapest from June 6<sup>th</sup> to 9<sup>th</sup>, 2007.
3. At "Just an Extra Bit of TLC? Exploring the Attitudes of Health Professionals Toward Palliative Care", Psychology, Health and Medicine Conference in NUI Maynooth on April 13<sup>th</sup>, 2007 by Kathleen McLoughlin and Sinéad McGilloway.
4. At "The Attitudes of Health Professionals Toward Palliative Care: an Irish Perspective", Irish Association of Palliative Care Education and Research Seminar, Dublin Castle on February 1<sup>st</sup>, 2007 by Kathleen McLoughlin and Sinéad McGilloway.
5. At "The Fear and Stigma of Palliative Care: Personal Construct Psychology Meets Health Promotion", Psychological Society of Ireland Annual Conference, Galway, in November 2006 by Kathleen McLoughlin and Sinéad McGilloway.

## FUNDED

This research has been funded by the Health Research Board and the Irish Hospice Foundation under the 2005 "Building Partnerships for a Healthier Society Research Awards Scheme."



# Clinical Research

## Surgical

<b>TITLE</b>	<b>Review of Thyroid Malignancy in the Mid-Western Regional Hospital, Limerick over a 10 Year Period (1997-2007)</b>
<b>AUTHORS</b>	<i>Archer, E., Manning, K., Leonard, D., Ahmed, I., Hughes, J., Fenton, J.E. Department of Otolaryngology/Head and Neck Surgery, Mid-Western Regional Hospital, Limerick</i>

### OBJECTIVES

Previous reports suggest that the incidence of thyroid carcinoma in Ireland is atypical. This study reviewed the thyroid cancers managed at the Mid-Western Regional Hospital over the period 1997-2007 and compared it with results of recent studies.

### METHODOLOGY

A review of all thyroid surgeries performed at the Mid-Western Regional Hospital was undertaken. The cases of thyroid cancer diagnosed from 1997-2007 were identified from the Mid-Western Regional Hospital Histopathology Department database. Cases of thyroid malignancy were analysed for demographic variables, clinical presentation, pre-op investigations, management and pathology.

### RESULTS

Of the 333 thyroid surgeries performed at the Mid-Western Regional Hospital over this time period, 29 patients were diagnosed with thyroid malignancies. Thyroid malignancy predominated in the female population with papillary cell carcinoma being the most prevalent histological sub-type. 8.7% of patients in this study were found to have thyroid cancer. 7.2% of thyroid nodules were found to be malignant thyroid cancer. Fine-Needle Aspiration Cytology (FNAC) proved diagnostic in 42% of cases, though 15.8% were misleading and 42% warranted repeat sampling. Radioactive Iodine (RAI) was administered in 80% of patients with follicular carcinoma and 71% of patients with papillary cell carcinoma. 16% of patients who underwent total/near total thyroidectomies did so for thyroid cancer.

### CONCLUSION

In our practice fewer than 10% of resected thyroid specimens were malignant which was lower than found in previous studies. 48% of patients with thyroid malignancy had papillary cell carcinoma which was 10% higher than previous studies. In addition, follicular cell carcinoma accounted for only 17% of thyroid malignancies identified which was much lower than previous studies from a similar region. Hence, the overall incidence and distribution of pathologies seems to be undergoing a metamorphosis at present.

### PRESENTED

At the Irish Otolaryngology/Head and Neck Society Meeting in Adare, Co. Limerick on October 5<sup>th</sup>, 2007 by Dr. Esther Archer.



# Clinical Research

## Surgical

<b>TITLE</b>	<b>Validity of Coagulation Screening in General Surgical Patients</b>
<b>AUTHORS</b>	<i>Lal, K., Ahmed, M., Whooley, P.J., Jude, U., Tadg, K., Eldin, M., Mc Mullin, Clinton, O. Department of Surgery, Roscommon County Hospital</i>

### INTRODUCTION

The Health Service Executive (HSE) is currently under enormous financial strain. This prospective study was carried out to monitor the indiscriminate practice of performing coagulation tests. This has raised the question whether routine coagulation screening is necessary in general surgery.

### METHODOLOGY

The study was structured on a random sample of 100 consecutive patients who were admitted in July 2007. The results of 4 standard coagulation tests, the prothrombin time (PT), activated partial thromboplastin time (APTT), international normalized ratio (INR) and fibrin degradation product (FDP) were prospectively analysed with each patient's history, clinical data and laboratory feedback.

### RESULTS

The coagulation results of 100 patients were reviewed in this study (51 female, 49 male). The age range was 15-94 years (median 56.1). There was no history of liver disease (0%) or no bleeding disorder in any patient (0%). In 76 patients the PT, APTT and FDP were fractionally raised and of no clinical significance. The test was normal in 17.7 patients who were on warfarin (INR between 1.1-3.9). The results of coagulation tests are summarized in Table 1.

**Table 1 - Coagulation Results**

Abnormal APTT, INR, FDP	6
Abnormal INR, FDP	16
Abnormal PT, INR	2
Abnormal APTT, FDP	3
All Raised	4
Increased INR	10
Increased FDP	38
Normal	17
Raised PT, INR, FDP	4
<b>Total =</b>	<b>100</b>



The indication for coagulation screening is liver disease, warfarin therapy, consumptive coagulopathy, severe bleeding, massive blood transfusion, Vitamin K deficiency, disseminated intravascular coagulation and uterine disorders etc.

## CONCLUSION

This study concludes that coagulation tests should not be performed routinely. The cost per test including phlebotomy is calculated as €1.20, PT €2.99, APTT €2.59, giving a total of €6.78 per test. (INR & FDP) are calculated mathematically from PT. On an average daily basis our laboratory receives 40 coagulation requests from the surgical, medical and casualty departments and the calculated cumulative annual cost is €97,632. This represents only the tip of the iceberg in terms of resource wastage and this indicates the imminent need to audit other key areas in the health system.





# Clinical Research

## Surgical

<b>TITLE</b>	<b>Patient-Controlled Sedation using Propofol and Fentanyl during Colonoscopy to Facilitate Pain Tolerance and Caecal Intubation Rate</b>
<b>AUTHORS</b>	<i>Lal, K., Ughovwa, J., Wasi, M., Eldin, M., McMullin, L., Rao, V., Clinton, O. Department of Surgery, Roscommon County Hospital</i>

### OBJECTIVE

Patient-controlled sedation (propofol & fentanyl) has been found useful in facilitating the patient's pain tolerance and caecal intubation rate.

### METHODOLOGY

The colonoscopies performed in this hospital from July to December 2007 were analysed prospectively from a database collection on the case registration book. The patient-controlled sedation, a mixture of propofol and fentanyl, was delivered intravenously on dose titration basis by means of controlled pump. An anaesthetist remained present throughout the procedure. Bowel preparation was achieved with Klean-Prep.

### RESULTS

A total of 319 colonoscopies were performed during the study period. 4 were left-sided, 15 procedures were abandoned due to suboptimal bowel preparation. In 41 cases caecum was not intubated due to a combination of severe diverticular disease (7), stricture (1), spasm (4), looping of colon (8) and technical difficulties (21). Males made up 149 (46.7%) and females 170 (53.3%). Age range was from 18-91 and the median was 61 years. However, in 259 cases, (82%), the caecal intubation was confirmed on viewing of the appendicular orifice, the triradiate fold or ileocaecal valve. Pain tolerance was almost 100% and none of the procedures were abandoned due to patient intolerance.

**Table 1 - Causes of Incomplete Colonoscopies**

Severe diverticular disease	07
Stricture of colon	01
Colonic spasm	04
Looping of colon	08
Technical difficulties	21
<b>Total</b>	<b>41</b>





Colonoscopies performed by using conventional intravenous midazolam with or without additional administration of pethidine or diazepam have variable completion rates but close to 90% is acceptable. Pain intolerance is a significant factor in the failure of caecal intubation which could be rectified by using patient-controlled sedation (propofol and fentanyl).

## CONCLUSION

Patient-controlled sedation during colonoscopy is an effective, well tolerated mode of sedation which facilitates pain tolerance and colonoscopy completion rate.



# Clinical Research

## Surgical

<b>TITLE</b>	<b>Anterior Tonsillar Pillar Preservation during Tonsillectomy - Is it Futile?</b>
<b>AUTHORS</b>	<i>Glynn, F., O'Neill, P., Manning, K., Fenton, J.E., Hughes, J.P. Dept of Otorhinolaryngology, Mid-Western Regional Hospital, Limerick</i>

### INTRODUCTION

This study examines the effect of leaving as much of the anterior pillar mucosa as possible when performing a tonsillectomy to help with healing and possibly in retaining normal palatal function. It queries whether the technique makes any difference to pillar preservation or what percentage of them resorb? This observation has not been studied previously.

### OBJECTIVES

To measure width of anterior tonsillar pillar post-tonsillectomy and reassess at one month post-surgery to ascertain whether pillar preservation is maintained.

### METHODOLOGY

Patients were enrolled prospectively. At day one post tonsillectomy all patients had both their anterior tonsillar pillar width measured using a graduated laryngeal mirror. All patients were reviewed back in the out-patients at one month post-surgery and the anterior pillar width was again measured using the same method.

### RESULTS

36 patients completed the study. Mean age 22 years, range (15 - 47 years).

Mean tonsillar pillar width at Day 1 post-surgery was 12mm on the right side (range 5mm-16mm) and 10mm on the left (range 6mm-13mm). At 1 month post-surgery, measurement of the anterior tonsillar pillar width was not possible in 32 patients (i.e. all less than 1mm). 3 patients had 2mm pillars and 1 patient had 3mm pillar width.

### CONCLUSION

The anterior tonsillar pillar seen in the immediate days following surgery, does not seem to be preserved to the 1 month post-operative stage.

### PRESENTED

At the Irish Otolaryngology/Head and Neck Society Meeting in Adare, Co. Limerick on October 5<sup>th</sup>, 2007 by Dr. Fergal Glynn.



# Clinical Research

## Surgical

<b>TITLE</b>	<b>Fear of Recurrence and Attendance to Head and Neck Cancer Clinic</b>
<b>AUTHORS</b>	<i>Abdulkarim, A., Sexton, S., Hughes, J., Manning, K., Fenton, J. Department of Otolaryngology, Head and Neck Surgery, Mid-Western Regional Hospital in Limerick</i>

### ABSTRACT

Recurrence risk in head and neck cancer patients is relatively high. Little information exists on patients' concern over the possibility of recurrence and the association of this concern with psychological morbidity and duration of attendance to cancer follow-up clinic.

To assess the fear of recurrence and psychological morbidity in head and neck cancer patients.

A prospective survey design was used consisting of four instruments to be completed by patients before seeing the doctor in the clinic.

Over 80% of the patients expressed concern over the possibility of recurrence at first point of screening post-treatment. This level reduced to 72% at the second point ( $p=0.06$ ). Approximately two-thirds of patients sampled were concerned at both assessment occasions. Psychological morbidity was greatest at 3 months post-treatment. Women were more likely to report anxiety than men 3 months following treatment ( $p<0.05$ ). Patients aged 65 or more were less concerned about recurrence. This effect was significant on both screening occasions ( $P<0.002$ ). The positive association between psychological morbidity and fears of recurrence was significant at both data collection points, with the exception that depression was more independent. Attendance at the cancer follow-up clinic was considered as helpful and reassuring in 85% of all patients screened, and the longer the period of follow-up, the less the patient was concerned about recurrence.

Head and neck cancer patients suffer from a wide range of psychosocial problems which could be decreased by acquiring adequate coping skills and reassurance. A cancer follow-up clinic can play an important role in this process.

### PRESENTED

As an oral presentation at the Head and Neck Surgery session of the Sylvester O'Halloran Surgical Scientific meeting in the University of Limerick on March 1<sup>st</sup>, 2008 by Dr. Ali Abdulkarim.

### SOURCE

Irish Journal of Medical Science. 2008 Feb;177 Suppl 1:S34.

# Clinical Research

## Surgical

**TITLE** Influence of Gender on the Outcome of Laparoscopic Cholecystectomy - A Prospective Study

**AUTHORS** Hussain, A.,<sup>1</sup> Shaikh, F.M.,<sup>2</sup> Philip, B.,<sup>1</sup> Ali, A.,<sup>1</sup> Byrnes, G.,<sup>1</sup>  
O'Ceallaigh, D.,<sup>1</sup> Naqvi, S.A.<sup>1</sup>  
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### INTRODUCTION

Laparoscopic cholecystectomy (LC) has become the gold standard for the treatment of symptomatic gallstone disease. The reported conversion rate to open procedure ranges from 1.5% to 14%. Factors such as age, severe inflammation, concomitant disease and male gender have been shown to affect the rate of conversion. However most of the studies performed are retrospective.

### OBJECTIVE

The aim of our study was to evaluate the influence of gender on the clinical presentation and outcome of LC.

### METHODOLOGY

We prospectively studied 100 consecutive laparoscopic cholecystectomies performed in our institution from March 2005 to September 2006. The male:female ratio was 28:72, with the average age being 54, range (20-79) in the male group and 43, range (19-75) in the female group. All patients underwent a routine biochemical and haematologic work-up, abdominal ultra-sonography, and a four-port cholecystectomy. We specifically recorded the difficulties encountered during the procedure.

### RESULTS

We observed that there were more difficulties encountered in the male group so the significantly higher conversion rate as compared to the females 18% v 4% (pvalue 0.037) There were no bile duct injuries recorded. Table 1, 2 & 3 show some results.

**Table 1 - Reason for Difficulty during Procedure**

	Frequency	Percentage
No Adhesions	60	60
Adhesions	25	25
Large Stones	4	4
Poor Anatomy	10	10
Bleeding	1	1

**Table 2 - Parameters Included in the Study**

	%
Endo-bag Used	36
Drain Used	39
Post-op antibiotic used	50
Pre-op MRCP	15
Pre-op ERCP	19
Post-op ERCP	1
Abnormal CBD calibre	16
H/O Pancreatitis	5

**Table 3 - Conversion to Open Gender Tabulation**

	Female	Male	Percentage
Converted to Open	3	5	8
Laparoscopic	69	23	92
Operative Difficulties	33%	57% (P Value 0.029)	
Conversion in Acute	33%		
Conversion in Elective	6%		

## CONCLUSION

In this small study the male gender was identified as one of the significant factors for severe cholecystitis, difficulties encountered during the procedure, higher conversion rate and higher morbidity after laparoscopic cholecystectomy.

## PRESENTED

As a poster at the Sylvester O'Halloran Surgical Scientific Meeting in the University of Limerick on February 29<sup>th</sup> and March 1<sup>st</sup>, 2008.

# Clinical Research

## Surgical

<b>TITLE</b>	<b>Ilizarov Technique in Maxillary Alveolar Distraction - A Report of Three Patients</b>
<b>AUTHORS</b>	<i>O'Connell, J., Kearns, G. Department of Oral and Maxillofacial Surgery, Mid-Western Regional Hospital, Limerick</i>

### INTRODUCTION

Distraction Osteogenesis (DO) is the process of generating new bone in a gap, created by osteotomy, between two bone segments in response to the application of graduated tensile stress across the gap.<sup>1</sup> A series of experimental and clinical studies<sup>2,3</sup> performed in the 1950's in Western Siberia by the Russian surgeon Ilizarov, advanced the technique. He successfully applied DO to elongate the upper and lower limbs. Uniquely, bone regeneration by DO is accompanied by simultaneous expansion of the functional soft tissue matrix, including blood vessels, nerves, skin, muscle, mucosa, fascia, ligaments, cartilage and periosteum.<sup>4</sup> The application of DO in the maxillofacial complex, as an alternative to orthognathic surgery, began in 1977 with Micheili et al<sup>5</sup> who reported on mandibular elongation in dogs.

DO is now used for vertical augmentation of the alveolar ridge,<sup>6</sup> surgical palatal expansion,<sup>7</sup> anterior advancement in maxillary hypoplasia,<sup>8</sup> correction of congenital facial abnormalities,<sup>9</sup> treating cleft patients,<sup>10</sup> mandibular symphysis elongation<sup>11</sup> and mandibular reconstruction after tumour reconstruction.<sup>12</sup> Chin and Toth<sup>13</sup> described alveolar distraction osteogenesis (ADO) in 1996. This technique is used for increasing alveolar bone where rehabilitation with dental implants is required. Some of the advantages of ADO, compared with the conventional techniques of bone grafting and guided tissue regeneration, are decreased bone resorption, no donor site morbidity and associated soft-tissue regeneration.<sup>14</sup>

### OBJECTIVE

The purpose of this retrospective study was to analyse the outcome of ADO used to treat Anterior Maxillary Atrophy including vertical and horizontal defects, prior to placement of endosseous implants.

### METHODOLOGY

This is a review of 3 patients who underwent ADO at the Oral and Maxillofacial Department, Mid-Western Regional Hospital, Limerick. All patients were male, with a mean age of 34 years (range, 21 to 50 years). All had a diagnosis of anterior maxillary deficiency and loss of associated teeth, secondary to trauma. The absence of alveolar bone, in a horizontal and vertical direction, prevented the placement of endosseous implants used to enhance function and aesthetics.

**All patients were treated using the following protocol:**

- Creation of a three-sided osteotomy in the maxillary alveolus and placement of the distractor under general anaesthesia
- Latency period of 5 days
- Distractor activation at a rate of 1mm per day
- Consolidation phase of 12 weeks



Following consolidation, the distractor was removed. Adequate vertical alveolar height was achieved in all cases. Horizontal bone deficiency was corrected using autogenous bone grafts (1 mandibular symphyseal and 2 iliac crest).

Following bone graft healing of approximately 4 months, all patients underwent placement of dental implants with subsequent restoration of the dentition by their dentist. The mean follow up was 30 months (range, 3 to 36 months).

## CONCLUSION

In patients with severe horizontal or vertical maxillary alveolar atrophy, the combination of Alveolar Distraction to increase vertical bone height and the associated soft tissue envelope followed by horizontal autogenous bone grafting, provides a predictable increase in alveolar bone volume to permit implant placement and restoration of the maxillary dentition.

## REFERENCES

Available on request.





# Clinical Research

## General Practice

<b>TITLE</b>	<b>Antenatal Classes - An Educational Advantage?</b>
<b>AUTHORS</b>	<i>Power, C. Final Year Medical Student, under guidance of Department of General Practice, University College Cork</i>

### INTRODUCTION

The commonest antenatal care in Ireland is "shared care" between GP in the local community with periodic midwife and obstetric input in the hospital setting. With this model, the patient continues her relationship with her local physician while establishing a relationship with the hospital team prior to delivery. This provides improved continuity of care, increased patient satisfaction and more favourable perinatal outcomes.<sup>1</sup>

Undergraduate medical obstetric education provides minimal focus on antenatal care in a normal pregnancy and fails to address the role of antenatal classes in antenatal care. A personal interest in womens' health along with the emergence of a deficiency in antenatal care information encouraged this research project.

### METHODOLOGY

The quality of antenatal classes was assessed using a quantitative written questionnaire. The questionnaire was self-designed and adjusted after piloting. These questionnaires were distributed to 100 women in St. Finbarr's and the Erinvilla maternity hospitals in Cork. The study sample included all women who completed antenatal classes in the above hospitals in the past two years. The results were entered onto a database using the EPI data programme and analysed using the SPSS-PC statistical package.

### RESULTS

In 1999 the WOMB study became the first multidimensional psychometric instrument to be published that specifically measured women's satisfaction with their antenatal care.<sup>2</sup> This study used a validated questionnaire which had been rigorously tested. I also examined patient overall satisfaction and the results in my study were impressive with 90% rating their benefit from classes as good or excellent. This is more favourable than 68.5% of women satisfied with antenatal classes in the WOMB study.

