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INTRODUCTION

Human Immunoglobulins are derived from pooled human plasma donations. Haemovigilance protocols require that batch numbers be recorded for every vial of Intravenous Immunoglobulin (IVIG) dispensed and administered to facilitate batch traceability. IVIG is used for a wide variety of indications and by a range of specialties in Cork University Hospital (CUH).

OBJECTIVES

The main objectives of this audit were:-
1. To establish the various indications for use and main prescribers of IVIG within CUH
2. To assess adherence to current recording protocols both at ward and pharmacy level
3. To formulate written protocols in order to achieve optimum levels of adherence

METHODOLOGY

A retrospective review of pharmacy and patient medical records was carried out to examine accuracy of record keeping and the indications for use of IVIG in CUH. Approval was prospectively granted by the hospital risk assessment unit.

RESULTS

57 doses of IVIG were dispensed during the study period; 29 by the pharmacy chemotherapy unit and 28 by the pharmacy main dispensary. 79% (n=23) were recorded correctly in the pharmacy chemotherapy unit, while the corresponding value for the main dispensary was 67% (n=18). 37% (n=21) of patient medical records did not contain the blood product prescription and transfusion record (BPPTTR), therefore their medical files had no record of administration of IVIG. Of the 36 BPPTTR available, 72% (n=26) records were completed correctly. The IVIG administered was used for 14 different indications, hypogammaglobulinaemia being the most common (p = 0.544).
CONCLUSIONS

Haemovigilance strives to achieve 100% accuracy in recording of blood products and blood derived products. As is evident from the results of this audit, recording of IVIG in CUH does not reach optimum levels. This raises major concerns regarding protocols for recording and prescribing globulins. This study highlights system shortfalls and has set in motion system changes to improve these.

PRESENTED

As a poster presentation at The Irish Pharmaceutical Healthcare Association (IPHA) Annual Educational Conference in Dublin on April 19th and 20th, 2008.
INTRODUCTION

Hospitalized patients with acute medical conditions are at significant risk of Venous-Thrombo Embolism (VTE), some patients may develop Deep Vein Thrombosis (DVT) or Pulmonary Embolism (PE) and the latter is a leading contributor to deaths in hospital. Prophylactic treatment with Enoxaparin 40mg subcutaneously safely reduces the risk of VTE in patients with acute medical illness.¹

OBJECTIVE

The aim of the audit is to determine the number of patients with acute medical illness who were at risk of VTE and whether they were appropriately covered with prophylactic Enoxaparin.

METHODOLOGY

Data was collected through a designed pro forma from the records of 75 patients who were admitted acutely and at risk of VTE during a one month period in Nenagh General Hospital.

RESULTS

54% of the patients were appropriately covered with thrombo-prophylaxis. 5% of patients were receiving a therapeutic dose of Enoxaparin for Unstable Angina (UA). See Figure 1.

Figure 1 - Was Prophylaxis Given?
38% of the patients were more than 75 years of age, and of these, only 23% of patients were covered with prophylactic Enoxaparin.

30 patients were at risk of VTE but were not receiving thrombo-prophylaxis. More than 50% were elderly with poor mobility. See Figure 2.

**Figure 2 - Patients At-Risk who did not Receive Thrombo-Prophylaxis**

The number of patients who are covered by thrombo-prophylaxis could be improved by administering Enoxaparin to all at-risk patients. Improvement in the thrombo-prophylaxis cover for elderly patients should be stressed as most of them have poor mobility in addition to other risk factors.

**CONCLUSION**

Significant numbers of at-risk patients were not covered by thrombo-prophylaxis. The number of patients who are covered by thrombo-prophylaxis could be improved by administering Enoxaparin to all at-risk patients. Improvement in the thrombo-prophylaxis cover for elderly patients should be stressed as most of them have poor mobility in addition to other risk factors.

**REFERENCE**

Available on request.

**PRESENTED**

At the Journal Club at the Mid-Western Regional Hospital, Nenagh in July 2006 by Dr. Musaab Elmamoun.
Predictive scores such as APACHE II have been used to assess patients in intensive care units, but few scores have been used to assess acutely ill general medical patients.

This study is an examination of the ability of clinical variables documented at the time of admission to predict early mortality between 15 minutes and 24 hours after admission. It is set in an Irish rural hospital. It involves 10,290 consecutive patients admitted as acute medical emergencies and divided into a derivation cohort of 6,947 patients and a validation cohort of 3,343 patients.

40 patients of the derivation cohort (0.6%) died within 24 hours of hospital admission. Multivariate analysis revealed 11 independent predictors of early death from which a simplified model with minimal loss of predictive ability was derived. Since this model contained only the five variables of Hypotension (systolic blood pressure <100 mmHg), low Oxygen saturation (<90%), low Temperature (<35ºC, abnormal ECG and Loss of independence (unable to stand unaided) it was named the HOTEL score (one point for each variable). There were no differences in the early mortality predicted by this score between the derivation and validation cohorts - the area under the receiver operator characteristic curves for the derivation and validation cohorts were 86.5% and 85.4%, respectively. None of the patients with a score of zero died within 15 minutes and 24 hours and a score of one had an early mortality of 0.3% in both cohorts. A score of two had an early mortality of 0.9% in the derivation cohort and 1.7% in the validation cohort, while a score of three or greater had an early mortality of 10.2% in the derivation and 5.6% in the validation cohort.

The HOTEL Score quickly identifies patients at a low and high risk of death between 15 minutes and 24 hours after admission, thus enabling prompt triage and placement within a healthcare facility.

**SOURCE**

ABSTRACT

Matrix metalloproteinases (MMPs) and their inhibitors are a group of enzymes that degrade basement membranes in physiological and pathological processes. In addition, MMP-9 might play a part in the pathogenesis of allergy by mediating cytokine and chemokine responses.

Our aim was therefore to study the interaction between MMP-9 and its principal inhibitor, tissue inhibitor of metalloproteinase-1 (TIMP-1) in the nasal secretions of children with and without allergic rhinitis.

This was a prospective descriptive study. The participants were 82 children aged between 5 and 16 years. They were selected on the basis of attendance at the clinic with a primary complaint unrelated to the nose. The study was set in a tertiary children’s hospital and laboratory.