#### Class Topics

Labour stood out as having particularly good coverage in the classes with an 81-90% satisfaction rate. Pain relief was also covered well with excellent ratings by 72% of women regarding use of the TENS machine and 86% of women regarding pain relief with epidural block. Of note, pain relief was the principal concern of women attending the multiparous refresher classes.

#### Comparison

In 4 out of the 6 topics assessed, the 19-30 year old women were more satisfied with the class coverage of these topics than women 31+ years old ( $p$ -value  $>0.05$ ). There was no particular trend in high evaluation of topics in relation to parity.



Despite women rating the class coverage of breast-feeding highly (79% - excellent coverage), only two women who hadn't intended to do so before the classes, decided to breast-feed after them. However, the class rates of intention to breast-feed was well above the current national breastfeeding rate of 41% at discharge from maternity care.

A higher percentage of younger women 19-30 years old (65.9%) intended to breast-feed (31+, 60.7%). There is a statistically significant correlation between parity and intention to breast feed, p-value (0.012), with less multiparous women intending to breastfeed, 40.7% in relation to 68.5% of primiparous women. 64.4% of married women intend to breast-feed in comparison to 51.9% of unmarried women (p-value>0.05). Women's anxiety levels after completion of antenatal classes decreased. There was a significant relationship between parity and breast-feeding and between women's anxiety level and marital status.

**Women also highlighted the following in the personal comment section of the questionnaire;-**

- The social benefit of classes
- The advantage of the link provided to other perinatal services at the class
- The emotional security reinforced by establishing a relationship with staff and hospital prior to labour

## CONCLUSION

Health promotion and patient empowerment is the principal focus of antenatal classes. Labour stood as particularly well covered in the classes. This implies that antenatal classes are successful in providing education with the correct focus. Pain relief was the principal concern of women attending the multiparous-refresher classes. This topic is covered well in the classes which is important so that women can consider all pain relief options available to them with an open mind during the pre-labour period. The study proved a link between parity and breastfeeding in keeping with the literature. 'Multiparous women who previously breast-fed are less likely to breast-feed subsequent children.'<sup>3</sup> Only two women who hadn't intended to do so before the classes, decided to breast-feed after them.

Maternal anxiety and stress are found to be predictors of adverse pregnancy outcomes.<sup>4</sup> This project represents the reduction in women's anxiety levels after completion of antenatal classes, a clear advantage.

The multiple benefits of classes are proven. The demand for classes is greater than place availability. The established high patient satisfaction with classes portrays the power of antenatal classes. Antenatal classes are an educational advantage.

## REFERENCES

Available on request.



# Clinical Research

## Nursing & Midwifery

<b>TITLE</b>	<b>An Exploration of the Attitudes of Attendees and Non-Attendees towards Antenatal Education</b>
<b>AUTHORS</b>	<i>Murphy Tighe, S. South Tipperary Community Care, HSE South East, Clonmel, Co. Tipperary</i>

### INTRODUCTION

The aim of this study was to explore the attitudes of first time mothers towards antenatal education from the perspective of attendees and non-attendees. The results identify how service providers might respond more effectively to pregnant women in the antenatal period.

### METHODOLOGY

**Research Design:** A qualitative approach was utilised using focus group interviews.

**Population:** A purposive sample of 16 first time mothers who both attended and did not attend antenatal classes was utilised.

**Data Collection:** The interview guide was developed on a conceptual framework based on a SWOT analysis. Focus group interviews were conducted with the participants and the Results section provides examples of actual feedback from participants under a number of key headings.

**Data Analysis:** Descriptive content analysis was employed as a means of analysing the transcripts.

### RESULTS

#### The Strengths of Antenatal Education

The mothers highlighted the following strengths with regard to key aspects of antenatal education courses; -

**The Facilitator** - "they were concerned we got the information."

Data related to the category of facilitator were the skills and style of teaching and peer mentoring.

**The Information and Preparation Received Prior to Birth** - "it consolidates what you already know."

A theme arising from the data was that antenatal classes were a good source of information and preparation for the birth.

**The Social Aspect of Meeting Other Expectant Mothers** - "to meet others in the same boat as yourself."

Those who did attend antenatal classes found them enjoyable. Empowerment through support is a vital aspect of antenatal education.



## The Weaknesses of Antenatal Education

The weaknesses of antenatal education as identified by the participants were;-

**The Delivery and Format of Classes** - "It ain't what you do, it's the way that you do it."

Findings detailed the general poor quality found at some antenatal classes. Poor facilitation skills, unfavourable environment and lack of group work was highlighted.

**Fathers Non-Attendance and Non-Participation** - "men looked liked they were dragged there."

The participants suggested that prospective fathers receive a poor service from service providers and require a more considered facilitation of their role.

**Lack of Awareness About Antenatal Education** - "ignorance is not bliss"

The lack of information regarding antenatal education was identified as problematic.

## Opportunities for Antenatal Education

The opportunities for antenatal education as explored by the participants were;-

**Other Sources of Information** - "it's a secret society."

Participants listed many sources of antenatal information, including books, leaflets, TV, mothers and extended family, friends, internet and healthcare professionals.

**Advertising and Promotion of Classes** - "what about a nice poster, a nice eye catcher."

Mothers made reference to the need for advertising and promoting antenatal education.

**Personal Learning Styles** - "sometimes you are better off learning for yourself."

The findings identified a range of personal learning styles, which are pointers to ways in which antenatal classes could be improved. Literacy was raised as an important issue for consideration by educators.

**Postnatal Classes and Peer Mentoring** - "just to see others in the same situation, it's not just you."

Mothers suggested that they wanted information that focused on more than labour. Postnatal classes provide an opportunity for education and support in relation to parenting.



### Barriers to Antenatal Education

The barriers to antenatal education as described by the women were;-

**Social Context of Life** - "I hardly know my neighbours and anyway everyone is so busy."

The social context of women's lives was raised as negatively impacting on them, for example unplanned pregnancy, housing concerns and work commitments.

**Lack of Advertising** - "I didn't know anything about them."

Many participants recounted that no doctor or midwife encouraged attendance at classes.

**Non-Attendance Due to Multiple Factors** - "I couldn't get to the classes, 'cause things kept happening."

Practical problems like transport, shift work, lack of interest and demanding work hours were cited as reasons for non-attendance.

### CONCLUSIONS

The challenge facing antenatal childbirth education is how to respond to a changing social, economic and political world. The potential for antenatal education to influence the health and social aspects of parents' lives is borne out by the findings of this study. The barriers identified must be tackled by firstly addressing the need for promotion and advertising of the service. Secondly, we must respond to parents' expressed needs in relation to antenatal education i.e. the provision of postnatal classes and peer mentoring; flexible availability of classes and facilitators utilising the principles of adult learning to guide classes. The important role of fathers and their attendance and inclusion at classes was emphasised. In view of the poor uptake of antenatal classes, it is imperative that an approach to service provision is parent-centred and needs-driven. In order to realise the full potential of antenatal education we need to give greater consideration to the social context of life today.

### PRESENTED

As a poster presentation at the Researching Children's World Conference in Galway on February 26<sup>th</sup> and 27<sup>th</sup>, 2008.



# Clinical Research

## Nursing & Midwifery

<b>TITLE</b>	<b>Intensive Care Unit (ICU) Nurses' Knowledge, Practices and Educational Preparation in Relation to Critical Care Family Needs</b>
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<b>AUTHORS</b>	<i>Buckley, P.</i> <i>Mid-Western Regional Hospital, Ennis, Co. Clare</i>
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### ABSTRACT

Critical care family needs research over the past 20 years has identified a well defined, universal and predictable set of needs that are considered important by families during the critical care experience (need for information, assurance, proximity, support and comfort).<sup>1,2</sup> Accurately assessing and responding to these needs may have desirable consequences for both family and patient.<sup>3,4</sup> Comparative studies exploring the needs of critical care families have identified discrepancies in nurses' perceptions of them.<sup>5,6</sup> These studies acknowledge the importance of knowledge, skill and educational preparation of ICU nurses to enable them to address these needs, but no study to date has researched these important variables.

The purpose of this study was to explore the knowledge, educational preparation and practices of ICU nurses in relation to critical care family needs. This research also investigates if there is a relationship between ICU nurses' knowledge and educational preparation, post-registration experience and length of time working in ICU.

A descriptive correlational and quantitative design was employed. The researcher developed a questionnaire based on the literature reviewed, and the sections in the questionnaire were guided by the three components of the Theoretical Framework of Enablement by Stamler (1996), looking at ICU nurses' abilities (knowledge), opportunities (practices) and means (educational preparation). The study population comprised 55 ICU nurses working in a teaching hospital in the Republic of Ireland. 48 ICU nurses completed the questionnaire, giving a response rate of 87%.

The findings demonstrated that ICU nurses have a good knowledge of critical care family needs as evidenced by a mean knowledge score of 82.44%. 56% of respondents (n=27) also rated their current knowledge "as good" and 10.4% (n=5) as "very good". The practice scores (mean=71%) in this study suggest that ICU nurses frequently employ evidence-based family-centred interventions in their daily practice, but there is a need for further improvement in areas related to the provision of written information to relatives and involving families in the physical care of their sick relative. However, 67% of respondents (n=32) had never received any formal educational preparation on the needs of families in critical care, while the majority of nurses (95.8%) believed that they needed more knowledge and (71%) stated that in-hospital in-service education should play a large role in providing them with updated information.

ICU nurses in this study demonstrated a good knowledge of critical care family needs, despite the fact that the majority of the participants lacked formal educational preparation in dealing with the needs of families. These findings indicate the need for both formal and informal continuing educational programmes in the ICU environment which have potential to improve patient/family-centred care. Also ongoing support is necessary in giving nurses confidence in providing for those needs.





## REFERENCES

Available on request.

## SOURCE

Buckley, P. (2005) "Intensive Care Unit (ICU) Nurses' knowledge, Practices and Educational Preparation in Relation to Critical Care Family Needs," Catherine McAuley School of Nursing Research Reports, 1(1)3-4.

*This research was undertaken in part fulfilment of a Masters Degree in University College Cork.*





# Clinical Research

## Clinical Services – Nutrition and Dietetics

<b>TITLE</b>	<b>Gastric Emptying and Food Intake throughout the Day are affected by the Energy and Macronutrient Content of Breakfast</b>
<b>AUTHORS</b>	<i>Clegg, M., Shafat, A. Department of Physical Education and Sport Sciences, University of Limerick</i>

### INTRODUCTION

Infusion studies have shown that nutrients in the small intestine delay gastric emptying. The relationship between fat and satiety has also been broadly portrayed in the literature, with fat being the least satiating macronutrient. However, a major criticism of many of these studies is that when fat is added to the test meal, the meal is controlled for weight but not for energy content. Previous research has noted the presence of an early postprandial peak in plasma triacylglycerol concentration, particularly when successive meals have been consumed. As much as 10% of fat from a previous meal can be absorbed during the subsequent meal. What has not been examined formerly is the effect of a high fat meal on gastric emptying and food intake of a subsequent meal.

### OBJECTIVE

The aim of this study is to examine the effect of high and low-fat breakfasts on gastrointestinal transit of lunch and subsequent energy and macronutrient intake.

### METHODOLOGY

9 male volunteers ( $25.5 \pm 1.6$  yr,  $179 \pm 5$  cm,  $79.1 \pm 6.4$  kg (all data mean  $\pm$  standard deviation)) participated in the study, approved by the University of Limerick Research Ethics Committee. All volunteers recorded their diet for 3 days prior to testing using a weighed-food diary. After a 12-h overnight fast volunteers consumed either a 1) high-fat breakfast (HF), 2) low-fat breakfast isoenergetic to HF (LFE) or 3) a low-fat breakfast of equal mass to HF (LF). 3 hours after breakfast volunteers consumed a soup lunch. Gastric emptying (GE) of the soup was measured using the  $^{13}\text{C}$  sodium acetate breath test. 4 hours after lunch an *ad libitum* buffet meal was provided to measure the volunteer's appetite. Volunteers repeated the food diary prior to each test day. Statistical significance ( $P < 0.05$ ) was examined with SPSS (version 15.0) using a repeated-measures ANOVA.

### RESULTS

There was a significant difference in gastric emptying half time between the three meals ( $P < 0.05$ ) as can be seen in Table 1.



**Table 1 - Gastric Emptying (GE) Parameters Shown in Minutes for High Fat Breakfast (HF), Low Fat Breakfast Isoenergetic to HF (LFE) and Low Fat Breakfast of Equal Mass to HF (LF) (n=9)**

Lunch GE	HF Breakfast	LFE Breakfast	LF Breakfast
GE half time	101.5±10.5††	96.3±13.3	94.7±12.5
GE lag phase	54.7±15.8†	52.8±18.8	46.2±14.6
Latency time	15.5±8.3†	15.5±9.3	11.2±5.8
Ascension time	86.0±7.0	80.8±5.2	83.5±7.4
% dose recovered	61.4±6.3	55.8±8.7	58.1±6.8

\*= P<0.05 compared to LFE

\*\*=P<0.01 compared to LFE

†=P<0.05 compared to LF

††=P<0.05 compared to LF

There were significant differences between the intake at the buffet for the three test days for energy consumed (P<0.01), grams of fat consumed (P<0.005) and grams of carbohydrate (P<0.05) consumed but no differences for protein consumed (P>0.05) and total grams consumed from food and beverage (P>0.05). Energy intake was highest following the HF breakfast as can be seen from Table 2.

**Table 2 - Energy, Total Grams and Macronutrients Consumed at Buffet Meal following One of Three Different Breakfasts – High Fat Breakfast (HF), Low Fat Breakfast Isoenergetic to HF (LFE) and Low Fat Breakfast of Equal Mass to HF (LF) (n=9)**

	HF Breakfast	LFE Breakfast	LF Breakfast
Energy (kJ)	7318±2206**	5962±2458	6397±1921
Mass consumed (g)	1220.6±302.4	1045.7±431.3	1124.8±365.1
Protein (g)	54.7±20.5*	47.9±20.6	50.6±17.0
Fat (g)	84.2±32.2**	68.9±34.2	73.2±25.5
Carbohydrate (g)	200.8±43.9*	169.0±57.9	174.1±52.2

\*= P<0.05 compared to LFE

\*\*=P<0.01 compared to LFE

†=P<0.05 compared to LF

††=P<0.05 compared to LF



## CONCLUSIONS

The current study has shown that gastric emptying at lunch time is affected by what is eaten previously at breakfast time. The HF breakfast delayed GE half time at lunch compared to the LF breakfast but was not significantly different to the LFE breakfast. This may be the cause of unabsorbed fat from the previous meal. Volunteers ate the most in the buffet meal following the HF breakfast, highlighting the inability of fat to satiate as much as other macronutrients. Volunteers also consumed most grams of the macronutrients; carbohydrate and especially fat, from the buffet meal, following the HF breakfast. Following the LFE breakfast, volunteers ate the least, in terms of energy and grams of macronutrients. In conclusion, eating a high fat breakfast can delay gastric emptying of a subsequent meal and can effect food intake up to 7 hours later.

## REFERENCES

Available on request.

## PRESENTED

At the British Feeding and Drinking Group Meeting in Liverpool on March 26<sup>th</sup> and 27<sup>th</sup>, 2008 by Miriam Clegg.

## FUNDING

This research was funded by the Irish Research Council for Science, Engineering and Technology.



# Clinical Research

## Clinical Services – Physiotherapy

<b>TITLE</b>	<b>Which Outcome Measure is most appropriate for Falls Prevention Programmes?</b>
<b>AUTHORS</b>	<i>Cahalan, R.,<sup>1,2</sup> Coote, S.,<sup>2</sup> Saunders, J.<sup>3</sup> Physiotherapy Department, St. Camillus Hospital, Limerick<sup>1</sup> Physiotherapy Department, University of Limerick<sup>2</sup> Statistical Consulting Unit, University of Limerick<sup>3</sup></i>

### INTRODUCTION

The efficacy of physiotherapeutic treatment is best assessed, and thus justified, by the use of an appropriate outcome measure. The Irish Health Service Executive (HSE) in its 2004 Standard recommended that the clinician is obliged to;

“Take account of the patient’s problems, and where possible (use) a published, standardised, valid, reliable and responsive outcome measure to evaluate the change in the patient’s health status”.<sup>1</sup>

Regarding mobility, balance and falls risk in an elderly population, a number of such tools exist.

### OBJECTIVE

The aim of this study was to ascertain which of a number of commonly used outcome measures, namely the Berg Balance Scale (BBS), the Elderly Mobility Scale (EMS), the Tinetti Performance Oriented Mobility Assessment (T-POMA) and the Biodex Balance System (Biodex), provides the greatest intra-rater reliability and sensitivity in such a population.

### METHODOLOGY

15 patients actively receiving physiotherapy treatment at St. Camillus hospital in Limerick were recruited for the study. Participants were required to be over the age of 65 years with impaired balance or mobility. Additional inclusion criteria included the ability to mobilise independently, with or without a walking aid, fluency in the English language and a Mini-Mental Status Examination (MMSE) score greater than 24. A same day test-retest design was used to investigate intra-rater reliability. All subjects were then retested after 4 weeks to assess sensitivity. Reliability was calculated using the intraclass correlation coefficient (ICC) and Bland & Altman methodologies. Sensitivity was assessed using paired t-tests, effect size and standardised response means.

### RESULTS

Excellent relative intra-rater reliability was demonstrated by the EMS, BBS and the T-POMA, as indicated by an ICC in excess of 0.75 and 95% confidence intervals (CI) values.<sup>2</sup> While the ICC values of the two components of the T-POMA and the Biodex showed excellent relative reliability, the greater variability inherent in the 95% CI reflected fair to good reliability for Tinetti Gait and Tinetti Balance subsections, and poor reliability for the Biodex. Bland & Altman analysis calculates measures of error and variability. Analysis on this basis also identified EMS as the most reliable tool, and the Biodex was found to have the poorest intra-rater reliability of measures assessed.



Regarding sensitivity analysis, all data were assumed to be normally distributed and treated parametrically using paired t-tests. It is acknowledged, given the small study population, that this assumption of normality may be defective and should be investigated more fully in any larger future studies.

On analysis, none of the differences between test occasions was found to be statistically significant ( $p=0.05$ ). A comparative sensitivity analysis was performed by calculating the effect size and standardised response mean for each outcome measure. In both instances, the Biodex proved to be the most sensitive of the outcome measures assessed, followed by the BBS. The EMS had the worst comparative sensitivity.

## CONCLUSIONS

This pilot study of the comparative intra-rater reliability and sensitivity of the EMS, BBS, T-POMA and Biodex balance system found excellent reliability for the EMS, BBS and T-POMA. While the Biodex proved to be the least reliable, it was the most sensitive. Of the outcome measures investigated, the BBS appears to have the best combination of reliability and sensitivity. An investigation in a larger more homogenous group with adequate rest periods and an amended Biodex protocol is advocated. The findings of this research are currently being used to evaluate the efficacy of the elderly falls prevention programme conducted by the Physiotherapy Department at St. Camillus Hospital, Limerick.

## REFERENCES

Available on request.

## PRESENTED

As a poster presentation at the Annual Health Research Board "Let's Talk Health" Conference in the Gresham Hotel, Dublin on Thursday, December 6<sup>th</sup>, 2007.

## FUNDING

This study was funded by the Health Research Board Summer Student Scholarship programme, 2007.