Nasal fluid was obtained by using a rhinoprobe curette. This was analysed by ELISA for the presence of MMP-9 and TIMP-1. In addition, MMP-9 activity was determined by zymography. Data were tabulated on Microsoft Excel (2000) and analysed using SPSS (Version 12).

It was possible to obtain both MMP-9 and TIMP-1 concentrations from 73 samples. Of these, 26 were from children with allergic rhinitis. The MMP-9/TIMP-1 concentration ratio was higher in children without rhinitis than those with allergic rhinitis (Mann-Whitney U test, z = 3.421, p < 0.01). There was no significant difference in the activity of MMP-9 or in the concentrations of MMP-9 and TIMP-1 between the two groups.

MMP-9/TIMP-1 ratio is significantly higher in nasal secretions of children without allergic rhinitis compared with controls. This may have implications on further understanding of this condition and on future therapeutic options.

SOURCE

INTRODUCTION

Hurling is an Irish sport which is played throughout the 32 counties. It is reputedly the fastest ball game in the world and the oldest field game in Europe. The sliotar is made of cork bound in leather and weighs 100-130 grams. It measures 75mm in diameter and travels at speeds of up to 30 metres per second (108km/hr) with a kinetic energy of 50 joules and therefore represents a missile with significant potential for injury. The hurling stick (caman) is also a common source of injury in this sport. It differs from hockey in that the player may handle the ball, which spends more time in the air than on the ground. There is no restriction on the heights to which the stick may be raised or projected.

Hurling is a popular sport in Ireland, particularly in Munster, part of which is served by the Mid-Western Regional Hospital, Limerick. The medical backup at training and at matches on site is varied, e.g., local GP attends matches or is available to be contacted by phone. Local doctors frequently support the club voluntarily. The parent of a player may be a doctor and provide medical cover. Players can be referred by the team manager to a local physiotherapist. Players are also referred to physical therapists by team management. The facilities at pitches to examine an injured player are variable and frequently limited. Injured players are reluctant to attend Accident and Emergency (A&E) due to what they perceive as the delay, often deferring until the following day. It is sometimes difficult for a doctor to know when attendance at A&E is warranted. This review of hurling injuries will potentially allow focused training for pitch side doctors.

There has not been a large scale systematic analysis of the type of injuries sustained by hurlers requiring A&E attendance since the introduction of the requirement to wear helmet and face guard in April 2004 for all players up to and including the age of 18 years. The GAA congress of 2005 passed a motion making the wearing of protective helmets with face masks compulsory for all players engaged in hurling up to the age of 21. In 2008, protective headgear and face guards are to be made compulsory for all players.

OBJECTIVES

This is an explorative descriptive study which could be described as a census of injured hurlers presenting to A&E over 5 years, spanning the introduction of helmets and face guards.
METHODOLOGY

Since 2003, the A&E Department in the Mid-Western Regional Hospital has recorded the incidence of injured hurlers. There are approximately 1,165 incidences recorded including both adults and children. The IT department of the Mid-Western Regional Hospital has provided basic demographic details. With the personal identity descriptor number the A&E notes are accessed through the ADOS document scanning system. If a patient has had an x-ray the official report can be accessed through the Radiology Information System (RIS).

The data will be extracted from these sources onto a computer compatible data collection form.

Camogie players are not included. In this study a hurling injury is defined as any physical complaint caused by hurling. This is adapted from the FIFA Medical Assessment and Research Centre (F-MARC) definition of soccer injury. More specifically for this A&E study a hurling injury is defined as any physical complaint caused by hurling with which the player presents to A&E, Mid-Western Regional Hospital. Statistical analysis output will be presented as Frequencies, Percentages, Graphs, Pie Charts using SPSS statistical software.

Ethical approval has been obtained from the Mid-Western Regional Hospital Ethics Committee. The main concern is protection of patient data and confidentiality. The A&E ADOS and the radiological reports (RIS) will be made available outside A&E in one office to which 2 doctors have access with a key. Within that office access to ADOS and RIS is by password known to the researcher and IT Officer only. Patients, i.e., injured hurlers will be identified by Personal Identification Descriptor. Names and addresses will not be recorded on the data collection sheets. Names of the professionals involved i.e. Staff nurse, A&E doctor, Radiologist will not be recorded.

CONCLUSION

The limitation of this study is that it does not profile all other hurling injuries for which attendance at A&E is not required. Our intention is to provide in depth description of the type of injury sustained and the anatomical location. This will be valuable information for future doctors who volunteer at hurling training and matches.

The study is ongoing with initial data collection completed on September 30th, 2008.
INTRODUCTION

Currently the Department of Dermatology at the Mid-Western Regional Hospital, Limerick has approximately 130 patients taking systemic medications including biologic drugs. All systemic drugs can have severe adverse effects and these patients need adequate and regular follow-up. A database of these patients would allow a more thorough method of tracking their treatment pathway for improved safety of administration, documenting the patients' medical and drug history, outpatient clinic follow-up and any adverse reactions. Such a database would also document co-morbidities. The majority of the patients in this cohort have psoriasis and recent findings have shown that certain co-morbidities such as cardiovascular disease and diabetes mellitus can be associated with psoriasis. Thus this part of the database would allow more complete holistic monitoring of these patients. Patients taking biologic medications are also at increased risk of mycobacterial infections and maintenance of an accurate register via a database is highly relevant in their care.

METHODOLOGY

We reviewed how our Filemaker Pro 8 database was being used within the Dermatology department. We analysed the clinic letters section of the database from July 1st, 2007 to June 30th, 2008 with regard to data entry for patient diagnosis and treatment(s). In light of the initial results we are creating a specific database for patients on systemic medications (including biologic agents) for their cutaneous conditions.

RESULTS

From July 1st, 2007 to June 30th, 2008 there were 2,541 clinic letters to family doctors and consultants. Out of these letters, the data entry system for diagnosis was used in 2,176 cases (85.64%). However, the treatment component of the data entry system was listed in just 44 of the letters (1.73%). This initial audit confirms that 98% of the time we are not clearly documenting what therapy our patients are on.

CONCLUSION

Awareness that we are deficient in recording and communicating current treatment to colleagues made us realise that we need to gather and record more data to help monitor these patients more accurately. We are developing a specific section on the database for patients on systemic agents which documents patient demographics; condition; current treatment (methotrexate, cyclosporine, fumaric acid esters, acitretin, etanercept, infliximab, adalimumab, efalizumab); previous treatments; reasons for discontinuing treatments (including refractory disease, renal impairment, hepatic impairment, drug rash, any adverse reactions); latest follow-up in OPD; co-morbidities (hypertension, angina, myocardial infarction, stroke, peripheral vascular disease, diabetes mellitus, obesity, smoking, alcohol).

This systemic treatment layout will also act as a treatment summary sheet enabling safer planning of future therapy.
INTRODUCTION

Implantable cardiac defibrillators (ICDs) are devices placed in patients with advancing cardiac disease with reduced cardiac output to prevent life threatening arrhythmias. In an ageing population where cancer and heart disease are more prevalent palliative medicine physicians will treat increasing numbers of patients with ICDs in situ.

Table 1 - Data Collected from Biotronik Group for the Implantation of ICDs in Ireland

<table>
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<th>YEAR</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008 (projected)</th>
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<tr>
<td>ICD No./Million</td>
<td>130</td>
<td>164</td>
<td>203</td>
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OBJECTIVES

The aim of this study was to evaluate the number of patients with ICDs presenting to palliative medicine in Ireland and to ascertain the views of palliative medicine consultants regarding device deactivation and end-of-life care for these patients.

METHODOLOGY

All palliative medicine consultants in Ireland were surveyed through a postal questionnaire, with 23 out of 26 responses. 18 replies were received after first round questionnaire with 5 more on follow-up questionnaire six weeks later.

RESULTS

23 out of 26 consultants replied (88%). Of the respondents, 16 consultants cared for a total of 35 patients with ICDs. Most patients were cared for in the inpatient setting. 7 consultants had not cared for a patient with an ICD in situ.

Of the 35 patients with ICDs 30 were deactivated prior to death. Of the 5 that were not deactivated, 2 fired initially repeatedly prior to death before eventually being deactivated. “One fired 12 times” and the other “fired for 48 hours.” 3 did not fire prior to death.

Of the 35 patients the decision to deactivate the device was discussed in 10 cases prior to referral to the palliative care team. 23 cases were discussed once the patient was referred to the palliative care team. This data was not complete in 2 cases. The majority of these discussions did not cause distress to patients and families and were welcomed in some instances. It was reported to cause some distress to 8 families - families needed clear explanation, support and reassurances.
The reasons for deactivation of the ICD included deteriorating condition in 22 cases. In 6 cases the deactivation was due to previous firing, in 2 cases it was due to a combination of both.

The clinical situation and place of care will influence the timing of and appropriate person to initiate the discussion re deactivation of the device. A combined approach from treating cardiologist and palliative medicine physician was felt to be most appropriate (12/23 replies; 52%). However, in general, it was viewed that this decision should be made early in the management of the patient prior to the patient’s decline and possibly at the time of insertion.

**CONCLUSION**

It is clear that the number of patients with ICDs requiring palliative care will increase. Patients with advanced terminal disease need to have the issue of deactivation discussed at the earliest opportunity (including at the time of insertion) to avoid situations of inappropriate firing and prolonged suffering. Practical guidelines and appropriate magnets should be available in each palliative care unit to enable deactivation of devices as needed.
INTRODUCTION

During our Palliative Medicine team discussion in Limerick about cultural issues in palliative care much emphasis was placed on the language and cultural needs of immigrants e.g., Polish, Latvian, Nigerian people. The question then arose whether the language and cultural needs of our own people speaking Irish received attention. In the 2001 report of the National Advisory Committee on Palliative Care the Chairperson Dr. Tony O’Brien wrote “we do not always get a second chance to get things right. All of us in sickness and in health have a basic need to be heard and to be understood.” We will be heard and understood best in our native language.

The Gaeltacht encompasses wide areas of Counties Donegal, Mayo, Galway and Kerry, all on the West coast, as well as Counties Cork, Meath and Waterford. The term Gaeltacht refers to a region in Ireland in which Irish is spoken as the language of the people. The total population of the Gaeltacht from the 2006 census is 90,503. 12,000 of this population live within the new suburbs of Galway city.

In terms of health it is a concern that Irish speakers will be left out and disadvantaged when they seek healthcare because of the lack of healthcare professionals who are able to speak their own language. It is very important that services in Irish are available so that equality and choice are available to Irish speakers for social care and healthcare. In addition it is an essential part of a high standard of healthcare that health professionals speak the patient’s language of choice. There is evidence from other countries that people from minority cultures are disadvantaged when they seek healthcare because there is not equality of language rights available. People who are ill are more vulnerable and they are depending on doctors, nurses and health professionals to make sense of their illness. Language communication barriers add to their vulnerability when the providers of that healthcare are not able to speak to them in their first language.

OBJECTIVES

We wished to survey the knowledge and use of Irish by Palliative Care Nurses and Palliative Medicine doctors in the provision of care to patients in Gaeltacht areas.

METHODOLOGY

The letter written in Irish and English included three questions. We received 30 written replies, 6 from Consultants and 24 from Home Care Clinical Nurse Specialists and Co-ordinators out of 32 questionnaires posted. We followed up the first round of letters with phone calls. We sent a second round of letters to those who had not replied.
RESULTS

In response to question 1, i.e., the number of patients under Palliative Care who speak Irish, it would appear that there are approximately 18 in Galway, 10 in Donegal and 7 in Kerry North. There do not appear to be any Palliative Care patients in Waterford, Meath, Clare or Cork who speak Irish.

In response to question 2, 1 Consultant, 4 Home Care Nurses - 3 in Donegal, 1 in Galway would feel confident conversing in Irish with patients and their families. We received one letter of reply in Irish of a very high standard written by a Clinical Nurse Specialist in Palliative Care on behalf of the Home Care team in Galway where the largest Gaeltacht population exists. 1 doctor said she would not be confident communicating in Irish with a patient but clearly she had proficiency as she replied in Irish by letter. In response to question 3, none of the respondents would feel capable of corresponding in Irish with their professional colleagues in relation to their Irish speaking patients.

It is difficult to determine what should be the ratio of Irish speaking professionals within Palliative Care to the Gaeltacht population. The National Advisory Committee on Palliative Care identified that there should be 1 Clinical Nurse Specialist in Palliative Care per 25,000 of the population and a minimum of 1 Consultant per 100,000 of the population. Taking these figures the present response of 1 Consultant and 4 Clinical Nurse Specialists capable of speaking Irish with patients equals the ratio for a population of 90,000. However, these 90,000 people are scattered throughout a broad area. Simple logic of numbers and ratios may not apply when responding to language and cultural needs of patients.