# Clinical Research

## Clinical Services – Physiotherapy

<b>TITLE</b>	<b>An Investigation of the Effects of a Low Dye Taping Technique on Foot Motion and Joint Displacement during Gait</b>
<b>AUTHORS</b>	<i>Ní Mhainín, U., O'Sullivan, K. Department of Physiotherapy, University of Limerick</i>

### INTRODUCTION

Low dye (LD) taping is commonly used to treat symptoms in the lower limb related to excessive pronation. The effectiveness of LD taping has previously been assessed using measures including vertical navicular height, navicular drop, plantar pressure patterns and 2-D video analysis. The aim of this study was to investigate the effects of low dye taping on pronation, supination and total range of motion (ROM) at the subtalar joint in healthy subjects with excessive pronation using 3-D analysis, which had not been done before.

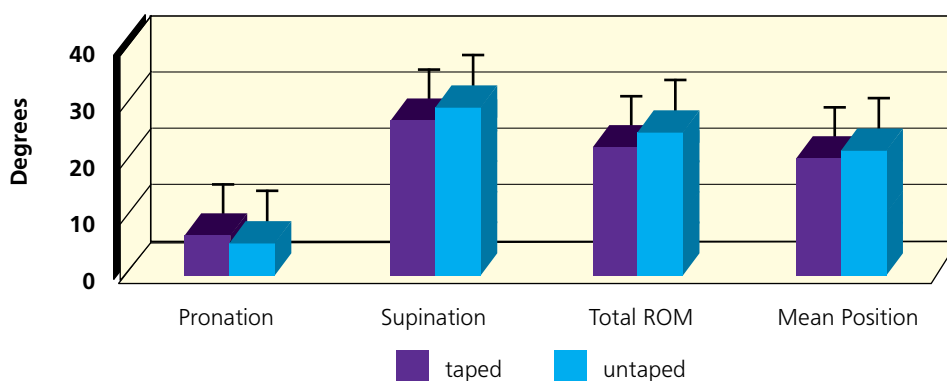
### METHODOLOGY

A repeated measures crossover study design was used. A convenience sample of 20 university staff and students participated in the study. Subjects were assessed under taped and untaped conditions using a CODA motion analysis system.

### RESULTS

Pronation, supination and total subtalar joint ROM decreased significantly (all  $p < 0.05$ ) under the taped condition compared to the non-taped condition. No statistically significant differences were found between taped and untaped conditions for mean subtalar joint position.

**Figure 1 - Comparison of Subtalar Joint Position and ROM in Taped and Untaped Conditions**



### CONCLUSIONS

LD anti-pronation taping reduces pronation at the subtalar joint, however it also reduces supination and overall ROM at the subtalar joint. This may indicate that LD taping restricts general movement at the subtalar joint, rather than having a specific 'anti-pronation' effect.





# Clinical Research

## Clinical Services – Physiotherapy

<b>TITLE</b>	<b>Use of a Mobility Clinical Indicator following Major Abdominal Surgery and Does it Affect Length of Stay?</b>
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<b>AUTHORS</b>	<i>Conroy, C., Scanlon, M. Physiotherapy Department, St. James' Hospital, Dublin 8</i>
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### INTRODUCTION

Early ambulation post-abdominal surgery is a widely practiced and much supported part of postoperative physiotherapy care following abdominal surgery. Benefits including prevention of post-operative pulmonary complications have been sustained in research literature however little exists relating early mobilisation to length of stay post-operatively.

### OBJECTIVE

This study aims to assess the effect of early mobilisation using a clinical indicator (CI) on the effect on length of stay. Measurement of mobility as an outcome measure post-major abdominal surgery was proposed by Silva, Li and Safiropoulos in 2003.<sup>1</sup> The CI established is that “patients undergoing major abdominal surgery will walk 30m with light assistance by the third post-operative day.”

Using their benchmark proposal of 80% a further study<sup>2</sup> has investigated this within their own service and related it to patients’ post-operative length of stay within their hospital. This study was replicated within the physiotherapy department in St. James’ Hospital (SJH) with the aim of investigating patients’ ability to achieve this CI post-operatively, the various reasons why this was not achieved and whether this affected their post-operative length of stay.

### METHODOLOGY

Data was collected from 4 wards at SJH over a 4 month period by the presiding respiratory physiotherapists using a uniform data collection tool. Data collected included age, sex, pre-op assessment, type of surgery, day of achievement of the CI, variance (reason CI was not achieved), and the post-operative length of stay (LOS). Physiotherapy management of these patients was not affected by the collection. Data was analysed using SPSS statistics, including normality testing, independent t-square and Pearson’s correlation tests with p-value set at  $P < 0.01$ .

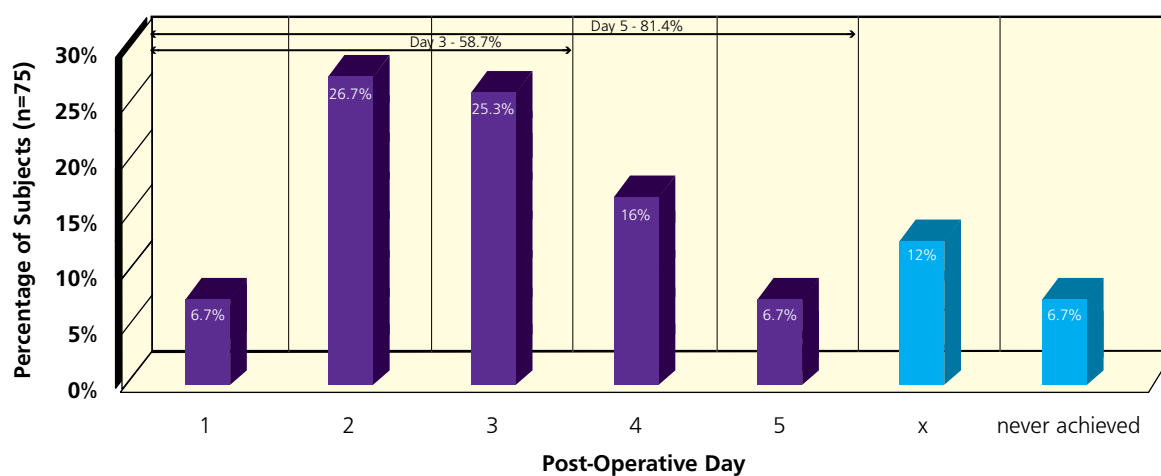
### RESULTS

75 subjects (age; 61 +/- 15yrs, range; 28-88, sex; male 45%, female 55%) had major abdominal surgery and were transferred to these wards during the collection period (July to November 2007). 58.7% achieved the CI by the third day. 34.7% achieved it in later days. 6.7% did not mobilise 30m throughout their hospital stay due to poor baseline mobility. The CI was met on day 5 with 81.3% mobilising 30m (See Figure 1).





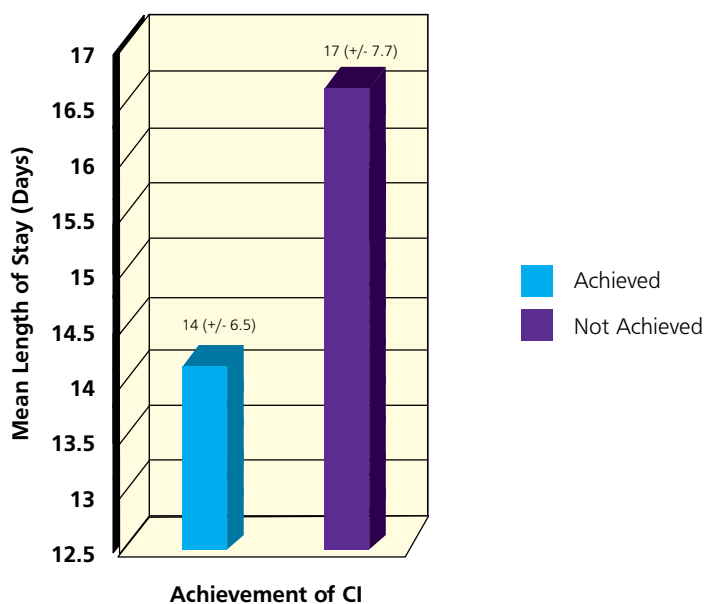
**Figure 1 - Day of Achievement of Clinical Indicator**



58.7% achieved the CI by Day 3 with the 80% Benchmark Standard not reached until Day 5. Day X = >6 Post-Op Days (n=75)

Pre-operative training was received by 9% of patients with no significant difference in their length of stay. No statistically significant difference was shown for those patients who did meet the CI compared to those who did not with their LOS {  $F = 0.762$ ,  $p = 0.154$  }. Mean LOS for those who did achieve CI was 14 days whereas those who did not achieve mean LOS was 17 days. (See Figure 2)

**Figure 2 - Achievement of the Clinical Indicator Compared to Mean Length of Stay (LOS)**





The reasons for not reaching the CI were weekend physiotherapy service limitations (35.5%), poor pain management (19.4%), deterioration medically (16.1%) and poor baseline (12.9%). A mild correlation was shown for LOS and day of achieving CI. ( $r = .392$ )

## DISCUSSION

Early mobilisation of the post-surgical patient is accepted as standard physiotherapy practice.

However, unlike previous studies a significant difference between those who achieved the CI on Day 3 and LOS was not shown. There is a distinction in the LOS between those who did mobilise early compared to those who did not.

## CONCLUSION

This data suggests that early mobilisation alone cannot reduce post-operative complications however it may contribute to their reduction and also aid in quicker discharge once medical issues are resolved. Investigating the variance for not achieving the CI and further exploration into the reasons for the prolonged length may assist us in promoting earlier mobility and thereby assisting in decreasing length of stay.

## REFERENCES

Available on request.



# Clinical Research

## Mental Health

<b>TITLE</b>	<b>Audit of the Recommendations of the 'Vision for Change' on Co-Morbid Substance Misuse and Mental Health Problems</b>
<b>AUTHORS</b>	<i>Subramanian, N., O'Mahoney, J. Acute Psychiatric Unit, Ennis. Co. Clare</i>

### INTRODUCTION

Mental Health disorders are almost three times as common among those with alcohol dependence, compared to the general population.<sup>1</sup> The Health Research Board in its fourth quarterly report (2006) of the Performance Indicators had indicated that Clare Mental Health Services stood second highest (19.1%) in the admission of patients with Primary Alcohol Disorder in the HSE West Area. Also, it was the highest among the Mid-Western Health Board Areas. This is the context within which this audit was done.

### OBJECTIVE

The main aim is to determine whether we have been moving in the direction of the 'Vision for Change' with regard to substance misuse issues. It states that "Mental Health Services for Adults are responsible for providing a Mental Health Service only to those individuals who have co-morbid substance misuse and mental health problems."<sup>2</sup>

The standard criteria is that admissions (16 years and above) to the Acute Psychiatric Unit should include only those with primary mental illness with or without co-morbid substance misuse issues.

### METHODOLOGY

The data was collected from all the admissions to the Acute Psychiatric Unit, extending from April 1<sup>st</sup> 2006 to April 1<sup>st</sup>, 2007. Exclusion criteria included those with a diagnosis of Schizophrenia or Bipolar Affective Disorder. ICD 10 criteria were used to diagnose alcohol dependence and illicit drug misuse.

### RESULTS

There were 458 admissions to the Acute Psychiatric Unit from April 1<sup>st</sup>, 2006 to April 1<sup>st</sup>, 2007. The various categories of admissions are given in Table 1.



**Table 1 - Overall Admissions to the Acute Psychiatric Unit from April 2006 to April 2007**

Primary alcohol dependence	10 admissions (2%)
Primary illicit drug abuse with or without alcohol dependence	4 admissions (1%)
Primary alcohol dependence and/or illicit drug abuse with threat to suicide or deliberate self harm (DSH)	44 admissions (10%)
Alcohol dependence with depressive features	45 admissions (10%)
Illicit drug abuse with or without alcohol dependence associated with depressive features	10 admissions (2%)
Others	345 admissions (75%)

3% of the admissions (primary alcohol and/or illicit drug dependence) should have been avoided. 10% of admissions with primary alcohol dependence and/or illicit drug abuse with threat to suicide or deliberate self harm could have been avoided and one of the factors influencing this group (10%) of admissions was the absence of inadequate beds in the Accident and Emergency (A & E) Department at Ennis General Hospital, which lead to these patients being discharged earlier. Subsequently, they had to be admitted to the Acute Psychiatric Unit under the influence of alcohol or illicit drugs. Also, many with alcohol dependence and/or illicit drug abuse with depressive features were started on antidepressants without an adequate period of abstinence from the substance of misuse due to practical issues associated with treatment.

Out of the 113 admissions (25%) involving substance misuse issues, the analysis of their duration of admission, their status of admission and repeat admissions are given below in the Table 2.

**Table 2 - Duration of Admission, Status of Admission and Repeat Admissions**

Admissions for $\leq 2$ days	29 (26% of this group)
Admissions for 3-7 days	39 (35% of this group)
Admissions under involuntary status	11 (10% of this group)
Repeat Admissions for 3-5 episodes over the 1 year period	11 (10% of this group)
Admissions discharged against medical advice	12 (10.5% of this group)



## CONCLUSION

Hence, it is evident from the above data that we have been struggling to move in the direction of 'Vision for Change'. Due to the shortage of resources in A & E and eligibility restrictions associated with Sláinte services, those with primary substance misuse issues have no proper facilities to receive follow-up treatment. The need for specialised Substance Misuse Psychiatric Teams all over the country (as in the United Kingdom) and adequate support services is the need of the hour to address this ever growing problem with substance misuse issues. Otherwise, the current trend of substance misuse admissions to the Acute Psychiatric Unit will continue at the same level.

## PRESENTED

At the Multidisciplinary Case Conference in the Acute Psychiatric Unit, Ennis on January 9<sup>th</sup>, 2008 by Dr Narayanan Subramanian, NCHD in Psychiatry under the supervision of Dr John O'Mahoney, Consultant Psychiatrist.

## REFERENCE

Available on request.



# Population Health

## Public Health

<b>TITLE</b>	<b>Understanding the Needs of Children - A study of Needs and their Determinants in Limerick</b>
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<b>AUTHORS</b>	McKeown, K., <sup>1</sup> Haase, T. <sup>2</sup> Social & Economic Research Consultant, Dublin <sup>1</sup> Social & Economic Consultant, Dublin <sup>2</sup>
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### INTRODUCTION

Barnardos is the largest charity in Ireland working with and supporting marginalised and disadvantaged children and their families. Barnardos has been working in the Moyross, Southill and Islandgate areas of Limerick since the mid-1990s.

Barnardos in partnership with the HSE commissioned Dr Kieran McKeown to conduct research into the needs of children on their behalf in March 2007.

### OBJECTIVE

The purpose of the research was to establish a picture of childrens' needs in Limerick city and to investigate the determinants of those needs. The findings from the research are being used to inform the development of services for disadvantaged and marginalised children and their families in the city.

### METHODOLOGY

For the purposes of this study children are defined as being in need where their well-being is below a threshold that is regarded as normal or minimal. Two key aspects of children's well-being is measured:-

1. Mental health and emotional well-being using the Strengths and Difficulties Questionnaire (SDQ)<sup>1</sup>
2. Cognitive development as measured by reading ability, school attendance etc.

201 mothers were randomly sampled and interviewed about their needs and the needs of 1 child in their family.

### RESULTS

The study shows that households with children in Limerick are broadly similar to households with children elsewhere in Ireland in terms of size, education, employment and financial strain. However, some differences were observed, for example, levels of owner occupation in Limerick city (52%) are significantly lower than in Ireland (74%); one-third of households with children in Limerick city are lone parent households compared to a fifth in Ireland; and half of the sample have a Medical Card which is significantly higher than in Ireland (28%) based on 2004 data.

The mental health and emotional well-being of children was measured using the SDQ. Eight per cent (8%) of children are in the abnormal range and a further 9% are in the borderline range. This is broadly in range with other population-based studies of childrens' mental health in Ireland<sup>2</sup> and elsewhere<sup>3</sup>. The main difficulties



involve conduct, hyperactivity and emotional problems. Boys present more difficulties than girls and older children present more difficulties than younger children. As a result boys are the most vulnerable group with 17% in the abnormal range. Extrapolating these results to all children (0-18 years) in Limerick city it is estimated that 1,137 children are in the abnormal range and a further 1,206 children are in the borderline range.

Children in Limerick city have a similar reading ability to children in Ireland but a small proportion (13%) have reading difficulties. Educational resources in the home as measured by the number of books, being read to before school age, access to a computer and the internet and expectations of leaving school tend to be better in Limerick city than Ireland. School attendance rates seem to be higher in Limerick than Ireland although it should be noted that this is based on reports of mothers rather than schools, the latter being the normal source of school attendance statistics. At the same time it is noteworthy that a substantial proportion of post-primary pupils in Limerick (14%), particularly girls, are missing school for 20 days or more; this is equivalent to 1,234 children.

The study uses correlation and regression analysis to establish determinants of mental health and emotional well-being among children indicated by SDQ scores in the abnormal range. This analysis reveals that children with mental health and emotional difficulties are found in households with a medical card, where mothers take sedatives, tranquillisers or anti-depressants and where mothers have an above average negative affect. Further correlation analysis on the variables associated with each of these determinants reveals that the primary influence on the mental health and emotional well-being of children is the mental health of their mothers. In addition, mothers who have a weak relationship with their child and who use excessive discipline (as measured by the Parent-Child Relationship Inventory and the Parent-Child Conflict Tactics scale respectively) are more likely to have a child in the abnormal range of the SDQ.

Regression analysis reveals that children with reading difficulties are found in households where the mother is a lone parent and has not read frequently to the child before primary school. Further correlation analysis shows the predominant influence of socio-economic circumstances as indicated by having a medical card and living in local authority accommodation.

## CONCLUSIONS

It is important to emphasise that the factors which influence the needs of children and mothers whether inside or outside the family do not operate in isolation from each other because it is their interaction effect which creates susceptibility to need. In drawing attention to the systemic nature of family life it is also important to emphasise that while children influence the well-being of mothers and vice versa it is the characteristics of the mothers which are the predominant influence on the well-being of both. The analysis also confirms that the needs of children and their mothers are shaped by the socio-economic context in which they live. However, this





relationship is not a simple one, the influence is bi-directional in that families with difficulties are more likely to experience socio-economic disadvantage by virtue of these difficulties while those living in adverse socio-economic circumstances are more likely to succumb to family difficulties.

These findings suggest that interventions that focus on changing mothers 'negative' emotions and behaviours, reducing the stress caused by financial strain, improving the capacity of mothers to set appropriate limits and direct work with children on behaviour problems offer the best route for improving the well-being of children. However, interventions that also address socio-economic problems should not be ignored.

## REFERENCES

Available on request.

## FUNDING

This research was partially funded by HSE West.

*This research was commissioned by and undertaken on behalf of Barnardos.*



# Population Health

## Public Health

<b>TITLE</b>	<b>Sick Elderly People and their Family Supports</b>
<b>AUTHORS</b>	<i>Bourke, J.,<sup>1</sup> Finucane, P.<sup>2</sup> Department of Medicine for the Elderly, Mid-Western Regional Hospital, Limerick<sup>1</sup> Graduate Medical School, University of Limerick<sup>2</sup></i>

### INTRODUCTION

Recent controversies surrounding the provision of long-term residential care for older people in Ireland<sup>1</sup> have generated fresh interest in developing strategies that might instead maintain frail elderly people in the community. At a societal level, this is a formidable challenge as some 12% of community-dwelling elderly Irish people need help with one or more activities of daily living.<sup>2</sup> Traditionally, the needs of frail elderly people have largely been met by informal carers, 90% of whom are spouses or other close relatives.<sup>3</sup> For a range of socio-economic and demographic factors, such informal supports are in decline.<sup>4</sup> The geographical dispersal of families is one such factor and potential carers may now simply live too far away to allow them to provide on-going care for their elderly relatives who become ill.

The level of availability of informal carers has implications for the planning of aged-care services. Should efforts be directed at bolstering the role of the traditional carers or in providing alternative services? Currently, how available are traditional carers? In an attempt to answer these questions we looked at the potential family support available to a group of elderly patients on admission to an acute hospital service and the impact of available family support on the discharge outcome.

### METHODOLOGY

We prospectively interviewed 100 consecutive patients and/or their families on admission to an acute Medicine for the Elderly service at the Mid-Western Regional Hospital, Limerick. This service also provides some acute medical services to the non-geriatric population. The hospital has 426 acute in-patient beds and serves a population of 360,000. All data were collected during November 2006. For patients aged 65 years and over, we documented their marital status, their number of children and the normal place of residence of their various family members. Subsequently, we documented the outcome of hospitalisation, including the discharge destinations.

### RESULTS

Of the 100 consecutive patients, 10 who were aged less than 65 years were excluded from the study. The remaining 90 patients had an average age of 82.8 years (range: 68-94 years) and 52 (58%) were female. Of these, 18 (20%) had a living spouse, 55 (61%) were widowed and 17 (19%) had never married. Prior to admission, 35 (39%) lived alone while 12 (13%) were in residential care.

Overall, 68 (76%) of the study population had living children, collectively numbering 311. 235 (76%) of these children were living locally (within a 30-minute drive of their parents), 32 (10%) were living elsewhere in Ireland and 44 (14%) were living overseas. Overall, 63 (93%) of those with living children had at least one child living locally.

The outcome of hospitalisation for the 78 people who were admitted to hospital from home is summarised in Table 1.



**Table 1 - Outcome of Hospitalisation for People admitted to Hospital from Home**

	Discharge home	Discharge to Nursing Home	Died
Overall (n=78)	54 (69%)	15 (19%)	9 (12%)
Living alone (n=35)	21 (60%)	10 (29%)	4 (11%)
Living with spouse/family (n=43)	33 (77%)	5 (11%)	5 (11%)
Children living locally (n=56)	42 (75%)	7 (13%)	7 (13%)
No children living locally (n=22)	13 (59%)	7 (32%)	2 (9%)

Those who lived with a spouse or family member were more likely to return home than were those who lived alone. Furthermore, those with one or more children living locally were more likely to return home than those without such support. However, these differences did not reach conventional levels of statistical significance ( $\chi^2 = 3.66$ ,  $p = 0.075$ ;  $\chi^2 = 4.01$ ,  $p = 0.11$  respectively).

## CONCLUSIONS

This short survey emphasises the impact of marital status, living arrangements and the availability of family supports on the discharge outcome for elderly people who are hospitalised with an acute illness. Though 80% of elderly people in this study had no living spouse, the majority had living children. For those with living children, the great majority had at least one child who lived within a 30-minute drive of them and who were therefore well placed to be involved in the care of their elderly parents following hospitalisation. Despite its small size, this study suggests that the presence of such family support positively impacts on the person's ability to return to living in the community. A larger study is required to demonstrate this conclusively.

These findings support the further development of strategies to strengthen family supports so as to maintain frail elderly people in the community.

Such strategies might include greater financial rewards for carers (e.g. through an enhanced carer allowance), greater access to day care and to community and residential respite care programmes.

## REFERENCES

Available on request.



# Population Health

## Health Promotion

### TITLE

**A Comparative Study of Human Immunodeficiency Virus Antibody Positive Patients in Ireland and Australia**

### AUTHORS

O'Connor, M.B.,<sup>1</sup> O'Connor, C.,<sup>2</sup> Saunders, J.A.,<sup>3</sup> Sheehan, C.,<sup>4</sup> Murphy, E.,<sup>4</sup> Horgan, M.,<sup>1, 4</sup> Carr, A.,<sup>5</sup> Cooper, D.A.<sup>5, 6</sup>  
*The School of Medicine, University College Cork<sup>1</sup>*  
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*National Centre for HIV Epidemiology and Clinical Research, University of New South Wales, Sydney, Australia<sup>6</sup>*

## OBJECTIVE

Differences between HIV+ patients in developed and third world countries are publicised. This study proposes to compare patients demographically, medically and therapeutically in the developed countries, Ireland and Australia.

## METHODOLOGY

### Proposed:

1. Cross-sectional self-administered anonymous questionnaire survey of 200 HIV+ patients attending HIV outpatient services in both countries.
2. Data analysis using SPSS.
3. Ethical approval.

**Table 1 - Some Findings of the Study**

	Ireland	Australia
Response rate	93/131 (71%)	148/194 (76%)
Mean age (range)	36 (20-67)	45 (20-71)
Mean time diagnosed (years)	4.5	11.8
Previous HIV test	35%	49%
Non-disclosure of status to anyone	20%	5%
Diagnostic CD4 count <200	35%	22%
Diagnosed since 2000 (Group 1, Group 2)	39%/75%	25%/20%
Ill at diagnosis	34%	34%
In-patient diagnosis (Group 1, Group 2)	25%/10%	3%/4%
HIV-related hospital admission(s) (Group 1, Group 2)	43%/6%	30%/27%
Rx ART	64%	85%



Drug resistance (Rx post HAART)	10% (0%)	41% (2%)
Regular sexual partner	53%	56%
Regular sexual partner has HIV	29%	33%
Mean number of sexual partners:-		
In last 6/12	2	8
Since diagnosis	7	174
In lifetime	50	521
Always use condoms for intercourse	77%	71%
Cure for HIV within next 10 years	54%	41%

HIV = Human Immunodeficiency Virus

ART = Anti-Retroviral Therapy

HAART = Highly Active Anti-Retroviral Therapy

Group 1 = Irish nationals/Non-Irish nationals, Group 2 = Australian nationals/Non-Australian nationals

#### Statistically significant findings include:-

1. History of Gonorrhoea and Syphilis
  - (a) In all subgroups in both countries.
  - (b) Is more likely with CD4 <200 at diagnosis (p=0.035)
2. Recreational drug use is higher in:-
  - (a) Younger people (p=0.021)
  - (b) Males (p=0.007)
  - (c) Homosexuals (p=0.05)
3. Alcohol use more likely in males (p=0.03)
4. Patients with HIV+ partners are less likely to use condoms (p=0.012)
5. Mean lifetime partner numbers predictive of number in last 6 months
6. Doctor requesting a test is associated with no previous test (p=0.038)
7. Patient request was the commonest reason for HIV testing



#### **There were no factors associated with;-**

1. Place of diagnosis
2. "ill" at diagnosis
3. On ART
4. Having a regular sexual partner
5. Sharing diagnosis with others

#### **CONCLUSIONS**

Resistance post-HAART is minimal. Improvements are needed in;-

1. STI prevention
2. Doctors being proactive in testing
3. Condom use with HIV+ partners
4. Addictive substance habits in younger male homosexuals
5. Number of sexual partners of HIV+ patients

#### **PRESENTED**

1. As a poster presentation at the 23<sup>rd</sup> Conference of the European Branch of the International Union against Sexually Transmitted Infections (IUSTI - Europe) in conjunction with the Annual Meeting of the Croatian Dermatovenereological and Croatian STD Societies of the Croatian Medical Association in Cavtat/Dubrovnik, Croatia, October 11<sup>th</sup> - 14<sup>th</sup>, 2007.
2. As a poster presentation at the Joint Congress of the 15<sup>th</sup> Asia Pacific International Union against Sexually Transmitted Infections (IUSTI - Asia Pacific) Congress and the 2<sup>nd</sup> Annual International Infectious Disease Congress in Dubai, United Arab Emirates, February 3<sup>rd</sup> - 5<sup>th</sup>, 2008.
3. As a poster presentation at the 2<sup>nd</sup> UCC/Cork University Teaching Hospitals Research Day in University College Cork on June 6<sup>th</sup>, 2008.





# Population Health

## Health Promotion

<b>TITLE</b>	<b>The Changing Face of Sexually Transmitted Infections (STIs) in Pregnancy in Limerick, Ireland over 18 Years</b>
<b>AUTHORS</b>	<i>O'Connor, C.,<sup>1</sup> O'Connor, M.B.,<sup>2</sup> Clancy, J.<sup>1</sup> Department of GU/STD Medicine, Mid-Western Regional Hospital, Limerick<sup>1</sup> The School of Medicine, University College Cork<sup>2</sup></i>

### ABSTRACT

The ever increasing attendance of pregnant patients, near term and recently delivered, at the GU/STD clinic prompted an audit of "STIs in pregnancy."

All files (1987-2004) in the GU/STD clinic, Mid-Western Regional Hospital Limerick were manually searched to identify women who were pregnant or post partum to 6 weeks. An audit of demographic details, referral sources and infections identified was performed.

- 288 patients were identified (4.5% of new patients)
- 66 (23%) of those who attended were post partum
- 173/288 (60%) were seen from 2000 to 2004 of which 75 (43%) were non-Irish nationals as opposed to only one patient in this category pre-millennium

Since the millennium there has been a big change in the attendance of pregnant patients at the GU/STD services in Limerick. Almost half of the patients are non-Irish nationals. The diseases with which they present vary greatly from Irish nationals. 80% of Irish diagnoses were warts while only 11% in non-Irish nationals. In Irish patients 4% (n=7) of diagnoses were Herpes Simplex, 3% (n=6) Syphilis and 0.6% (n=1) Human Immunodeficiency Virus (HIV). In the diagnoses of non-Irish nationals there were 36% (n=20) Hepatitis B, 23% (n=13) Syphilis and 16% (n=9) HIV, with 7% (n=4) Hepatitis C and 5% (n=3) Herpes Simplex.

Referral site for Irish nationals was more diverse with 38% referred from GP, 27% from Maternity Hospital while non-Irish nationals were predominately referred from the Maternity Unit (60%). It is surprising that only 1 pregnant patient came from the asylum screening programme.

Of all female patients attending the service 4.5% (n=288) were pregnant or immediately post partum. Only one pregnant/post partum non-Irish national was seen prior to the millennium while since then they have accounted for 43% of such patients. 47% (n=35) were from Africa while 21% (n=16) were from Eastern Europe. 86% of infections diagnosed in non-Irish nationals have the potential to be transmitted to the neonates compared to 7.6% in Irish nationals.

Even in the most distal clinics increased clinical awareness of less common diagnoses and inter specialty co-operation is essential to help prevent congenital transmission of preventable diseases.





## PRESENTED

1. As a poster presentation at the Joint Congress of the 15<sup>th</sup> Asia Pacific International Union against Sexually Transmitted Infections (IUSTI - Asia Pacific) Congress and at the 2<sup>nd</sup> Annual International Infectious Disease Congress in Dubai, United Arab Emirates from February 3<sup>rd</sup> to 5<sup>th</sup>, 2008.
2. As a poster presentation at the 11<sup>th</sup> Annual Conference of the British HIV Association in conjunction with the British Association of Sexual Health and HIV in Dublin, Ireland, April 20<sup>th</sup> to 23<sup>rd</sup>, 2005.
3. At the Annual Meeting of the 23<sup>rd</sup> Conference of the European Branch of the International Union against Sexually Transmitted Infections (IUSTI – Europe) in conjunction with the Annual Meeting of the Croatian Dermatovenereological and Croatian STD Societies of the Croatian Medical Association in Cavtat/Dubrovnik, Croatia, October 11<sup>th</sup> to 14<sup>th</sup>, 2007 by Dr. Catherine O'Connor.
4. At the Annual meeting of The Society of the Study of STDs in Ireland in Cavan, November 10<sup>th</sup> to 11<sup>th</sup>, 2007 by Dr. Catherine O'Connor.

## SOURCE

International Journal of STD & Aids 2008 Feb;19(2):144.



# Population Health

## Health Promotion

<b>TITLE</b>	<b>Body Fatness and Lifestyle Factors in Two Populations</b>
<b>AUTHORS</b>	<i>Moloney, Y.</i> <i>St. Munchin's Regional Maternity Hospital, Limerick</i>

### INTRODUCTION

The aim of this study is to assess the nutrition status in two populations, one with Type 2 Diabetes and the second a healthy population, age and sex matched.

**The study undertaken looked at the following hypothesis:**

- Body composition is determined by gender
- Body composition in people with Type 2 Diabetes Mellitus is different to that of healthy subjects
- Subjects performing regular exercise will have a lower body fat content compared to subjects who do not exercise regularly

### METHODOLOGY

#### Data Analysis

The overall approach was experimental, the data was collected from 8 subjects (i.e. 4 patients with Type 2 Diabetes Mellitus and 4 control subjects) and this was aggregated with data collected by other students. The design was between groups, one group which was healthy and the other group with Type 2 Diabetes using related measures weight, height, waist circumference, BMI and body fat measures trying to find a causal relationship for Type 2 Diabetes. It was a cross sectional design based on observations at a single point in time for the purpose of inferring trends over time regarding body composition, gender, Type 2 Diabetes and exercise.

### RESULTS

**The sample included:**

- 48 subjects: 20 male, 28 female
- 23 diagnosed with Type 2 Diabetes
- 24 healthy subjects
- 38 Caucasian, 1 Indian subcontinent, 4 Middle Eastern, 1 Far Eastern, 1 Latin American and 3 others

The ages were from 24 to 78 with a mean of 48 years.

The % body fat minimum was 13.6, maximum 44.0, M=29.173, SD 9.14, Median=27.25, not normally distributed. The Lean Body Mass (LBM)kg minimum 36.7, maximum was 86.4, M=57.004, SD=10.67, Median=58.46, normally distributed. The group was then divided according to gender, 20 males and 28 females. The mean age of males was 54.16 years and of females was 45.36 years.



The mean BMI for males was  $M=27.83\text{kg/m}^2$ ,  $SD=4.20\text{kg/m}^2$  and for females was  $M=29.38\text{kg/m}^2$ ,  $SD=6.31\text{kg/m}^2$ . The mean % body fat for males was  $M=26.08\%$ ,  $SD=6.5\%$  and for females was  $M=31.38\%$ ,  $SD=10.18\%$ . The males tended to be younger, have a lower BMI and lower % body fat.

The group was then divided according to healthy or Type 2 Diabetes. The healthy subjects had a mean age of 44 years, and those with Type 2 Diabetes 52.41 years. The mean BMI of the healthy group was  $M=27.689\text{kg/m}^2$ ,  $SD=5.62\text{kg/m}^2$  and the Type 2 Diabetes group  $M=29.84\text{kg/m}^2$ ,  $SD=5.47\text{kg/m}^2$ . The % body fat of the healthy group had a mean of  $M=29.57\%$ ,  $SD=8.59\%$  and the Type 2 Diabetes group % body fat was  $M=29.27\%$ ,  $SD=9.74\%$ . Therefore, the Type 2 Diabetes group were older, had a greater BMI, but % body fat did not differ greatly and the waist circumference of the healthy group was  $M=92.10\text{cms}$ ,  $SD=14.86\text{cms}$ , Type 2 Diabetes group,  $M=99.14\text{cms}$ ,  $SD=16.81\text{cms}$  showing the waist circumference was greater in the Type 2 Diabetes group.

The % body fat for the whole group was minimum 13.6%, maximum 44.0%,  $M=29.173\%$ ,  $SD\ 9.14\%$ , Median=27.25%. An independent sample Mann-Whitney U test was conducted to test the difference in % body fat for males and females. Z value was -1.76 with a significance level of  $p=.079$ . The probability value (p) was not less than or equal to 0.05, therefore the result was not significant. There was no statistically significant difference in the body composition of males and females. An independent sample Mann-Whitney U test was conducted to test the difference in % body fat of the healthy subjects. Z value was -0.12 with a significance value of 0.907 the probability (p) is not less than or equal to 0.05, so the result was not significant. There was no statistically significant difference in the body composition of the healthy subjects and those with Type 2 Diabetes. A Kruskal-Wallis test was conducted to compare those who exercised and body fat content. The sign value  $> .05$ ,  $p= .789$  therefore it can be concluded there is no significant difference in % body fat between the groups that exercise regularly.

## CONCLUSION

The findings agree with some previous findings on body composition and healthy and Type 2 Diabetes subjects depending on the body composition measurements taken. With regard to the issue of regular exercise and body fat content depending on the literature it varies greatly. Lifestyle modifications should be our first line of treatment in treating these patients but we may not get all results we hope to achieve with just exercise alone.

## REFERENCES

Available on request.



# Population Health

## Health Promotion

<b>TITLE</b>	<b>Evaluation of a Tobacco Awareness Project Implemented in the Acute Psychiatric Unit of the Mid-Western Regional Hospital, Ennis, Co. Clare</b>
<b>AUTHORS</b>	<i>Mac Mahon, M.,<sup>1</sup> Heagney, A.<sup>2</sup> Clare Health Promotion Services, Ennis, Co. Clare<sup>1</sup> Acute Psychiatric Unit, Mid-Western Regional Hospital, Ennis, Co. Clare<sup>2</sup></i>

### INTRODUCTION

People with mental health issues smoke more tobacco (70% versus 24%)<sup>1</sup> and suffer worse health outcomes than the general population of smokers.<sup>2</sup> Quitting is difficult for all but further complicated for the former as cessation may destabilise certain conditions. Many smokers with mental health issues want to quit smoking but lack the necessary support.<sup>2,3</sup> Nevertheless, they can achieve quit rates similar to those of the general population.<sup>4,5</sup>

### OBJECTIVE

Two factors drove the setting up of a tobacco awareness raising project in the Acute Psychiatric Unit of the Mid-Western Regional Hospital, Ennis in 2007. Within the unit, a Clinical Nurse Manager (CNM11) observed that service users smoked heavily but appeared ill informed about tobacco and its interplay with health. To address this, he approached Clare Health Promotion Services (CHPS) which provides a community smoking cessation service and a working partnership was forged.

Meanwhile, 27% of clients attending the community smoking cessation service during 2005-2006 spoke about current or previous experiences of mental health problems. The Public Health Nurse (PHN) who facilitated smoking cessation had no training in mental health and quickly identified a need for service integration.

Service users admitted to the Acute Psychiatric Unit are acutely unwell so the agreed project aim was to raise their awareness of tobacco and how it affects health. The project would also test the potential for integrating the community smoking cessation and the acute psychiatric services.

### METHODOLOGY

A series of planning meetings between CHPS and the CNM11 and Nursing Director informed project planning. A literature review identified evidence of best practice in the area of tobacco and mental health. An ASH Scotland directory of service providers yielded contact details for key informants in the United Kingdom and Ireland. Despite attempts, just two informants were contactable. An Australian resource addressing smoking cessation for people with mental illness was also sourced and referenced (SANES smoke free kit).<sup>6</sup>

Programme content was planned using the above sources of information. The CNM11 consulted with staff and service users via the weekly community forum to ensure they were aware of and supported the proposed project.

Group sessions, based on participative methods were then delivered over a period of 4 weeks lasting 40 minutes per session. They were co-facilitated by the PHN and the CNM11. Participants were invited to attend the project by means of a notice displayed on the community notice board. Those who were interested informed the CNM11 who ascertained if intending participants were well enough to attend.