CONCLUSION

A person’s native language is integral to them. This survey shows that Palliative Home Care professionals are available to speak to patients in Irish. Third level institutions could provide courses in spoken Irish for Home Care professionals in Palliative Care. To acknowledge and support proficiency in Irish, Palliative Care professionals who speak in Irish could receive a bursary or financial recognition. Where Palliative Care services are available in Irish they should be advertised as such. Palliative Care information websites and leaflets should be available in Irish in Gaeltacht areas.
INTRODUCTION

Cervical spine (C-spine) trauma is a common reason for presentation to an emergency department. However, less than 5% of patients who have suffered possible neck injury actually have an injury requiring treatment. The diagnosis and management of a cervical spinal injury can be quite challenging, especially for an inexperienced doctor, and a missed injury can have devastating long-term consequences for the patient. Thus, cervical spine cord injury should always be assumed to be present in any trauma patient until it is safely excluded.

OBJECTIVES

1. To determine knowledge levels, attitudes and practice of Non-Consultant Hospital Doctors (NCHDs) in the assessment of the patients with suspected C-spine injuries.
2. To determine if there are established departmental protocols/guidelines for the assessment of C-spine injuries in acute injury assessment units in Ireland.
3. To assess the level of training in C-spine injury assessment received by NCHDs by their supervising physicians.
4. To determine if there are established follow-up protocols for patients with suspected C-spine injuries post-discharge.

METHODOLOGY

A randomised survey was conducted over a six month period. 200 anonymous questionnaires were mailed to senior house officers and registrars in recognised training posts working in emergency medicine or trauma/orthopaedic surgery in major and peripheral hospitals in Ireland. 138 fully completed questionnaires were returned, the response rate was 69%. Data analysis was done on the returned questionnaires and results were obtained from this.

RESULTS

Of the total respondents (138):
• 110 (80%) were SHOs
• 28(20%) were Registrars
• 103 (75%) had \( <1 \) year’s working experience
• 35(25%) had \( >1 \) year’s working experience
• 68 (49%) of all respondents reported good confidence levels in their clinical ability to assess patients
• 42 respondents (41%) of the sub-group with less than 1 year’s experience expressed good confidence
• 26 (74%) of respondents with >1 year’s experience reported good confidence levels
• 85 (62%) had done the Advanced Trauma Life Support (ATLS) Course within the last 4 years (86% of registrars and 55% of SHOs)

Of the 85 NCHDs with ATLS, 66 (78%) expressed good confidence levels in the assessment of patients with suspected C-spine injuries. Only 72 of the respondents (52%) had received formal departmental teaching/training in assessment of C-spine injuries. Only 47 (34%) respondents reported having a department protocol for assessing patients, 14 (10%) had proper indications for radiological investigations, and 97 (80%) said ready access to consultant radiology opinion was on a 9am-5pm basis on weekdays only. 57% (79) of respondents said they had no clear department follow-up plan/protocol for patients with suspected C-spine injuries.

**CONCLUSIONS**

With 138 subjects (response rate of 69%) drawn from hospitals all over Ireland, we believe this study to be representative of the situation in our hospitals. From the results, it can be inferred that many Emergency Departments (EDs) in Ireland employ a significant proportion of NCHDs with less than 1 year’s experience, do not have an established protocol/guidelines for assessing patients with suspected C-spine injuries, and many also do not give their NCHDs the necessary teaching required to enable them assess these patients confidently.

EDs should set up clear guidelines/protocols for the assessment of C-spine injuries, and train their doctors in the implementation of these guidelines. Completion of an ATLS course is strongly advised for NCHDs in EDs.
INTRODUCTION

Laparoscopic cholecystectomy for symptomatic gall stones has become the gold standard treatment. But it can lead to serious complications, some of which can be disastrous if they are not recognized and managed immediately.

OBJECTIVE

The purpose of this audit is to ensure that the results with low complication rates achieved in tertiary centres can be reproduced in a county hospital.

METHODOLOGY

Over the 18 months, 160 laparoscopic cholecystectomies were performed. Data was collected regarding presenting complaints, u/s findings, incidence of complications, conversion to open procedure, mean operating time and the duration of the post-operative stay.

RESULTS

Major complications occurred in 18 cases (11.25%). The conversion rate to open was 5%. Complications include:- subphrenic collections in 6 cases (3.75%); Intra abdominal haematoma was observed in 4 patients (2.5%); Bleeding from gall bladder bed in 2 cases (1.25%); Port site bleeding in 2 patients; Bile leak in 2 cases. Intraoperative cholangiogram was performed in 4 patients (2.5%). 4 patients (2.5%) underwent exploratory laparotomy for the complications. 4 patients had post-operative ERCP complications (Endoscopic Retrograde Cholangiopancreatography). 4 had CT guided aspiration for subphrenic collection. The mean operating time was 50 minutes. Out of 160 patients 140 (85%) were discharged within 3 to 6 days. 20 (15%) patients had a hospital stay between 7 and 24 days. 1 (0.6%) mortality was seen in a patient with carcinoma of gall bladder.

CONCLUSION

Our complication rates compare favourably with the results achieved in many centres for lap cholecystectomy. This study showed that this procedure can be performed safely even for acute cholecystitis in a county hospital with good outcome.

PRESENTED

At the 33rd Sir Peter Freyer Surgical Symposium in the National University of Ireland, Galway on September 5th, 2008 by Mr. Khalid.
INTRODUCTION

Blood type O is associated with decreased expression of von Willebrand factor. Type O patients suffer fewer thrombotic problems and may be more prone to haemorrhage. Secondary post-tonsillectomy haemorrhage is the most common severe complication of tonsillectomy.

OBJECTIVE

This study proposes that type O blood may be over-represented in patients presenting with secondary bleeds.

METHODOLOGY

Patients treated in the Royal Victoria Eye and Ear Hospital and the Mid-Western Regional Hospital for secondary post-tonsillectomy haemorrhages from 2001 to 2006 were reviewed.

RESULTS

303 patients suffered secondary post-tonsillectomy haemorrhages over the study period. Blood group data was available in 206 cases (68%). 63% of patients studied were blood group O, compared with 55% of the general population (CI 0.56 - 0.70).