On average, 6 participants (male and female) attended each session. It was difficult to achieve group stability as attendance was influenced by state of wellness, a need to attend therapeutic sessions and day release. Participant feedback during sessions and at the community forum was positive and outcome evaluation was carried out 3 months after the project ended using telephone and face to face interviews guided by an interview schedule

## RESULTS

In view of participants' potential vulnerability, the CNM11 facilitator performed the outcome evaluation at 3 months. 6 participants were contacted. An interview schedule guided the telephone surveys of discharged participants as well as the face to face interviews held with 2 participants who remained as in-patients. Respondents felt they had learned more about tobacco and health during the sessions as reflected by the following comments: *'...am now very aware of the damage smoking is causing'; 'never realised the amount of people who have died or are physically unwell'; 'yes, became much more aware of the physical complications of smoking'*. Participants also demonstrated knowledge of how to contact the tobacco services - *'...have the number on my mobile'*. Likert scores indicated that participants were highly satisfied with the project and perceived it as being useful.

At 6 months, the project was reviewed by the relevant partners. At that stage, highly visible anti-tobacco posters were displayed throughout the unit. To sustain the project, tobacco awareness raising had been integrated into the unit's activation programme by the CNM11. Although tobacco products had been temporarily removed from the unit's mobile shop trolley, they had to be re-installed as clients were asking staff to source cigarettes outside the unit. However, healthier food options are now available on the trolley. The need for an information display stand was identified to offer tobacco and other health related client information. Plans were made to add the local and national cessation services' telephone numbers to service users' information cards and to invite service users to design anti-tobacco posters for display within the unit. It was also agreed that CHPS would provide updated information on tobacco and mental health to the CNM11 on a quarterly basis to support his work to address tobacco within the unit.

## CONCLUSIONS

The project is the first, tentative step towards addressing the needs of Clare mental health service users who smoke. In the longer term, continued service integration is required with spread beyond the acute to the community mental health services. Knowledge, attitudes, behaviours and skills must be addressed along the way at staff, service user and visitor levels. To achieve the long term goal of reducing smoking rates among mental health service users, sustainable policy development is required in the areas of combined pharmacological therapy, brief intervention training and partnership working.

## REFERENCES

Available on request.



# Health Systems Research

## Health Management

<b>TITLE</b>	<b>Improving Interpretation in Clinical Communication</b>
<b>AUTHORS</b>	<i>Gibbons, M., McGrath, C., Lyons, J., O'Sullivan, N., Barry, C. Regional Maternity Hospital, Limerick</i>

### INTRODUCTION

Ireland is being transformed into a multicultural society as increasing numbers of people from diverse cultures and ethnic backgrounds live, work and settle here.<sup>1</sup> This project was developed as part of the National Intercultural Hospital Initiative (NIHI) 2002, which is a sub-project of the Health Promoting Hospitals Network (HPH) of Ireland. It is an initiative to promote health and health literacy for migrant and ethnic minorities.

### OBJECTIVES

To improve the quality of clinical interventions with non-English speaking clients by:-

- Exploring staff experiences of current practices
- Standardising the procedure for accessing interpreter services
- Devising an operational guideline for accessing interpreter services
- Evaluating the intervention after a 6 month period
- Introducing a Multicultural resource file for clinical areas

### METHODOLOGY

A multidisciplinary working group was established. A pre-intervention survey was conducted among a random section of staff from the two pilot sites, antenatal clinic and antenatal inpatient ward to determine staff perceptions of the current interpreter services. An operational guideline was devised in order to standardise the practice of accessing interpreter services and thereby improve the quality of the service. The National Health Promoting Hospitals (HPH) Network had a group of interested hospitals dedicated to producing a resource file which is intended to assist staff in communicating with clients while waiting for an interpreter to arrive. The file contains translated phrases/questions in different languages, interpreter claim forms and the operational guideline for accessing interpreter services. There is also a section on the religious beliefs of different cultures. A post-intervention survey was conducted to evaluate the results.

### RESULTS

#### Pre-Intervention Results:

The initial survey of staff experiences of the interpreter services clearly indicated that several staff members did not have a knowledge of the current services available, which was impacting on the usage of the service. The feedback on the service stated that 12% of staff considered the service to be available and timely 'often' and 21% of staff used an adult relative or friend to interpret for the client rather than use an interpreter service. Overall satisfaction with the interpreter service was considered 'very good' by 22% of staff and 'good' by 44% of staff.





### **Post-Intervention results**

There was a significant increase in the usage of interpreter services. Staff who used an interpreter service 'often' or 'always' increased by 54%.

80% of staff considered the service to be available and timely 'always'.

Overall satisfaction with the interpreter service was considered 'excellent' by 50% of staff and 'very good' by 30% of staff.

Staff members indicated that the assistance of the guideline has been beneficial.

40% of staff stated that they used the resource file once per week and 60% of staff stated they used the file once per month. The 'most useful' sections were considered to be 'What language do you speak?' and the multilingual phrase section.

### **CONCLUSION**

The introduction of the operational guideline and resource file has clearly improved the usage of professional interpreter services. There is a clear understanding of the process of accessing the service. The added assistance of the resource file has been acknowledged as a short term measure while awaiting interpreter services but not as a replacement for interpreter services.

### **PRESENTED**

As a poster presentation at the Nursing and Midwifery Planning and Development Unit Conference, "Transforming Care through Innovation and Quality", in the University of Limerick on April 30<sup>th</sup>, 2008.





# Health Systems Research

## Health Management

<b>TITLE</b>	<b>Comparative Study Exploring the Attitudes of Doctors and Nurses towards Hand Hygiene and Alcohol-Based Hand Rubs</b>
<b>AUTHORS</b>	<i>Slevin, B.</i> <i>Infection Prevention and Control, Mid-Western Regional Hospital, Limerick</i>

### INTRODUCTION

Hand hygiene substantially reduces the risk of cross-infection within healthcare. Attitudes, behaviours, poor compliance and barriers exist towards hand hygiene. Proper, consistent use of alcohol-based hand rubs (ABHRs) can minimise risk from such problems. They are quick, effective and user-friendly. There is a paucity of Irish hand hygiene research in healthcare, particularly exploration of *perceived* behaviours and attitudes towards hand hygiene and ABHRs. Study results presented here provide a unique opportunity to research attitudes towards hand hygiene and ABHRs in the Irish healthcare setting.

### OBJECTIVE

This comparative study aimed to explore and compare self-reported compliance, behaviours, attitudes and barriers to hand hygiene and ABHRs among doctors and nurses in Ireland.

### METHODOLOGY

A quantitative positivist methodology, utilising a cross-sectional design was used. Data collection consisted of a validated attitudinal survey comprising a validated five-point Likert-scale. The study was conducted in a 426-bed Irish acute, tertiary, teaching hospital from March to May 2007. A stratified random sample (n=423) of doctors and nurses achieved a representative population. Data were analysed descriptively and cross-tabulated. Chi-square (Pearson's) and Mann-Whitney U statistical tests, using SPSS version 14.0 were conducted. Effect Size and Odds Ratio testing were conducted.

### RESULTS

The response rate was 59%, (n=242). The majority of respondents were nurses, 70.7% (n=171), whereas 26.9% (n=65) were doctors, however 2.5% (n=6) did not reveal their profession. Several statistically significant differences, ( $p < 0.05$ ) between doctors and nurses self-reported compliance, perceived behaviours and attitudes and barriers to hand hygiene and ABHRs were identified. Table 1 provides a summary of the main findings of the study.



**Table 1 - Main Study Findings**

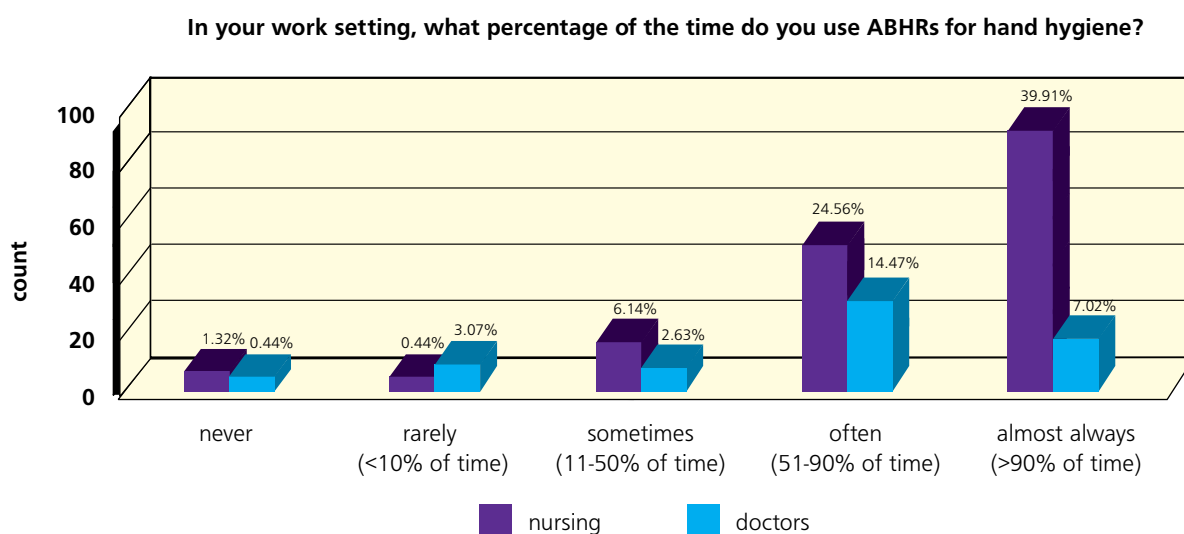
Question	Sample (%)	Nurses (%)	Doctors (%)	p=value
<b>Compliance</b>				
Familiar with hospital HH policy	92	98	77	<b>&lt;0.001</b>
Familiar with Irish HH Policy	49	60	19	<b>&lt;0.001</b>
Unaware of WHO Global Patient Safety Challenge	76	68.4	95.2	<b>&lt;0.001</b>
Pre-patient contact HH	81	90	58	<b>&lt;0.001</b>
Post-patient contact HH	86	90	77	<b>0.004</b>
ABHR used > 90% of time	47	55	25	<b>0.001</b>
ABHR used 51-90% of time	39	34	52	<b>0.001</b>
ABHR < 10% of time	3.5	1	11	<b>0.001</b>
<b>Perceived Attitudes and Behaviours</b>				
Adherence to HH is inconvenient	15	11	27	<b>0.005</b>
HH improved patient outcomes	91	96	77	<b>&lt;0.001</b>
Nosocomial infection rates will decrease if hand hygiene recommendations are followed	90	95	76	<b>&lt;0.001</b>
Important to act as a role model when using ABHRs	93	97	81	<b>&lt;0.001</b>
<b>Barriers</b>				
Hand will be drier and damaged if ABHRs are used	46	44	51	<b>.106 n/s</b>
ABHRs were unpleasant to use	32	26	46	<b>0.003</b>
Disagreed that ABHRs improve skin condition	67	67	66	<b>.516 n/s</b>

ABHRs = Alcohol-Based Hand Rubs

HH = Hand Hygiene



**Figure 1 - Percentage of time ABHRs are used in the work setting**



## CONCLUSIONS

Notable attitudes and barriers towards hand hygiene and ABHRs were demonstrated. Significant differences between the professions were evident within the Irish healthcare setting. Despite provision of ongoing hand hygiene educational programmes and the availability of local and national guidelines on the hospital intranet, awareness and knowledge of these guidelines is sub-optimal. Findings suggest that the level of acceptance of ABHRs among healthcare professionals may be a formidable obstacle towards the implementation of hand hygiene recommendations. This is one small sample and several limitations existed in the methodology, as the sample surveyed is limited to doctors and nurses. A follow on national study is necessary to determine if the attitudes identified in this study were specifically related to the ABHR used within the researcher's hospital or if the attitudes and perceived behaviours and barriers identified towards hand hygiene and ABHRs are evident within the Irish Healthcare setting.

## REFERENCES

Available on request.



## PRESENTED

1. As a poster presentation at the 8<sup>th</sup> Annual Interdisciplinary Research Conference 2007 in the School of Nursing and Midwifery, Trinity College, Dublin, November 7<sup>th</sup> to 9<sup>th</sup>, 2007.
2. As a poster presentation at The Society for Healthcare Epidemiology of America (SHEA) 18<sup>th</sup> Annual Scientific Meeting, Orlando, Florida 2008, April 5<sup>th</sup> to 8<sup>th</sup>, 2008.
3. At the 27<sup>th</sup> International RCSI Nursing and Midwifery Conference at the Royal College of Surgeons in Ireland, Dublin on February 20<sup>th</sup> to 21<sup>st</sup>, 2008 by Barbara Slevin.

*This research was undertaken in part fulfilment of a Masters of Science in Nursing in the Royal College of Surgeons (RCSI), Ireland.*



# Health Systems Research

## Health Management

<b>TITLE</b>	<b>Boston or Berlin - Perhaps a Choice for Us?</b>
<b>AUTHORS</b>	<i>Ní Luasa, S.</i> <i>University of Limerick</i>

### INTRODUCTION

Restructuring public services to be more efficient and effective is a central goal of governments throughout the world. Generally this entails a movement away from the state producing and delivering services, which is referred to as a public integrated model to a scenario where private agencies compete for contracts to deliver services, which is referred to as a public contract model. Duff states that this 'change' can be explained by three reasons: (1) the need to contain costs; (2) the need to preserve equity; (3) changes in the demand 'for the public service'.<sup>1</sup> Puig-Junoy and Ortun 'go further' and suggest that the logic behind these 'reform procedures' was the adoption of the price mechanism rather than the planning mechanism to guide resource allocation.<sup>2</sup>

Regarding Ireland it would seem like we are moving from a publicly integrated model to the public contract model in the delivery of some public services, for example services for the elderly. O'Shea notes that in the 1980's, for every one bed in a private nursing home there were nearly two in the public sector.<sup>3</sup> However, by the year 2000 private provision dominated the landscape, the ratio being 56:44 and this trend has continued with the current ratio estimated to be 62:38.<sup>4</sup> The international literature indicates that the benefits of implementing 'the public contract model' are numerous and include the following;- increased dynamism, enhanced experimentation, augmented entrepreneurial attitudes and costs savings.

### OBJECTIVES

The purpose of this research is to investigate whether public contract models deliver more 'effective outcomes' than public integrated models. To date, the benefits of the public contract model have been outlined in UK and US literature, however mainly in 'broad healthcare settings'. The purpose of this research is to assess these models in a specific and nouvelle market, namely the nursing home market.

### METHODOLOGY

This research is primarily of a quantitative nature with some nuances of qualitative issues being incorporated. Prior to the commencement of the actual fieldwork, pilot testing is being undertaken to ensure the 'semi-structured questionnaire' captures all relevant concepts regarding 'market reform'.

Subsequently, the research instrument (semi-structured questionnaire) will be administered to 50 research respondents through the medium of face to face interviews. Afterwards data will be inserted into a statistical package and rigorous data analysis (including the econometric technique of stochastic frontier analysis) will be undertaken.



## CONCLUSION

This work is an ongoing piece of research, the results of which may contribute to and further the debate on whether Ireland is closer to 'Boston or Berlin'. Moreover, it may provide an insight as to whether public integrated models or perhaps competition, contracting and innovation are more effective 'tools' in the delivery of services for the elderly, here in Ireland and in the international arena.

## REFERENCES

Available on request.



# Health Systems Research

## Health Management

<b>TITLE</b>	<b>Managing your Employees Effectively - A Case Study on the Intellectual Disability Care Sector in Ireland</b>
<b>AUTHORS</b>	<i>Berkery, E. Department of Management and Marketing, Kemmy Business School, University of Limerick</i>

### INTRODUCTION

Human resources play a critical role in the provision of services in the Intellectual Disability Care (IDC) Sector in Ireland. Services offered within the IDC sector in Ireland are predominantly based around the interactions between service providers and service users. Given the low level of clinical and technical interventions in the sector, services are fundamentally reliant on service personnel in the form of health professionals and support staff. Therefore, it is essential to ensure employees are managed effectively, and as a resource, are maximised to ensure a high quality service is offered to service users.

This research argues that by managing employees effectively, and through maximising human resources in the IDC sector, employees as a resource will become more efficient, thus maintaining or increasing the quality of care provided. This research proposes that this can be done through the use of Strategic Human Resource Management (SHRM), with specific reference to High Performance Work Systems (HPWS).

This research suggests that the strategic management of human resources in the IDC sector is critical. SHRM literature has emerged as a major paradigm in the HR field.<sup>1</sup> The literature blends the more 'macro' HR literature with 'micro' literature. Traditionally, researchers focused on the individual level effect of HRM practices, however, in recent years there has been a shift in focus from individual impacts of HRM towards a more 'macro' level approach. Gowen et al note that SHRM "...can be critical to the efficacy of healthcare errors, error reduction barriers, quality management processes and practices, programme results and competitive advantage."<sup>2</sup>

One of the common themes identified in the SHRM literature is an "emphasis on utilising a system of management practices that provide employees with skills, information motivation and latitude"<sup>3</sup> which in turn results in a more productive workforce which become a source of competitive advantage for the organisation. These bundles of practices are collectively known as high performance work systems (HPWS).

The term HPWS was popularised by Appelbaum and Batt.<sup>4</sup> HPWS broadly describe a set of SHRM practices and procedures aimed at increasing employee development, participation, information sharing, commitment and job satisfaction.

Similar to other industries, the healthcare sector is concerned with maximising effectiveness through the adoption of appropriate management policies and practices.<sup>5</sup> Although a limited amount of research has been carried out to date investigating HPWS in the health sector, a small body of research does exist. Some of the key findings to date on HPWS in the health sector have highlighted a positive relationship between HPWS and employee job satisfaction,<sup>6</sup> lower job stress and lower patient service costs,<sup>7</sup> effective information processing and decision-making,<sup>8</sup> effective patient care and patient mortality<sup>9</sup> and ultimately superior healthcare.<sup>10</sup> However, no such research has been carried out within the IDC sector.





## OBJECTIVE

To date, there remains a dearth of research in addressing the linkages between HRM and organisational effectiveness within the IDC sector. This research aims to address this gap in the literature, investigating the linkages between the effective management of human resources, with specific reference to HPWS, and organisational effectiveness in the IDC sector in Ireland.

## METHODOLOGY

A series of surveys will be administered to collect the data for this research. Firstly, an organisation-wide survey will be administered to generate an overall view of employee management in the IDC sector, focusing on issues such as recruitment and selection, performance/reward management, quality orientation, employee involvement, work organisation, diversity and equality and training and development.

The second survey will focus on individual employees within the IDC sector. This survey will address the issues outlined above on an individual level.

The initial survey has been sent to the IDC centres in Ireland and some initial findings have been analysed.

## REFERENCES

Available on request.



# Health Systems Research

## Health Management

<b>TITLE</b>	<b>Organisational Climates in Healthcare - A Framework to Explain the Combined Impact of Trust and Task-Related Conflict</b>
<b>AUTHORS</b>	<i>MacCurtain, S., Armstrong, C. Strategic Healthcare Management Research Group, Personnel and Employment Relations, Kemmy Business School, University of Limerick</i>

### INTRODUCTION

Gradually, a body of research that links organisational climate to quality processes and outcomes in healthcare is accumulating, but solid evidence of such linkages in relation to performance quality is still lacking. However, the limited evidence that exists clearly demonstrates a link between climate (both team and organizational) and important employee and patient outcomes. For example, Borrill, West, Shapiro and Rees's study of more than 500 National Health Service (NHS) teams found that innovative and participative climates were linked to effectiveness in delivering patient care.<sup>1</sup> Bower, Campbell, Bojke and Sibbald found a positive and significant relationship between team climate and positive patient evaluations of practice and employee perceptions of innovativeness and effectiveness.<sup>2</sup>

### OBJECTIVE

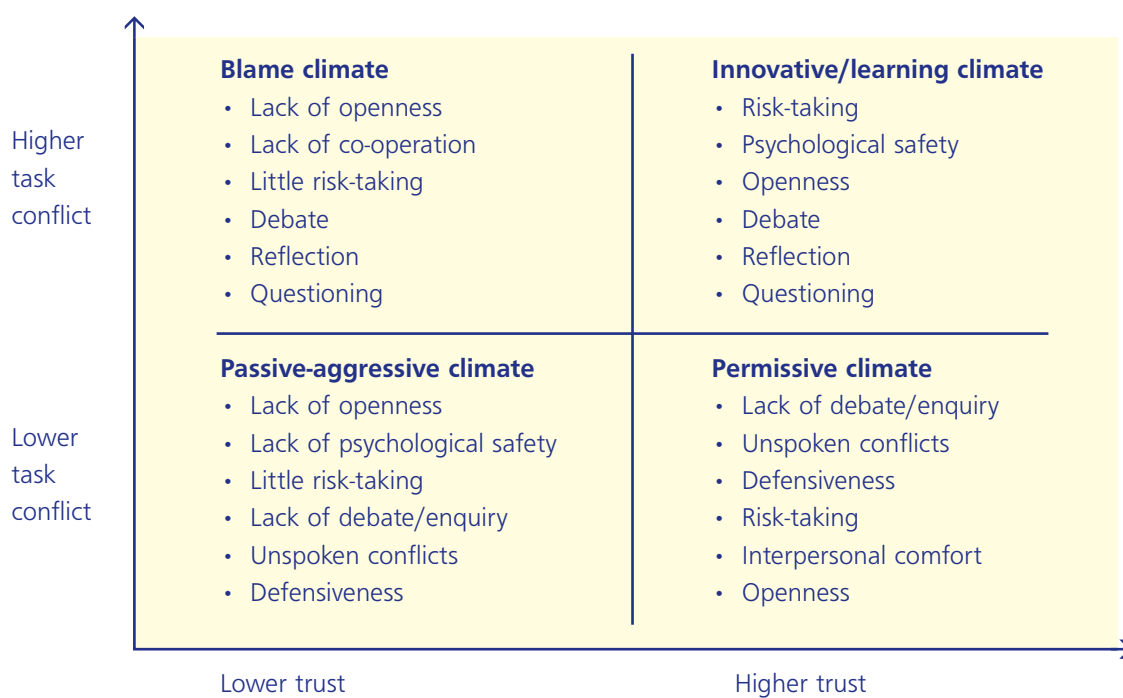
This paper focuses on organisational climate in health care, a sector undergoing substantial change and facing growing challenges such as resourcing, accountability and health and safety. The organisational climate literature argues that a variety of factors influence the type of climate that exists in organisations. Such factors include leadership, communication and top management support.<sup>3</sup> We propose to focus on two other important variables that we argue are associated with organisational climate: trust and conflict. We argue that both trust and conflict are particularly relevant amongst employees in the health sector, as these individuals are working under uncertain and ambiguous conditions due to the major changes taking place and can encounter high risk situations (e.g. dealing with challenging behaviour). Also there is generally mutual dependency between organisation members when working in multidisciplinary teams, which is the preferred model of care in many healthcare organisations today. It follows that in situations where such conditions are present, the importance of and need for trust and psychological safety increases. Also, these conditions can give rise to conflict – both functional and dysfunctional. The co-existence of trust and conflict in health teams can help the team to tap into the advantages of conflict without triggering the dysfunctional aspects of conflict.

### METHODOLOGY

We have developed a two by two matrix exploring the different combinations of varying levels of trust and task conflict, which will lead to four different organisational climates. These can range from beneficial to dysfunctional, which in turn can affect the quality of patient care (See Figure 1).



**Figure 1 - Climate-typology influenced by task conflict and trust**



## RESULTS

We argue that while trust is important if there is to be openness, reflection and error detection and correction, it is most effective when balanced with the existence of task conflict. In order to prevent dysfunctional conflict on the one hand or complacency and over trusting on the other, it is important to encourage reasonably high levels of task conflict in tandem with high levels of trust.

## CONCLUSION

In an attempt to optimise the quality of patient care, clinical managers should ensure that appropriate levels of both interpersonal trust (e.g. frequent communication, no scape-goating, promoting openness) and task-related conflict (critical debate, review, questioning) are promoted and maintained.

## PRESENTED

At the Irish Academy of Management Conference, Queen's University, Belfast, on September 5<sup>th</sup>, 2007 by Dr. Sarah MacCurtain.

## REFERENCES

Available on request.



# Health Systems Research

## Knowledge Management

<b>TITLE</b>	<b>Ontological Data Structures for Medical Data in Ireland - Applications of Semantic Web within a Knowledge Based Framework</b>
<b>AUTHORS</b>	<i>O'Brien, J., McGrath, F. Department of Management and Marketing, Kemmy Business School, University of Limerick</i>

### INTRODUCTION

One particular area of research focus for ontology-based knowledge management is clinical trials. A reason for the increased usage of ontologies in this domain is that ontologies have the capability of creating semantic links between various data objects in medical trials, thereby facilitating better knowledge management applications. A second reason for this is there are a number of standards emerging in this area (e.g. Clinical Data Interchange Standards Consortium (CDISC), Health Level Seven (HL7)). Yet despite these advances, adoption of technology in the clinical trials industry has been poor<sup>1</sup> and the industry remains predominantly paper-based in Ireland

Semantic Web provides a common framework that allows data to be shared and reused across application, enterprise and community boundaries. It is a collaborative effort led by World Wide Web Consortium (W3C) with participation from a large number of researchers and industrial partners and is based on the Resource Description Framework (RDF) framework. Semantic Web is a web of data. It advocates the common formats for integration and combination of data drawn from diverse sources. It is concerned with the language for recording how the data relates to real world systems. This would allow the person or machine to start off in one database and then move through an unending set of databases which are connected. This would be particularly useful in the medical profession to adopt an ontology-based approach to enable the semantic integration of applications and information collected across clinical trials. With this ontological framework in place, medical trial organisations will be able to introduce new applications to improve knowledge management in the conduct of any medical trials in Ireland.

### OBJECTIVES

The purpose of this research is to analyse and test the current solutions and systems used in the medical environment in Ireland for the structuring of data and capacity of system builders to make data available.

Also tests will be carried out to verify the viability of the application of Semantic Web in the medical environment with reference to knowledge-based theories. This research proposes to design a framework for software development of medical data ontology within the scope of knowledge-based theory.



## METHODOLOGY

The research will initially involve background reading and a review of the literature. Information will be found in journals, articles, technical papers, white papers, proceedings of conferences, technical specifications, websites and discussions with other researchers in the field.

Before the final results are submitted, surveys, focus groups and informal interviews will be held with employees from a sample of the relevant sectors. The initial survey will help to create an industry-wide snapshot with the aim of identifying practices which are followed with regard to capturing and retrieving data. Subsequent sectors will be ranked on a scale to measure acceptance of the knowledge-based data structure. Choosing between the varying degrees of ontological acceptance will allow for comparisons to be drawn between sectors that adopt a high level of data capturing/retrieval/usage and those that do not.

Descriptive statistics, together with charts and tables will be used to describe the basic features of the data collected providing simple summaries about the sample and the measures.

The research would be carried out in association with the Centre for Information and Knowledge Management at the University of Limerick in partnership with Dr. Fergal McGrath and the Irish Cervical Screening Programme.

## RESULTS

Once completed, interviews and surveys will be analysed and a detailed report will be compiled to show:-

- The reactions and opinions of staff to an ontological based data tool in the sector
- Analysis of clinical trial environments and success/failures of data capturing technologies
- The feasibility of the design of knowledge-based data ontology for medical data
- The probability of developing a system using Semantic Web data in conjunction with knowledge-based theory and effects on quality thereafter
- The implications of implementation of a knowledge-based Semantic Web

## REFERENCES

Available on request.

# News & Events

## SYLVESTER O'HALLORAN SURGICAL SCIENTIFIC MEETING, FEBRUARY 29TH AND MARCH 1ST 2008, UNIVERSITY OF LIMERICK

The Sylvester O'Halloran meeting is held annually at the University of Limerick.

The meeting is named after Sylvester O'Halloran, who was a renowned Limerick surgeon of the 18<sup>th</sup> century. He and others founded the Limerick County Infirmary in the 1760's and he was influential in establishing the Royal College of Surgeons in Ireland in 1784.

The two day conference comprises of oral presentations, poster sessions and two keynote lectures. The Sylvester O'Halloran Lecture entitled "Early Rectal Cancer" was presented by Professor Neil Mortensen and the Sir Thomas Myles Lecture entitled "Biomedical Engineering – The New Branch of Medicine" was presented by Professor Tim McGloughlin.



L to R: Tim McGloughlin, Professor of Mechanical and Aeronautical Engineering, University of Limerick, Pierce Grace, Professor of Surgical Science, University of Limerick, Neil Mortensen, Professor of Surgery, Department of Colorectal Surgery, John Radcliffe Hospital, Oxford, UK.

The prizes were awarded as follows:

### 1. O'Halloran Prize €3,000 (Sponsored by LEO Pharma)

*"Mellitin: An Agent for Peptide Drug Delivery in the Gastrointestinal Tract."*

R. Kennelly, A. Hogan, V. Bzik\*, A. Baird\*, D. C. Winter (St. Vincent's University Hospital Dublin 4, College of Life Science, UCD\*)



# News & Events

## 2. Poster Prize €1,000 (Sponsored by AstraZeneca)



L to R: Mr. Gerard Kearns, Consultant Maxillo-Facial Surgeon, Mid-Western Regional Hospital Limerick, Tim McGloughlin, Professor of Mechanical and Aeronautical Engineering, University of Limerick, John Carr AstraZeneca Pharmaceuticals Ltd. (Presentation of Best Poster Prize)

*"Biomechanical Considerations in the Management of Mandibular Angle Fractures (MAF)."*

L. Cahill\*, C. Farley\*, E. Kavanagh\*, J. Jarvis\*, T. McGloughlin\*, F. Wallis\*\*, G. Kearns\*\* (University of Limerick\*, Mid-Western Regional Hospital, Limerick\*\*).

## 3. Orthopaedic 1<sup>st</sup> Prize (Sponsored by Tekno Surgical Ltd.)

*"Cobalt Ions Induce a Mesenchymal Phenotype in Primary Human Osteoblasts."*

J. M. Queally<sup>1</sup>, B. M. Devitt<sup>1</sup>, J. S. Butler<sup>1</sup>, D. Murray<sup>1</sup>, P. P. Doran<sup>1</sup>, J. M. O'Byrne<sup>2</sup> (Clinical Research Centre, UCD School of Medicine and Medical Sciences, Mater University Hospital, Dublin 2,<sup>1</sup> Department of Trauma and Orthopaedic Surgery, Royal College of Surgeons in Ireland, Cappagh National Orthopaedic Hospital Dublin<sup>2</sup>).

## 4. Orthopaedic 2nd Prize (Sponsored by Tekno Surgical Ltd.)



L to R: Pierce Grace, Professor of Surgical Science, University of Limerick, Dr. J. M. Queally, (Clinical Research Centre, UCD School of Medicine and Medical Sciences, Mater University Hospital, Dublin 2).

*"Minimally Invasive Reduction and Fixation of Intra-Articular Distal Tibial Fractures."*

M. Leonard, P. Magill, G. Khayat (Department of Trauma Orthopaedics, Our Lady of Lourdes Hospital, Drogheda, Co. Louth, Ireland).





## 5. Head and Neck Prize (Sponsored by Wyeth)

*"Maxillofacial and Dental Injuries Sustained in Hurling."*

C. Murphy, C. Mullarkey, G. Kearns (Department of Oral and Maxillofacial Surgery, Mid-Western Regional Hospital, Limerick).

## 6. Anaesthesia Prize (Sponsored by Astellas Pharma)



L to R: Professor Dominic Harmon, Consultant in Anaesthesia and Pain Medicine, Mid-Western Regional Hospital Limerick, Mr. Robin Ward Astellas Pharma Co. Ltd., Dr. Brian O'Donnell, Department of Anaesthesia and Intensive Care, Mid-Western Regional Hospitals, Limerick.

*"Ultrasound-Guided Paravertebral Block - Accuracy of a New Technique Confirmed by Anatomical Dissection."*

S. O'Riain, B. O'Donnell, G. Shorten, F. Fraher, D. Harmon (Department of Anaesthesia and Intensive Care, Mid-Western Regional Hospital, Limerick).

## OPTIMISING CHANGE THROUGH EDUCATION

**Irish Association of Internal Medicine in association with the Royal College of Physicians of Ireland, Hilton Hotel, Limerick, March 7<sup>th</sup> and 8<sup>th</sup>, 2008.**

A very successful meeting was held recently in Limerick to highlight the importance of new educational certification and standards development in Medicine in Ireland.

The meeting was organised for the Irish Association of Internal Medicine (IAIM) by Dr. James O'Hare, President of the Royal College of Physicians of Ireland (RCPI).

The meeting was very well attended and included Chairpersons Professor Bill Shannon, University of Limerick and Dr. John Donohue, President, Royal College of Physicians of Ireland. In addition, Dr. Geoff Chadwick from University College Dublin and Dr. Liam Casserly from the Mid-Western Regional Hospital chaired the afternoon sessions.



Panel Discussion, L to R: Dr. Chadwick (RCPI), Dr. Casserly (Limerick Regional), Professor Kerins (UCC), Dr. O'Hare (President IAIM), Professor Bell (Imperial College, London).

An overview of postgraduate medical education was presented by **Mr. Leo Kearns**, CEO, RCPI on the topic "Changing Postgraduate Training - Tooke Report and the lessons learned from the UK." Mr. Kearns reviewed the recent disastrous "re-engineering" of postgraduate applications developed by the UK authorities. This resulted in a national scandal which hit the headlines. He emphasised the importance of advising doctors to have an input into applications for training programmes and that these applicants should undergo live interviews in the traditional mode so that aptitude can be assessed in real terms.

**Professor Tom Keane**, Director, National Cancer Programme spoke on "Physician Leadership and its Role in Reforming Healthcare." Professor Keane has been employed from Canada by the HSE for the re-engineering of Cancer Services in Ireland. He addressed the problems that were faced by Canada when income rapidly dropped in the Health Service which forced radical changes in cancer service development with centralisation. Professor Keane emphasised that if physicians do not take a leading role in reform then non-physicians and bureaucrats will take control probably to the detriment of healthcare provision and patients.

**Dr. Colm Quigley**, President of the Medical Council of Ireland spoke on "Professional Competence Assurance and what it means to physicians." He emphasised the public's expectation and professional educational standards. This will require doctors to undergo re-certification and assessment by peers and other supporting professionals. This will require enormous resources which are currently not available.

**Professor David Kerins**, Head of School of Medicine, University College Cork gave a wonderful computer simulated address entitled "See One, Do One, Teach One in the 21<sup>st</sup> Century." It demonstrated that modern computer simulation can greatly enrich comprehension and indeed practical skills both for undergraduate and postgraduate training.



**Professor Derek Bell**, Professor of Acute Medicine, Imperial College, London spoke on "Pulmonary Embolism as a Learning Paradigm." He reviewed the problems of uncertainty in diagnosis in many patients and the use of various diagnostic procedures and the need for careful logical analysis in making a diagnosis.

**Dr. James O'Hare**, President Irish Association of Internal Medicine reviewed "Teaching and Mentoring on the Ward Round." He emphasised the critical role of listening and communication in professional standards set by senior doctors who must transmit the correct skills and attitudes to younger colleagues.

The Royal College of Physicians held its fellowship ceremony and conferred an honorary fellowship on Professor O'Donnell, currently visiting the University of Limerick Medical School.

After the college dinner IAIM conferred distinguished service medals to Dr. Pat Sullivan, Mallow and Dr. Paddy Mc Kiernan, Wexford.

Dr. James O'Hare handed over Presidency of IAIM to the newly elected President Dr. Colm Quigley.

An excellent range of original scientific presentations were made on March 8<sup>th</sup>. The winner of the Lemass Gold Medal was Dr. Gallagher, Department of Geriatric Medicine, Cork University Hospital with his presentation "Inappropriate Prescribing and Adverse Drug Events in Acutely Ill Older Patients".

## GRADUATE MEDICAL SCHOOL - 1<sup>ST</sup> ANNUAL RESEARCH FORUM

The 1<sup>st</sup> annual research forum was held in the graduate medical school on Tuesday March 11<sup>th</sup>, 2008. The goal of the research forum is to make the graduate students aware of the on-going research opportunities in UL and to encourage them to actively engage in research leading to an M.D.,M.Ch. or Ph.D. Degree over the course of their medical studies. Following a welcome address by Professor Vincent Cunnane, Vice President Research UL, some nineteen research topics were read to an audience of the first year graduate medical students and participant speakers. In keeping with the wide diversity of backgrounds among the graduate students a wide range of research topics was presented. The invited speaker, Brian Leonard, Emeritus Professor of Pharmacology, NUIG, Galway and Visiting Professor at the Department of Psychiatry and Psychotherapy, Ludwig Maximilians University, Munich, Germany gave a talk provocatively entitled *Depression as a Disease of the Immune System*.

Professor Leonard's talk was well received by the audience and was followed by a vigorous question and answer session. Discussion and debate continued among graduates and speakers during a well attended light lunch in the Mill Race. As will be the tradition for this meeting the organizers have published an electronic booklet in the series Medical Research Resources. This booklet contains the full programme of the research forum including the contact details of the nineteen speakers, a brief description of each research area and the individual power-point presentations. Graduate students were encouraged to contact the speakers directly if interested in undertaking research.

# News & Events



Attending the 1st annual graduate medical school research forum were invited speaker Brian Leonard, Emeritus Professor of Pharmacology, NUIG, Galway and Visiting Professor at the Department of Psychiatry and Psychotherapy, Ludwig Maximilians University, Munich, Germany and Professor Billy O'Connor, Head of Teaching and Research in Physiology, Graduate Medical School, University of Limerick.



A section of the audience attending the research forum.

The organisers would like to express their sincere thanks to the medical school staff for their hard work in making the research forum such a success.

William T. O'Connor Ph.D.(Chair, Organising Committee)  
Chair and Head of Teaching and Research in Physiology  
Graduate School of Medicine

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<http://www.ul.ie/medicalschoo/index.html>

**The Graduate Medical School at the University of Limerick had its first intake of students in 2007. It provides a highly innovative, student-centred and integrated curriculum with a strong emphasis on small-group teaching, self-directed learning and research.**

## HEALTH SERVICES CONFERENCE ON QUALITY AND SAFETY IN HEALTHCARE

A two day conference on Quality and Safety in Healthcare was held on the 14<sup>th</sup> and 15<sup>th</sup> of April 2008 at the Radisson SAS Hotel, Dublin Airport. The conference was conjointly hosted by nine key health service organisations; Clinical Indemnity Scheme; Healthcare Risk Managers' Forum; Health Services Executive Office of Quality and Risk, Health Services National Partnership Forum; Institution of Occupational Safety and Health; Irish Clinical Audit Network; Irish Health Promoting Hospitals; Irish Public Bodies Mutual Insurances Ltd. and the Irish Society for Quality and Safety in Healthcare. This was the first time in Ireland that so many organisations have come together to host a conjoint conference on health service quality and safety.