CONCLUSIONS

Blood group O is disproportionately represented in secondary post-tonsillectomy haemorrhage patients. Although causality cannot be demonstrated, this association suggests that patients with type O blood are more likely to suffer from secondary bleeds following tonsillectomy.

REFERENCES

Available on request.

PRESENTED

At the Royal Academy of Medicine in Ireland, Otolaryngology Section in Wexford, on April 7th 2008, by David S. Leonard, SpR in Otolaryngology Head and Neck Surgery.
INTRODUCTION

Patients with sleep related breathing disorders have usually been investigated by physicians and managed by CPAP (Continuous Positive Airway Pressure). There is a frequent liaison between physicians and ENT surgeons in the management of certain refractory cases which need expert ENT intervention.

OBJECTIVE

This study is first to evaluate the outcome of referrals made by physicians to otorhinolaryngologists for management of sleep related breathing disorders.

In this study we evaluated the indications, findings and outcomes of patients with sleep-related breathing disorders, referred from respiratory physicians to our department for investigation and possible operative intervention. We also evaluated the positive impact of sleep nasoendoscopy on patients who underwent ENT intervention.

METHODOLOGY

Retrospective chart review of 56 patients meeting inclusion criteria from 2004 to 2007 in a tertiary referral centre.

RESULTS

Of 144 patients studied, 56 were referrals from respiratory physicians and other surgical colleagues, who underwent sleep nasoendoscopy in our hospital in the period between 2004 and 2007. 42 were male (75%). The age ranged from 24 to 77 years and mean of age was 42.54. Peak age incidence was between 40 and 50 years with 13 (23.21%) male patients and 6 (10.7%) female patients. On the whole 45 (80.3%) patients were referred from physicians and 11 (19.6%) from other surgical colleagues. The most common indication for referral was found to be sleep apnoea accounting for 35 (62.5%) of patients. 32 (57.1%) were primary snorers. The commonest finding related to sleep disturbed breathing on sleep nasoendoscopy was found to be abnormality in tongue base in 38 (67.8%) followed by associated soft palate abnormality in 17 (30.3%) followed by long uvula in 11 (19.6%) of patients.

38 (67.8%) of patients were further referred to orthodontic colleagues for mandibular splints and 11 (19.6%) required CPAP along with splints. 4 patients underwent uvulopalatopharyngoplasty, 2 underwent septoplasty and 4 patients had tonsillectomy and nasal polypectomy. 1 patient underwent laser assisted uvulopalatoplasty.
CONCLUSION

The effective management of a sleep related breathing disorder depends on an efficient joint team effort by physicians, otolaryngologists, orthodontists and anaesthetists including expert intervention by ENT surgeons, who play a central and vital role in its successful outcome.
INTRODUCTION

The diagnosis and early extraction of inhaled foreign bodies in children is a life-saving measure.

In an effort to avoid unnecessary rigid bronchoscopy in cases of equivocal foreign body inhalation the use of the flexible fibre optic bronchoscope in infants and children has been recommended. Laryngeal Mask Airway (LMA) has been reported to be a safe and effective adjuvant to flexible bronchoscopy under general anaesthesia in children.

OBJECTIVE

In this study we suggest the use of the flexible nasopharyngoscopy via LMA is less traumatic and allows superior visualisation of the endobronchial tree due to its smaller diameter and better flexibility.

METHODOLOGY

This study is based on a retrospective chart review of 23 paediatric patients meeting inclusion criteria from 2002 to 2007. All patients were anaesthetised and airway secured using appropriately sized LMA. Anaesthesia was maintained with spontaneous breathing of anaesthetic agent (sevoflurane 2-5%) in oxygen delivered via the LMA. Vocal cords and carina were sprayed with lignocaine. Flexible nasopharyngolaryngoscopy via swivel adapter on LMA. Conversion to rigid bronchoscopy on identification of foreign body.

RESULTS

- 7 patients were suspected of foreign body inhalation.
- Ages ranged between 1.4 months and 12 years, average age was 56 months.
- 2 were female and 5 were male.
- Procedure accomplished successfully in all patients.
- 2 patients required conversion to rigid bronchoscopy for removal of foreign body.
- No complications occurred.

CONCLUSION

This is a safe, effective method for initial diagnostic assessment of lower respiratory tract allowing better visualisation of smaller airways whilst maintaining safe airway.
**INTRODUCTION**

The Otolaryngologist plays a key role in the successful diagnosis and management of ear and hearing disorders in individuals with Autism Spectrum Disease (ASD). There is no current review in the literature of the otological manifestations of ASD.

**METHODOLOGY**

The following databases were searched for articles pertaining to the otological manifestations of Autism Spectrum Disorders: MEDLINE, EMBASE, CURRENT CONTENTS, PSYCHLIT, CINAHL and HEALTHSTAR.

**RESULTS**

Autistic Spectrum of Disorders (ASD) is a group of neurodevelopmental disorders characterised by impairments in socialisation, communication and behaviour. Patients with this disorder have an increased incidence of peripheral and central otological pathology, which plays a key role in the behavioural, communication and social aspects of this disease. ASD individuals appear to have a higher incidence of middle ear infections, abnormalities of the cochlear nerve and profound sensorineural hearing loss. Recent research has shown neurodevelopmental abnormalities affecting the auditory brainstem and cortical areas. In the brainstem there are abnormalities of both the classical and non-classical auditory pathways. In the cortex, there appears to be developmental re-organisation of right-left hemispheric functions with the right hemisphere adopting functions usually assigned to the left hemisphere. The primary and association auditory cortices and voice selective areas of the brain have also been found to be abnormal. These specific anomalies of the peripheral and central auditory pathways have a direct impact on speech, language function and behaviour in ASD.

**CONCLUSION**

The Otolaryngologist plays a key role in the diagnosis and management of individuals with ASD. A detailed understanding of the auditory pathology, which can affect individuals with these disorders, can maximise developmental outcomes and improve patient outcome.
**INTRODUCTION**

Orthognathic Surgery is a surgical modality which can reshape the facial skeleton to improve function and aesthetics. The goal of Orthognathic Surgery is to correct facial skeletal discrepancy which cannot be achieved by orthodontic treatment alone. The process involves a combination of pre-surgical orthodontic treatment for approximately 1 year and post-surgical orthodontic treatment for approximately 6 months.