The theme of the conference was *Leading and Managing: together we can provide a safe quality service for all*. The conference aimed to promote safe, quality patient care, promote a safe environment for all employees and share best practice and information on quality and safety.





**Organising Committee:** Back row L to R: Ann O'Riordan IHPH, Helen Franklin HSNPF, Professor Drumm CEO HSE, Hilary Dunne ISQSH, Majella Daly ICAN. Front row L to R: Rosemary Ryan IPB, Cora McCaughan HCRMf, Maria McInerney HSE Office of Quality & Risk (Chairperson, Conference Committee), Niamh Keane ISQSH.



L to R: Edwina Dunne, Head of Quality and Risk HSE, Professor Anne Scott, Deputy President Dublin City University, Mr. John Campion, Executive Director Human Resources and Corporate Affairs ESB, Mr. Jean Par  s, Chief Executive Officer Dedale and Maria McInerney, Quality & Risk Area Manager HSE West.



L to R: Maria McInerney HSE Office of Quality & Risk (Chairperson, Conference Committee), Professor Brendan Drumm CEO HSE, Edwina Dunne, Head of Quality and Risk HSE.

The opening address was delivered by Professor Anne Scott, Deputy President, Dublin City University. In her opening remarks Professor Scott said some of the challenges facing the health service today include culture; vested interest from professions and unions; evidence or lack of evidence to support practice; resource distribution and configuration; leadership and management and accountability both at corporate and personal level. Professor Scott said we should be striving for a health service that has ease and equity of access, with the patient at its core, where employees feel acknowledged, respected and empowered and where every member of staff understands their role and accepts responsibility for enacting that role competently and humanely.

Keynote speakers included Andrew Kelly, CEO Irish Blood Transfusion Services; David Dodd, Senior Counsel; John Campion, Executive Director, HR and Corporate Affairs, ESB; Jim Easton, Chief Executive, York Hospitals NHS Trust; Hugh O'Brien, Head of HR, Eircom Retail; Professor Des O'Neill, Associate Professor in Medical



# News & Events

Gerontology, TCD and Jean Pariès, CEO Dedale, France. Many attendees commented on the valuable lessons learnt from the speakers representing other areas of industry, as well as those more closely linked to the health service.

The winners of the HSE Achievement Awards presented their projects at the Parallel Sessions. The presentations generated lively discussion. The important messages communicated by all the presenters, if applied throughout the healthcare system, could significantly enhance the quality and safety of care for patients, service users, staff and all those who come into contact with health services.

The conference concluded with a panel discussion chaired by Bob Semple, Price Waterhouse Coopers. The speakers included; Dermot Smyth, Department of Health and Children, Dr. Deirdre Madden, Chair, Patient Safety Commission, Hilary Coates, HIQA, Patricia Gilheaney, Mental Health Commission, Martin O'Halloran, CEO Health and Safety Authority and Edwina Dunne, HSE Office of Quality and Risk. Questions were put to the panel from the conference attendees challenging the thinking behind each speaker's mission and values and contribution to quality and safe health services.

Professor Brendan Drumm, CEO of the HSE delivered the closing address. Professor Drumm spoke of the importance of clinicians being actively involved in the management of risk and patient safety, while stressing the importance of speaking with and involving patients and service users when adverse events occurred.

Eighty poster abstracts were submitted for consideration, 43 were short listed and exhibited at the conference. Professor Drumm presented the awards to the four category winners:-

## **Quality Improvement:**

'Benefits of nurse education in the management of venous leg ulcers.' Niamh Keane PHN and Mary Clarke Moloney RGN PhD, Ennis, Co Clare.

## **Patient Safety:**

'Public access poisons information, patient care processes and potential healthcare cost savings.' N. Cassidy, JA. Tracey, National Poisons Information Centre, Beaumont Hospital.

## **Staff Quality and Safety:**

'Care Pairs - Together Each Achieves More.' Alicia McCabe, Breda Hayes, Michelle Russell, Practice Development Co-ordinator, St. Mary's Hospital, Phoenix Park.

## **Leading and Managing:**

'Opening the Transitional Care Unit (TCU).' Trudy Bennett, Our Lady's Children's Hospital, Crumlin.

Attendees at the conference provided their evaluation on the usefulness of the two days. 80% said the conference met their expectations. The keynote presentations rated 85% in the good or very good categories. Participants particularly enjoyed and learned from the quality and safety improvement initiatives outlined by organisations outside of the HSE such as the ESB and the NHS. The service user perspective was also welcomed. A large number commented favourably in terms of the learning and the standard of the poster presentations.



Attendees suggested that websites and healthcare publications be used as a method of disseminating the information and learning from the conference. The conference website and HSE website will be used to disseminate the information from the conference.

The conference organising committee have agreed to host another conference in 2009.

All presentation materials are available on [www.qualityandsafetyconference.ie](http://www.qualityandsafetyconference.ie)

## **THE NURSING AND MIDWIFERY PLANNING AND DEVELOPMENT UNIT, (NMPDU) HSE WEST (LIMERICK, CLARE, TIPPERARY NR)**

### **5<sup>TH</sup> ANNUAL CONFERENCE**

The NMPDU's 5th annual conference, *Transforming Care through Innovation and Quality*, took place on April 30<sup>th</sup>, 2008 in the Department of Nursing and Midwifery, Health Sciences Building at the University of Limerick.

The aim of the NMPDU is to support, communicate and collaborate with all nursing and midwifery staff, at both clinical and managerial level, to deliver a quality patient-centred service. The purpose of the NMPDU is to work actively with all health service employees, in line with national and corporate health strategies and the transformation programme priorities. This year the title of the conference reflected changes and developments occurring within the service. Transforming patient care in this current climate of an evolving healthcare system requires the innovation and creativity of staff in developing and improving patient care and the conference programme focused on all of these areas in great detail.

Speakers at the conference included international, national and local speakers discussing evidence-based practice and the transforming of care within the nursing profession. The first keynote address was delivered by Professor Mike Nolan, Professor of Gerontological Nursing, School of Nursing and Midwifery, Sheffield Institute of Studies who spoke about the issue of *Ageing in the United Kingdom*. Professor Nolan trained as a teacher before entering the nursing profession. After gaining qualifications in general and psychiatric nursing, he worked with older people and their family carers in a variety of clinical, educational and research roles for the past 25 years. He has particular interests in the experiences of frail older people and their family carers in community and residential settings. The evaluation of services to support such individuals, and the ways in which formal services, family carers and older people can forge creative partnerships by sharing their knowledge and expertise was explored in this motivating and stimulating presentation.

Professor Marita Titler, Director of Research, Quality and Outcomes Management, Department of Nursing Services and Patient Care at the University of Iowa Hospitals and Clinics delivered the second keynote address. Professor Titler's current programme of research focuses on translation science, interventions to improve outcomes of adults with chronic illnesses and dissemination of evidence-based practice guidelines for older persons. Professor Titler delivered an interesting and stimulating presentation on quality initiatives, processes and outcome measurements. One of her key messages was that evidence-based practice promotes quality patient care via excellence in clinical practice. She also emphasised that research utilisation and evidence-based practice activities are required when undertaking quality and outcome management initiatives linked to the transformation agenda.



# News & Events

## NMPDU Staff and Conference Speakers



L to R: Larry O'Connor, Cora Lunn, Michelle Frawley, Rachael Banques, Linda Moore, Lorna Peelo-Kilroe, Sarah Condell, Ina Crowley, Valerie Ryan, Fiona Collins, Professor Mike Nolan, Katie Tierney, Professor Marita Titler, Margaret Gleeson, Marie Casey, Dr. John Kellett, Mairéad Cowan, Gillian Conway, Nora Irwin, Dr. Siobhán Ní Mhaolrunaigh, Aidan Boucher, Niamh Keane, Fiona Hurley, Denise O'Leary, Sheila O'Malley

Presentations were also given by four local and four national speakers this year. An overview of the nursing services directorate was provided by Dr. Siobhán O'Halloran, Director of Nursing Services, Health Service Executive. Ms. Linda Moore provided an insightful account of the Health Information and Quality Authority's quality and safety framework. Ms. Margaret Gleeson and Dr. John Kellett from the Mid-Western Regional Hospital in Nenagh gave a presentation on the Simple Clinical Score as a lever for change. Since its implementation the score has enabled nurses and doctors to perform systematic and standardised patient assessment.

Dr. Siobhán Ní Mhaolrunaigh and Ms. Denise O'Leary from the Nursing and Social Care Research Unit in the Institute of Technology, Tralee provided an overview of the evaluation of Nurses' use of research-based evidence in their decision making. Ms. Niamh Keane, Public Health Nurse and Co-ordinator of the Ennis Leg Ulcer Clinic shared the challenges and developments for nurses of Leg Ulcer Clinics in the community. In order to provide a view from a patient perspective, Mr. Aidan Boucher spoke honestly about his experiences as a user of the health services.

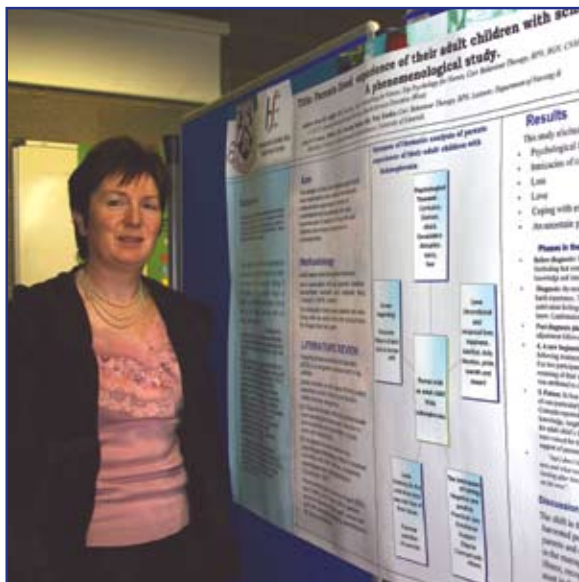
Closing the conference, Ms. Sheila O'Malley, Chief Nursing Officer in the Department of Health and Children, aptly summarised the proceedings of the day.

Further to the presentations on the day, 17 posters were displayed showcasing the work of nurses and midwives within HSE West. The posters depicted innovation in the transformation of quality care provided to health service users.

The posters displayed were of a high standard and were commended by all delegates who attended. External judging by Professor Marita Titler and Sarah Condell from the National Council of Nursing and Midwifery awarded the following presenters with a prize:-



## Parents Lived Experiences of their Adult Children with Schizophrenia - A Phenomenological Study



Rose McAuliffe (absent Larry O'Connor)

## Nurses' Experience of Delivering Spiritual Care to Patients in an Irish Hospice Palliative Care Unit



L to R: Maria Bailey and Sue Moran

## Benefits of Nurse Education in the Management of Venous Leg Ulcers



Niamh Keane (absent Mary Clarke Moloney)

# News & Events

As an extension of the conference programme a master class was held on May 1<sup>st</sup>.

This was facilitated by Professor Marita Titler and Dr. Susan Adams both from the University of Iowa Hospitals and Clinics. This masterclass explored:-

- tools to evaluate nursing and midwifery care
- development of core indicators to measure quality improvement

The session was interactive and challenged all participants to measure and monitor outcomes as part of all quality initiatives.

## Masterclass



L to R: Katie Tierney, Professor Marita Titler, Sarah Condell, Gillian Conway, Mairéad Cowan, Dr. Susan Adams.

**The Nursing and Midwifery Planning and Development Unit would like to take this opportunity to thank all of our speakers and presenters for their participation, and the University of Limerick and the Centre of Nursing and Midwifery Education for the use of their facilities.**

## MEDICINE & HUMANITIES MEETING

A Medicine & Humanities evening was hosted by the Palliative Medicine Department, Milford Care Centre on Wednesday May 7<sup>th</sup>, 2008. This is a twice yearly event. Two doctors/poets entertained the audience on the night, linking poetry and medicine.

Dr. Columba Quigley, formerly a Consultant in Palliative Medicine and a Cork graduate, now a PhD student of Irish literature, also presented her own work.

Dr. Glenn Colquhoun is a General Practitioner, born in South Auckland and now working as a doctor and poet in New Zealand. He has published a childrens' book *An Explanation of Poetry to my Father* and also a book





entitled *Playing God*. He captivated his audience by linking Maori and Irish mythology in a dramatic presentation of his poetry including the Haka.

Medicine & Humanities seminars have been established in Limerick to acknowledge the valuable addition and tradition of the humanities in the education of doctors.

## THE ART AND SCIENCE OF PALLIATIVE MEDICINE – 8<sup>TH</sup> INTERNATIONAL CONFERENCE PALLIATIVE MEDICINE DEPARTMENT, LIMERICK

The 8<sup>th</sup> International Art and Science of Palliative Medicine Conference took place in the Castletroy Hotel on Thursday May 8<sup>th</sup>, 2008. Though smaller than the previous conference, this year's was equally diverse and international in nature. The speakers came from Ireland, Scotland, London, New Zealand, Canada and Australia. They varied in their fields of expertise but each provided insight into the Art and Science of Palliative Medicine. Between each presentation were brief showcases of Art, Poetry and Music.



L to R: Dr. S. Donnelly, Consultant in Palliative Medicine, HSE/Milford Care Centre, Professor Dominic Harmon, Consultant Anaesthetist, Dr. M. Conroy, Consultant in Palliative Medicine, HSE/Milford Care Centre, Professor L. Clein, Canada, (Speaker)



L to R: Dr. D. O'Brannagáin, Consultant in Palliative Medicine, Our Lady of Lourdes Hospital, Drogheda, Marian Moriarty, Director of Nursing, Milford Care Centre, Dr. S. Donnelly, Consultant in Palliative Medicine, HSE/Milford Care Centre, Dr. J. Loughnane GP, Newcastle West, Co. Limerick

Dr David Finn Neurobiology Professor in NUI Galway opened the meeting as a scientist. He presented an exciting overview of lab-based research using animal models to study pain. Specifically he demonstrated the increasing knowledge gained from such study with respect to the relationships between pain, fear and anxiety. Ultimately, once these pathways are fully understood, the hope is that appropriate targets for novel therapies will be identified which could alleviate pain.



L to R: Dr. Columba Quigley, London, (Speaker), Dr. F. Cranfield, SpR in Palliative Medicine, Milford Care Centre, Dr. David Finn, University of Galway, (Speaker), Damien Finness, Australia, (Speaker)

# News & Events

Dr Columba Quigley, a member of the Cochrane Pain, Palliative and Supportive Care Group, and author of the Cochrane review on the subject, presented an evidence based overview on the practice of opioid switching. She untangled the complexities of opioid dose equivalences and the difficulties in conducting a Cochrane review when randomised controlled trial data is not available. She brought the audience through the available data on opioid switching and concluded that it is an established practice for which the evidence base is limited but growing. Both further genetic research exploring the many candidate genes and large robust trials are needed to guide the best use of opioids.

Dr Damien Finniss from Sydney and Jacqui Malcolm from Glasgow concluded the morning session with complementary presentations looking at the importance of the effect of the doctor or nurse in caring for their palliative care patient, but from very different approaches. Dr Finniss, in his presentation entitled “The placebo response –mechanisms and their implication for clinical practice” reviewed the clinical and lab-based trial data exploring the placebo effect. He explained the concepts of placebo effects via conditioning and expectation. He presented fascinating research identifying some of the physiological pathways involved in the placebo effect and demonstrated the clear involvement of higher centres. The key learning points involved challenging the audience to change their concept of placebo effect to an active, therapeutic and highly variable positive effect dependent on conditions in which the placebo treatment is administered, rather than an innate process designed that is of no benefit to the patient.

Jacqui Malcolm’s presentation entitled “Dying: the end of a life” was thought-provoking and inspiring. A beautiful story reminded the audience of each person’s innate ability to face their fears and help others do the same. She read a moving piece by a young woman dying of cancer, which was a stark reminder of the importance of demonstrating and bringing your own humanity to any interaction with a patient who is facing death.



A section of the audience at the conference

The afternoon began with the first public performance of a moving documentary by Dr. Sinead Donnelly from Limerick entitled “Going Home”. This documentary is the fourth on the subject of dying in Ireland produced by Dr. Donnelly. In this modern busy world with smaller families, and competing community health care resources, this documentary serves as a timely and sensitive exploration of what it is like to care for a relative who is dying



at home. The documentary gently highlights the value of that time and portrays the courage demonstrated by relatives facing the fears and uncertainties of undertaking the care of a dying family member at such an emotional time.

Professor Clein of Edmonton Alberta gave a historical and pathophysiological overview of dependent limb oedema and treatment options to date. He then introduced the concept of drainage of dependent limb oedema. He gave a video demonstration of the procedure of drainage by a subcutaneous closed drainage system, with case examples supported by photographic evidence. This simple technique offers hope and a potential solution for those with progressive illness worst affected by such a debilitating symptom.

The last scientific presentation explored the use of opioids in patients with renal impairment, renal failure and on dialysis. Professor Welsh exposed the lack of research in the area, presented his own findings to date and proposed broad guidelines for opioid guidelines in renal failure based on the available evidence. This was widely welcomed and acknowledged as likely to be of great use in day-to-day clinical practice.

The day ended with an enthralling and diverse poetry reading by the award-winning New Zealand Poet Glenn Colquhoun who works as a general practitioner. He read mostly from his collection entitled *Playing God*, a collection of poems related to his experiences in medicine. The audience listened intently and was at times moved to sorrow, reflection and laughter. He conveyed moments of life witnessed or experienced by a doctor with exceptional insight and poignancy.

Overall, the Conference delivered on its promise to be a fascinating, though-provoking day of learning on both the "Art and Science of Palliative Medicine."

## THE IRISH SOCIETY FOR IMMEDIATE CARE 6<sup>TH</sup> SCIENTIFIC MEETING



This event will be held in the Connemara Coast Hotel on June 12<sup>th</sup> and 13<sup>th</sup>, 2008.

The aims of ISIC are: -

- To enhance the development of pre-hospital care in Ireland
- To provide training and support
- To foster audit and research in pre-hospital care
- To liaise with other relevant organisations nationally and internationally

This year's conference will have national and international experts on pre-hospital care from a variety of backgrounds. All interested in pre-hospital care are welcome to attend, irrespective of background or profession. See [www.isic.ie](http://www.isic.ie) for more information.



# Education, Training and Continuing Professional Development

## **HSE ESTATES ISO 9001:2000 TECHNICAL TRAINING ACCREDITATION - TRAINING AND CONTINUING PROFESSIONAL DEVELOPMENT FOR ESTATES STAFF IN LIMERICK, CLARE AND NORTH TIPPERARY**

The Estates Department, HSE West, Limerick, Clare and North Tipperary has ISO 9001:2000 Certification. Among the areas certified are Technical Training, and for compliance, the Department has an on-going Training Programme for Estates Staff.

As part of the Programme, a Training Seminar was held on February 5<sup>th</sup>, 2008 in conjunction with ESB Networks Services, Mid-West which was attended by senior staff of both organisations.



Presentation of Certificates of Attendance at Training Seminar

Back row L to R: Gerry Mac Namara, John Magner, Noel Nagle, Pat Marks, Niamh Mooney, Vincent O'Brien, Michael Brennan.

Front row L to R: Jim Ryan, Michael O'Brien, John Cregan, Jim Enright, Michael Fogarty, Philip Brennan.