**OBJECTIVE**

The aim of this study is to evaluate the change and improvement in quality of life for patients following Orthognathic Surgery.

**METHODOLOGY**

This is a cross-sectional study design, which is the collection of data on a series of variables involving the use of a questionnaire distributed to patients who underwent Orthognathic Surgery in the Mid-Western Regional Hospital (MWRH). For this research the quantitative approach was mainly identified with some degree of qualitative in the form of a comment option on the questionnaire.

The study population was defined as patients who underwent Orthognathic Surgery at the Oral and Maxillofacial Department, MWRH since 1997. The target population for this study consisted of 120 patients of which 70 were female and 50 were male. Of the 120 patients, 60 returned the questionnaires (22 male and 38 female).

**RESULTS**

The research revealed that the majority of patients who underwent Orthognathic Surgery were satisfied with the outcome following surgery. The results show that patients felt that their self confidence had improved. In relation to the overall satisfaction with treatment 93.3% of patients received the treatment they expected, 3.3% indicated that they received a better outcome than expected and 3.3% were unable to judge. The experience of undergoing orthodontic treatment was seen as less difficult than the surgical treatment. The term in hospital was considered the most difficult aspect of the surgical treatment. 91.7% agreed that they received the necessary information prior to surgery.
In this study 96.7% of participants reported functional improvements following surgery. 78.4% of participants indicated that they could chew better and 40% indicated that they could speak better. In relation to aesthetic improvement, 90% of the patients’ family and friends noticed an improvement following surgery, with 71.7% of these indicating a significant improvement. There was also a positive response in relation to psychosocial improvements with 86.6% of participants reporting that they felt more secure when socialising with other people post-operatively. Of this 86.6%, 56.6% were female and 30% were male. 86.7% felt that their self-confidence was affected prior to surgery and 95% reported that they were happier following surgery.

CONCLUSION

In conclusion the majority of patients indicated functional, aesthetic and psychosocial benefits of the treatment.
INTRODUCTION

Bisphosphonates are commonly used agents in the management of osteoporosis and primary or metastatic bone tumours. There have been reports of osteonecrosis (ON) involving the maxilla and mandible associated with bisphosphonate therapy. This is a debilitating condition with no specific treatment protocol.

OBJECTIVE

This is a retrospective study to assess the occurrence of ON in patients treated with bisphosphonates.

METHODOLOGY

Patients treated by the Haematology/Oncology or Geriatric Services with Bisphosphonates for at least six months were examined clinically and radiographically to identify the presence of osteonecrosis involving the jaws. The occurrence of ON in this population was estimated and recommendations for management suggested.

RESULTS

The study population included 79 patients (69 female, 10 male). Mean age 62 (28-92) years. Mean duration of treatment 38 (6-108) months. Bisphosphonates were used as follows; Intravenous agents: Zolendronate n = 17, Pamidronate n = 10; Oral agents: Alendronate, n = 26, Residronate, n = 20, both n=6. The indications for treatment were: Haematology (AML, n=1, Multiple Myeloma, n=10), Oncology (Breast, Prostate Cancer and Metastasis in bone, n = 16), Geriatrics (Osteoporosis, n=45).

5 patients had ON (6%), 2 treated with Zolendronate (Prostate and Breast Cancer), 3 with Pamidronate (Multiple Myeloma). ON involved the maxilla (n =1), mandible (n=3), maxilla and mandible (n=1). The development of ON was spontaneous in 2 patients on Zolendronate, and following tooth extraction in other patients. Mean induction time was 42 (11-93) months, and mean duration of therapy was 48 (16-96) months.

No patients on oral bisphosphonates developed ON.
CONCLUSION

Based on the findings of this study, occurrence of ON is not uncommon, occurring in patients on intravenous bisphosphonates. The occurrences were spontaneous or following tooth extraction. No patient on the oral bisphosphonate had ON.

PRESENTED

At the British Association of Oral and Maxillofacial Surgery (BAOMS) Meeting in Aviemore, Scotland on June 14th, 2007 by Dr. Okechukwu Ikeagwuani.

At the Sylvester O’Halloran Surgical Scientific Meeting in the University of Limerick on March 1st, 2008 by Dr. Okechukwu Ikeagwuani.
INTRODUCTION

The buccal fat pad (BFP) is a mass of fatty tissue which is distinct from subcutaneous fat and is described as consisting of 4 extensions: buccal, pterygoid, superficial and deep temporal. The use of the BFP as a pedicled graft for closure of oral defects was first described by Egyedi, in 1977, with split skin graft cover. Tideman et al, in 1986, showed that a skin graft covering is not required when the BFP is brought into the mouth because it readily epithelializes within 3 to 4 weeks.

OBJECTIVE

To evaluate the use of the BFP in the repair of intra-oral defects.

METHODOLOGY

This is a five year retrospective study of patients treated with a BFG to repair intra-oral defects between 2003 and 2008. A total of 20 patients (10 female, 10 male) were included in the study. The mean age was 50 years (range, 13 to 91 years). Oral reconstruction with a BFP was carried out in the following patients: repair of an oro-antral communication, 13 patients (11 communications created during tooth extraction and 2 following cyst removal); repair of defect created following harvesting of buccal mucosa for urethroplasty, 2 patients; closure of soft tissue defect following resection, 5 patients (2 verrucous hyperkeratosis, 1 squamous cell carcinoma, 1 salivary gland tumour and 1 ameloblastoma). 15 defects were in the maxilla and 5 in the buccal mucosa. The mean follow-up was 14 months (range, 1 to 48 months).

RESULTS

The BFP healed without complications in all cases. No additional procedures were required to repair any of the defects. All grafts epithelialised within 3 to 4 weeks. No patient suffered from long term trismus.

CONCLUSION

Good vascularisation, minimal donor site morbidity, and ease of access make the BFP graft a safe, versatile and reliable technique for the repair of defects in the ipsilateral maxillary alveolus, buccal mucosa and soft palate.

PRESENTED

At the Pan European Federation of the IADR Conference held in the Queen Elizabeth Conference Centre, London, on September 14th, 2008 by Dr. John O’Connell.
INTRODUCTION

The Crisis Intervention Service (CIS) in the Mid-Western Region has existed since 1999. Its aim is to treat people with psychiatric illness as close as possible to their own community, thereby avoiding the further trauma associated with admission to an inpatient facility. Prior to its existence, the CIS did not document any ‘out of hours’ contact unless these contacts led to an admission. Patients were often made wait 4 hours or more before being assessed by the Psychiatry S.H.O. on call. GPs as a result were often left in difficult positions as there was no service available to provide a speedy out of hours response. The service was started on a pilot basis for six months from September 1999 and an evaluation was undertaken at this point.

Referrals are made to the service from a number of sources including Family/Self, General Hospital, the Gardaí and GPs. During the pilot phase GPs were not made aware of the service to any great extent and as a result GP referrals to the service accounted for only 18% of the total referrals. This was seen as one of the pitfalls of the service in this evaluation. Since this pilot study was undertaken GPs have been informed officially of the service and how to use it.

OBJECTIVES

There has never been a follow-up study to assess how satisfied GPs are with the service. The aim, with the results from this study is to enable GPs to give feedback to the CIS and in return enable the CIS to give clear referral guidelines to GPs. In this way each can assess the other’s needs and facilitate smoother transfer of the patient from one service to the other.

METHODOLOGY

Each GP referral to the CIS between October 2006 and March 2007 was collected. These consisted of direct referrals to the service and referrals that had been made to the Accident and Emergency Department in the Mid-Western Regional Hospital Limerick and subsequently referred on to the CIS. These were the samples and consisted of 118 referrals.

Each GP was sent a standardised satisfaction questionnaire with regard to their specific referral. A list was obtained of GPs in the area and those who had not used the service in the time frame of the data collection were identified. As the sample collection was not random in nature, each of these GPs was sent a standardised questionnaire with regard to their awareness and experience of the CIS.
RESULTS

Overall 64% of users rated their satisfaction as good or excellent while only 20% rated their satisfaction as poor or very poor.

CONCLUSIONS

The results were certainly favourable in that 64% of users rated their satisfaction as good or excellent which would be a respectable result placed against any other service of its kind in the HSE.

Lack of direct feedback to the referring GP was one of the main reasons behind any lack of satisfaction; another main reason was not agreeing with the CIS subsequent course of action.

Perhaps dealing with the feedback issue may indirectly help solve the other issue, through open channels of communication and, as a result, an agreed management plan.

REFERENCES

Available on request.
INTRODUCTION

Clinical learning for student nurses has always constituted a significant component of the undergraduate nursing curriculum. Clinical practice enables the student nurse to develop competence in the application of theory to clinical practice situations. With the recent changes in nurse education the emphasis on clinical learning has continued - planned placements constitute approximately 50% of the course time for student nurses in the Degree Programme. Clinical placement sites as learning environments have been the focus of many studies worldwide during the past two decades. These studies have provided a wealth of insight into the factors that affect clinical learning for student nurses and what constitutes a favourable or unfavourable clinical learning environment.

OBJECTIVE

This research explores the student nurses’ lived experiences of the clinical learning environment. The introduction of the Degree Programme for undergraduate nurses in Ireland in 2002 presented a new opportunity to explore these experiences.

METHODOLOGY

The clinical experiences of 11 student nurses were explored, using a phenomenological Heideggerian approach. In-depth unstructured interviews were conducted, lasting from 30 to 70 minutes. The data were analysed using a modified form of hermeneutic analysis as outlined by Diekelmann, Allen and Tanner. During the process of hermeneutical analysis common meanings and shared experiences of the clinical learning environment began to emerge. As the analysis proceeded from text to text, themes that described these meanings and experiences as relational across the texts were illuminated. Finally, the Constitutive Pattern, which expresses the relationship between themes and is the highest level of the analysis, was explicited.

RESULTS

Three main themes emerged from the data. These are ‘Receptivity as a Transactional Process’, ‘The Structure and Organisation of the Degree Programme’ and ‘Becoming a Nurse.’ The Constitutive Pattern emerged as ‘Learning to become a nurse is an individual journey, interwoven with the environmental context.’ The study revealed that even though nurse education has encountered a period of radical change in the past twenty five years in this country, students’ experiences of the clinical learning environment have largely remained unchanged. Students in this study described some experiences similar to those in seminal studies undertaken in this area in the early 1980’s. The findings suggest that students demonstrated an element of autonomy and decision making, working through the web of experiences they encountered in the clinical learning environment. Students cognitively
reframed their experiences and adopted strategies to circumvent the ‘structures’ imposed on them, for example, in relation to preceptorship. The findings suggest that with the introduction of the Degree Programme the clinical learning environment may not have changed, but the display of autonomy by the students in meeting their own learning needs must be acknowledged as a positive development in student nurse education in Ireland.

CONCLUSION

Elements of the meaning revealed from the students’ experiences of the clinical learning environment in this study have previously been identified in many other studies, from the seminal work of Orten7 and Fretwell8 to more recent studies undertaken by Attack et al.2 and Papp et al.8, and are not new. These findings do not necessarily reveal new descriptions but this study reveals a new understanding of the meaning of the lived experience of the clinical learning environment - these are the experiences of students undertaking the maiden journey of the degree programme of education, introduced in 2002, in Ireland. How each student experiences the education programme - the individual journey is the essential element that makes it different. This individual journey is described by one student as a “character building experience”. Each ‘character building experience’ is unique. Heidegger6 assumed the indissoluble unity between the person and the world. Human existence and the world co-constitute each other. Similarly, there is an indissoluble unity between each student’s unique experience and the world of the clinical learning environment, they co-constitute each other. Each individual student nurse’s experience, even though common feelings and experiences were discussed, was unique in order to understand their ‘Being-in-the-world’ as ‘Learning to become a nurse is an individual journey interwoven with the environmental context’.

Narratives can begin to create new understandings and uncover meaning about the nature of content and thinking in nursing education.3 If we are to be successful in meeting the challenges of the future in undergraduate nurse education, it will be with individuals who are presently students. The in-depth knowledge generated from this study enables all stakeholders involved in the Degree Programme to become increasingly aware of the experiences and needs of degree students and the role that each can play in the environmental context, in assisting students through the individual educational journey to becoming a nurse. The value of this study lies in its implications for the clinical education of student nurses and resulting development of the profession, as the student nurses of today are tomorrow’s nursing profession.

REFERENCES

Available on request.
INTRODUCTION

Healthcare delivery is constantly changing. Nursing studies have raised questions about the invisibility of the mental health nurses, the evolving role demands on them and the necessity to clearly articulate exactly what it is mental health nurses do. Policy in Ireland has encouraged the individual mental health nurses to develop ways of learning to enhance their skills and provide therapeutic care in a community setting.