Certificates of Attendance were later presented to all HSE Estates staff who had attended the February Training Seminar on March 18<sup>th</sup>, 2008;- Bernard Lennon (Regional Fire and Safety Officer), Niamh Mooney (Assistant Regional Fire and Safety Officer), Tony Mc Bride (Maintenance Manager), Larry Murphy (Building Services Officer), Martin McGrath (Maintenance Manager), John Cregan (Foreman), Pat Marks (Maintenance Manager), Vincent O'Brien (Foreman), Mark Kelly (Electrician), Jim Ryan (Maintenance Manager), Philip Brennan (Buildings Services Officer), Michael Fogarty (Buildings Services Officer), Michael O'Brien (Electrician), Jim Enright (Maintenance Manager), Richard Niland (Foreman), Michael Brennan (Foreman), John Phillips (Foreman), John Magner (Senior Technician), Noel Nagle (Project Manager) and Gerry Mac Namara (Estate Manager).



## **FURTHER SERVICES AVAILABLE DUE TO EXTENSION OF STATISTICAL CONSULTING UNIT TO NEW APPLIED BIOSTATISTICS CONSULTING CENTRE WITHIN GRADUATE MEDICAL SCHOOL AT UL**

The Statistical Consulting Unit (SCU) is based in the Department of Mathematics and Statistics at the University of Limerick. Its satellite centre the Applied Biostatistics Consulting Centre (ABCC) is based in the Graduate Medical School and concentrates on advice to the Health Sector only, both externally (HSE) and internally (Health Sciences). Both aim to provide a professional statistical consulting service and to promote good statistical practice amongst researchers in the University, Industry and in the Health Sector. The services provided by the SCU/ABCC include both one-to-one consultation and the running of courses for larger groups. The ABCC services are offered to all staff involved in research within the HSE Mid-West (soon to be extended throughout Ireland).

### **Main Aim**

To improve the standard of research design from initial proposal through to presentation of results and findings both within the UL community, HSE and beyond.

### **Objectives**

To enhance and increase knowledge of quantitative (and qualitative) research methods within the UL academic community and the HSE by means of the SCU/ABCC offering statistical consultancy and courses.

To establish regular courses in quantitative research methods both internally and externally (companies and HSE etc.)

### **Services Offered**

Both drop-in sessions (Tues/Thurs 11-1) and booked 1 hour appointments. These can be at UL or HSE sites as appropriate.

#### **1. Consultations - Advice given on the following:**

- Research methods/design
- Proposal completion (particularly statistical methodology section)
- Designing Experiments
- Survey Analysis and Design
- Questionnaire Design
- Sampling Procedures
- Data Collection
- Data Entry
- Data Analysis (quantitative and qualitative)
- Report Writing
- Presentation
- Application and interpretation of statistical methods
- Statistical advice for grant proposals
- Reports on data analysis for publications/theses



# Education, Training and Continuing Professional Development

## Courses

The aim of the courses run by the unit (SCU) and centre (ABCc) is to provide people with basic statistical tools for inputting, describing and analysing data. The courses are computer based using software packages such as Excel and SPSS to carry out the analyses. They are designed for people with no or little prior knowledge of statistics and mathematical theory is kept to a minimum. All of the courses are run over a one or two day period and a comprehensive manual is provided. The courses are conducted within the University of Limerick campus. They are usually offered in Jan/Feb and May/Jun each year. They can also be given on clients' premises.

### Research Methodology and Statistical Courses offered by the SCU/ABCc

#### (a) Questionnaire Design

**Duration: 1 day**

This introductory course covers the basic elements of questionnaire design and question wording. The different requirements for postal and interview questionnaires will be emphasised and practical exercises will be given in question wording. Various modes of presentation will be described. Some suggestions for ways of improving response rates will also be given.

#### (b) Surveys and Sampling

**Duration: 1 day**

This course examines how sampling techniques can be applied in survey research. We begin by looking at the role of sampling in the survey process. We introduce the basic principles of sampling theory and how this relates to sampling strategies and sample design in a practical context. Practical exercises address the questions of the required sample size and precision of estimates, sampling strategies and when sample surveys are appropriate. This course, together with the 'Questionnaire Design' course above, provides a strong foundation for any researcher planning a survey.

#### (c) Introductory SPSS

**Duration: 1 day**

This course provides an intensive introduction to SPSS. It assumes that participants will have a basic familiarity with the Windows environment. We will examine the features of SPSS for Windows, use a simple data set to cover the topics of transforming variables, selecting data for analysis, then perform basic analyses to produce frequency distributions, summary statistics and cross tabulations before examining some of the extensive graphic capabilities of SPSS.

#### (d) Analyses of Categorical (Survey) Data

**Duration: 1 day**

#### (e) Exploring Relationships & Regression Analyses **Duration: 1 day**

(These courses cover one day's material each from the 2 day course below)

#### (f) Basic Statistics for Researchers

**Duration: 2 days**

A Basic Statistics course covering the basic methods of analysis needed for most quantitative research. A mix of practice and theory. No prior knowledge of statistics is assumed although you will require a basic knowledge of using SPSS and/or other statistical software packages (e.g. attendance at Introductory SPSS course would be sufficient). Material covered includes: Sampling; Data analysis - An overview; Types of data; Scales of data measurement; coding questionnaire data.



Describing data using graphical and numerical methods. Normal Probability distributions. Confidence Intervals and Hypothesis Testing (Parametric and non-parametric). Multivariable analysis – Qualitative (categorical) variables – Chi-squared Tests. Multivariable analyses – Quantitative (continuous) variables – Scatter plots, correlation and regression.

**(g) Introduction to Design of Experiments**

**Duration: 1 day**

This introduces the general principles of experimental design. It is only run subject to demand.

**(h) Structural Equation Modelling using LISREL**

**Duration: 2 days**

This workshop will examine the historical and statistical foundations of structural equation modelling (SEM), and introduce the ideas associated with measurement models and confirmatory factor analysis (CFA).

Further details of these courses and types of consultation provided can be found on the SCU website given below (soon to be updated to include details of new centre(s)).

**Contact details:**

Dr Jean Saunders  
Executive Director  
Statistical Consulting Unit  
Department of Mathematics and Statistics  
(Applied Biostatistics Consulting Centre  
Graduate Medical School)  
University of Limerick

Tel: 061-213471  
Mob: 086-3866353  
Fax: 061-334927

email: [jean.saunders@ul.ie](mailto:jean.saunders@ul.ie)  
Website: <http://www.ul.ie/scu/>





# Education, Training and Continuing Professional Development

## SUICIDE PREVENTION TRAINING INITIATIVES

The Suicide Prevention Office, HSE West is committed to the implementation of key recommendations set out in 'Reach Out', the National Strategy for Action on Suicide Prevention 2005-2014. Such a commitment identifies the need to develop and deliver training and awareness programmes for communities, organisations and professionals. The following suicide prevention initiatives are specifically tailored for the needs of those working within the HSE Western area.

### STORM (Skills Training on Risk Management)

Developed in Manchester by Professor Louis Appleby and his team, STORM is a high quality, evidence-based practical course, designed to improve the confidence, skills and knowledge in both the assessment and management of clients at risk of self-harm and suicide.

This suicide prevention training programme focuses on both the **assessment and management of suicide risk**. STORM comprises of 4 modules:-

- Assessment
- Crisis management
- Problem solving
- Crisis prevention

**Target Audience:** STORM is most suitable for frontline clinical staff who may encounter clients at risk of suicide.

**Method:** Presentation and skills practice.

**Delivery:** STORM can be tailored to suit the needs of participants but is typically delivered over two full day training sessions but can also be delivered over one full day with the emphasis on the assessment and management modules.

### ASIST (Applied Suicide Intervention Skills Training)

The emphasis of ASIST is on suicide first aid, on helping a person at risk of suicide to stay safe and seeking further help. Evaluations have shown that ASIST increases caregivers' knowledge and confidence in responding to a person at risk of suicide.

Participants learn how to:-

- Recognise invitations for help
- Reach out and offer support
- Review the risk of suicide
- Apply a suicide intervention model
- Link people to further support

**Target Audience:** ASIST provides practical training for all caregivers, both formal and informal whether concerned about the welfare of a friend or a client at risk of suicide.



**Method:** Presentation, discussion, interactive group work, group and individual skills practice.

**Delivery:** ASIST is a two day workshop delivered over two consecutive days.

**Attendance at the two full days is essential.**

### Understanding Self-Harm

In 2005, it was reported that approximately 10,800 cases of deliberate self-harm (DSH) were treated nationally in A&E Departments. For some, DSH represents a wish to die by suicide. However, for others, engaging in self-harm has other meanings, some of which are complex. In many incidences, this behaviour takes the form of "cutting", the true incidence of which is difficult to accurately determine. This awareness programme considers the complexity of self-harm by:-

- Developing participants' knowledge and understanding of the behaviours associated with self-harm
- Providing an understanding of the reasons underlying self-harm
- Considering the needs of people who engage in these behaviours
- Developing participants' confidence when working with people who self-harm

**Target Audience:** This programme is suitable for all caregivers, especially those working in areas which frequently encounter self-harming behaviour.

**Method:** Presentation, discussion, interactive group work

**Delivery:** The delivery of 'Understanding Self-Harm' can be tailored to suit the needs of participants. It is typically delivered over a 3 hour or full day session.

### General Suicide Awareness

An awareness session which incorporates:-

- Suicidal behaviour in Ireland: Recent facts and findings
- Understanding suicidal risk factors and warning signs
- Responding to suicidal feelings and behaviour

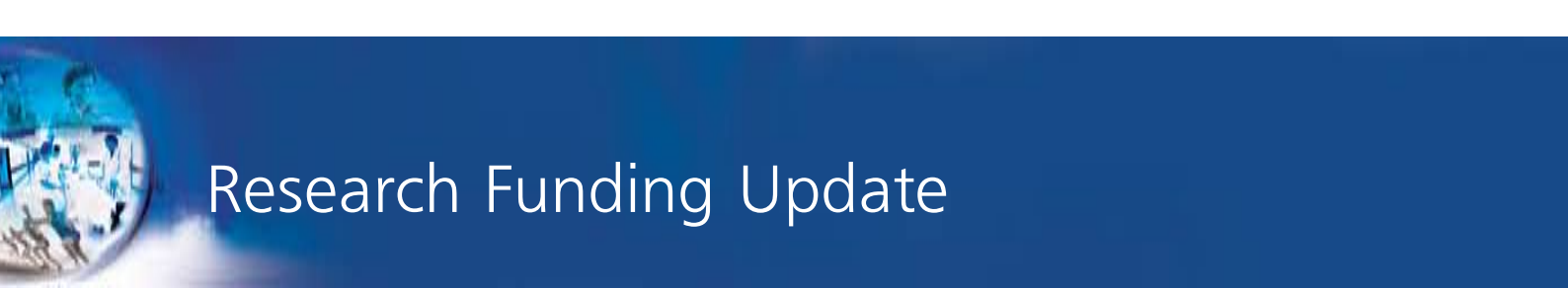
**Target Audience:** This awareness session is suitable for all who have a general interest in suicide prevention.

**Method:** Presentation.

**Delivery:** This session is typically delivered over a two hour session.

*For further information on any of these suicide prevention initiatives, please contact the Suicide Prevention Office on 061-461454.*





# Research Funding Update

## Health Research Board (HRB)

The following funding schemes are yet to be announced in 2008

- Health Service R&D Awards
- Global Health Research Awards
- Nursing and Midwifery Research Priority Study
- NCI Cancer Prevention Fellowship Programme

Visit [www.hrb.ie](http://www.hrb.ie) for updates

## Wellcome Trust

The Wellcome Trust offers grant support in the following general areas:

- Biomedical Science
- Technology Transfer
- Medical Humanities
- Public Engagement

For further information visit [www.wellcome.ac.uk/funding](http://www.wellcome.ac.uk/funding)

## Science Foundation Ireland (SFI)

For further information on current and rolling calls visit [www.sfi.ie](http://www.sfi.ie)

## EU Funding

Information is currently available on [www.welcomeeurope.com](http://www.welcomeeurope.com)

## Enterprise Ireland

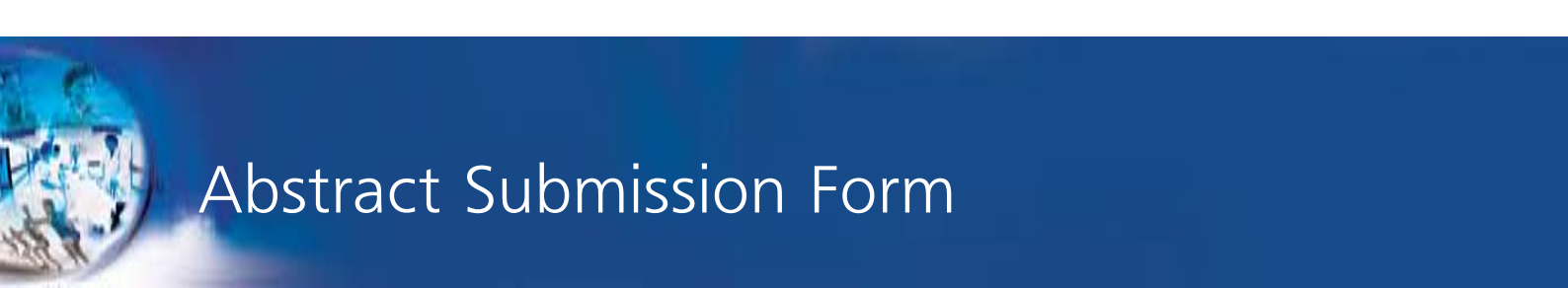
For detailed information on:

- Commercialisation Fund
- Patent Fund and Advice
- Applied Research Enhancement Programme

Visit [www.enterprise-ireland.com](http://www.enterprise-ireland.com)

## Irish Research Council for Science, Engineering & Technology

Postdoctoral Fellowship Schemes, Basic Research Grants Schemes and Postgraduate Research Scholarships available visit [www.ircset.ie](http://www.ircset.ie)



# Abstract Submission Form

Subject area: please tick the appropriate box

Medical	<input type="checkbox"/>	Health Services Management	<input type="checkbox"/>
Surgical	<input type="checkbox"/>	Personal & Social Services	<input type="checkbox"/>
Clinical Services	<input type="checkbox"/>	Nursing and Midwifery	<input type="checkbox"/>
Mental Health Services	<input type="checkbox"/>	Other *	<input type="checkbox"/>

\* If 'Other', please specify \_\_\_\_\_

Is the research Completed? ☐ Ongoing? ☐ Date Started \_\_\_\_\_ Date Completed \_\_\_\_\_

Title of Research \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Author(s) \_\_\_\_\_

## Your abstract should reflect the following suggested headings:

***Introduction, Rationale, Methodology, Results, Conclusion(s)***

Has this research led to further research activity? If yes, please give details \_\_\_\_\_

\_\_\_\_\_

Has this abstract been previously published? Yes ☐ No ☐ (please tick one box)

If "Yes", please state where and when: \_\_\_\_\_

Has this abstract been presented at Conferences or Seminars? Yes ☐ No ☐ (please tick one box)

If "Yes", please state when, where and by whom (please provide title Mr, Ms, Dr. etc.): \_\_\_\_\_

\_\_\_\_\_

Please indicate any funding the research has received which you would like to have acknowledged.

\_\_\_\_\_

Your contact details (including e-mail if possible). Name: \_\_\_\_\_

Postal address: \_\_\_\_\_

\_\_\_\_\_

Tel: \_\_\_\_\_ E-mail: \_\_\_\_\_

**Please e-mail your abstract and this completed form to:** [ckennedy@nihs.ie](mailto:ckennedy@nihs.ie)

**For further information please contact:**

Catherine Kennedy, Information Scientist, National Institute of Health Sciences, HSE West,  
St. Camillus Hospital, Shelbourne Road, Limerick t. 061-483975 f. 061-326670

We particularly welcome submissions on the online version of this form which may be accessed in the Research Bulletin  
Section of our website at [www.nihs.ie](http://www.nihs.ie). Alternatively, please e-mail your abstract and this completed form to  
[ckennedy@nihs.ie](mailto:ckennedy@nihs.ie)





# Abstract Submission Guidelines for Previously Unpublished Material

## PLEASE USE THESE GUIDELINES TO WHEN PREPARING ABSTRACT FOR SUBMISSION TO THE NIHS

The abstract should be structured as follows:

- **Title**
- **Author(s)**
- **Work Location of each author when involved in doing this research**  
*Specify Department, Institution, Town/City*

### Abstract

Abstracts should be structured to include as many of the following parts as appropriate:

- **Introduction**  
*Providing the background for the study, this section should be informative and brief*
- **Rationale**  
*Defining why the study was conducted*
- **Methodology**  
*Indicate the context, number and type of subjects or materials being studied, the principal procedures, tests or treatments performed*
- **Results**  
*Confirming or refuting the hypothesis, supported by statistics if appropriate*
- **Conclusions**  
*Stating the major new findings of the study and specifying what these findings add to what is known already*
- **Presented** (if appropriate)  
*Listing meeting name, location, date(s), name and title of speaker*
- **Funding** (if appropriate)  
*Indicating any sources of funding/sponsorship received which author(s) wish to have acknowledged*

### ABSTRACT FORMAT

1. All text should be typed in 12 point font size Times New Roman.
2. The abstract should be typed single-spaced with one line of space between paragraphs and under headings.
3. Paragraphs or headings should not be indented.
4. Type the title in **bold-face**.
5. List all authors (last name, first name initial) under Title, indicating main author by superscript <sup>1</sup> placed after the first name initial, the second author by superscript <sup>2</sup> etc.
6. In the Location Section, list the place where each author was based when they carried out the research. Place superscript <sup>1</sup> after the location of the main author and number other locations according to the order of the authors in the previous list.
7. Keep the body of the Abstract to an overall word limit of 600 words.
8. Use the following headings to structure your abstract: Introduction, Rationale, Methodology, Results, Conclusions, Presented\*, Funding\* (if appropriate)



9. Figures and Tables may be included. They should be labelled Table 1-/ Figure 1 and provided with a title which should be inserted above the graphic.
10. In the text of the abstract use standard abbreviations and symbols and define each abbreviation when it is used for the first time.
11. References may be included at the end of the abstract using the Vancouver Style. It is **essential** that all references are numbered in the text with superscript and listed at the end in the following format:

**Author's surname, Author's initial(s). Title of Article. Title of Journal. Year of Publication; Volume Number (Issue Number): Page Numbers of Article.**

**For Example:**

Hirsch DR, Ingenito EP, Goldhaber SZ. Prevalence of deep venous thrombosis among patients in medical intensive care. JAMA.1995;274:335-337.

## **SUBMISSION PROCEDURE**

1. Online Submission via **[www.nihs.ie](http://www.nihs.ie)**
2. Abstracts may only be submitted on the Abstract Submission Form available at **<http://www.nihs.ie/ResearchBulletin/index.cfm>**

**For any queries you may have with regard to responding to the Call for Abstracts, please contact**

Ms. Catherine Kennedy,  
Information Scientist,  
National Institute of Health Sciences,  
HSE West,  
St. Camillus Hospital,  
Limerick.

t. 061-483975  
m. 086-3812926  
f. 061-326670

e: [ckennedy@nihs.ie](mailto:ckennedy@nihs.ie)



# Abstract Submission Guidelines for Previously Published Material

## PLEASE USE THESE GUIDELINES WHEN PREPARING ABSTRACT FOR SUBMISSION TO NIHS

The piece of research should have been published in the 6-8 month period prior to December or June for inclusion in this section of the National Institute of Health Sciences Research Bulletin.

Please structure the abstract using the following subheadings:

- **Title**
- **Author(s)**
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