OBJECTIVE

The aim of the study was to gain a description of mental health nurses’ experiences of developing therapeutic relationships with clients/patients in community settings in one geographical location in Ireland.

METHODOLOGY

A qualitative descriptive study where n = 6 mental health nurses, working exclusively in community settings, were purposively sampled to participate. The semi-structured interview was the data collection tool used. This allowed the participants to reflect on their personal experiences and describe their own story. Data collection and analysis was cyclical in fashion using Colazzi’s Framework of Analysis.

RESULTS

The semi-structured interview findings suggested four main themes and these were: -

- ‘Core Principles’
- ‘Aspects and Challenges in Development of Therapeutic Relationships’
- ‘Learning in Therapeutic Relationships’
- ‘Giving of Self’

The participants recognised core principles notably those of trust, empathy, communicating and listening, mutuality and power, throughout the process of developing therapeutic relationships. All of the participants in the study described both the rewarding aspects and the related challenges of developing therapeutic relationships. The participants learnt both through experience and education. The participants also revealed that they reflected on their practice, informally, with fellow colleagues and with other disciplines within their relevant multidisciplinary teams. The participants recognised the demands placed upon themselves. These demands related to patient needs, policy drivers and individual expectations. In the future, the participants expected that their roles would become more autonomous and outreach based, with flexibility, and be directed toward client needs rather than service needs.
CONCLUSION

Overall, the study may contribute to the existing body of knowledge and increase understanding of the experiences of mental health nurses developing therapeutic relationships within community settings. The study had some limitations. Time was a limiting factor as the study had to be completed within eight months.

Recommendations, tentatively offered, are that further studies could include the clients of the participants and their carers as this would present an interesting enquiry. This additional research could be undertaken into the specific themes that have arisen from this study.

This research was undertaken in part fulfilment of the requirement for the degree of M.Sc. Nursing (Psychosocial Interventions in Mental Health Care) in the University of Limerick in 2007.
INTRODUCTION

The aim of this study was to examine the subjective burden experienced by nurses as they provide care for patients with acute delirium. The individual aspects of delirium and the clinical subscales of delirium that nurses find most challenging to deal with are explored and identified. The themes and concepts extracted from the literature indicate that the focus to date has primarily been on the provision of symptom management, accurate identification, long term prognosis and the clinical subtypes of delirium. How nursing staff cope with the increased functional and copious demands associated with caring for a delirious patient is understudied. It has been identified within the literature that delirium does increase nurse labour and frustration due to the increased functional dependence of the patient. No studies have been completed to measure and examine the subjective burden nurses experience when caring for patients with delirium. The study is descriptive and retrospective, adopting quantitative research methodologies.

METHODOLOGY

The Strain of Care for Delirium Index (SCDI) which was developed by Milisen et al. is the data collection tool. Content validity, internal consistency and construct validity was evaluated using Cronbach’s alpha and results support validity and reliability. Permission has been granted to utilise the tool. The population is registered general nurses, male and female, working in a variety of settings. A systematic random sample was sourced. This was achieved by obtaining a list of registered general nurses from An Board Altranais (The Irish Nursing Board) and distributing the questionnaires by post to the nurses selected. Statistical analysis of the quantitative data was conducted using Statistical Package for the Social Sciences (SPSS).

RESULTS

A total of 181 questionnaires were completed and returned. This represents a total response rate of 22.62%. Results indicate that the subjective burden that nurses experience when caring for delirious patients is high (M=2.97), the mean having derived from a 1-4 numerical difficulty rating scale. The hyperactive/hyperalert subscale was deemed the most challenging to deal with (M=3.41). The mean score of the remaining three subscales averaged between (2.60-2.77). In relation to individual behaviours, the patients who averaged highest in terms of burden are those who are unco-operative and difficult to manage M=3.58 (SD=0.57). Following on from this was caring for patients who pull at tubes and catheters (M=3.57) and dealing with patients who try to get out of bed inappropriately (M=3.56). The other end of the scale lies in dealing with patients who speak in a slow/hesitant manner M=2.29 (SD=0.72) and patients who are withdrawn/unusually quiet M=2.45 (SD=0.74).

The results indicate that caring for delirious patients presents challenges and difficulties for the nurses caring for them.
Table 1 - Mean of Subscales

<table>
<thead>
<tr>
<th>SUBSCALE</th>
<th>MEAN</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Hypoactive Behaviour</td>
<td>2.60</td>
</tr>
<tr>
<td>2. Hypoalert Behaviour</td>
<td>2.60</td>
</tr>
<tr>
<td>3. Fluctuating course and psycho-neurotic behaviour</td>
<td>2.77</td>
</tr>
<tr>
<td>4. Hyperactive/Hyperalert Behaviour</td>
<td>3.41</td>
</tr>
</tbody>
</table>

CONCLUSIONS

On completion of the study it was unequivocally found that nurses do feel burdened when caring for delirious patients. This is an issue that needs to be addressed and further research is needed as to why it is the case. A specific examination into the factors that cause high levels of strain needs to be identified. This study recognises the subtypes and behaviours that increase burden but why this is the case and the preceding factors that lead to this circumstance necessitates further exploration. Research into the underlying deficiencies in identification, assessment and management of the syndrome is needed and, until these issues are examined, the subjective burden that nurses experience is likely to remain elevated. Specific behaviours and subscales are particularly challenging and cause elevated levels of strain. Appropriate education and training initiatives relating to effective management of the syndrome could reduce levels of strain. Utilising the results from this study and focusing on the management of specific behaviours that are deemed particularly difficult to manage may be beneficial. The overall mismanagement of delirium needs to be addressed and the use of standardised detection and assessment tools implemented. This, in conjunction with undergraduate and postgraduate training could, as well as improving patient outcomes, result in a less burdened delivery of care for the nurse. This study holds substantial implications for care of delirious patients. Nurses spend the majority of time in direct, prolonged and intimate contact with the patient and experience a burden of care when doing so. Delirious patients presenting with challenging behaviours, e.g. being unco-operative or agitated, which were found in this study to be particularly taxing are strong predictors of nurse distress. This study examines the difficulties relating to nurse experiences but it also highlights the need to develop and research the other aspects of delirium that may be substantial contributors to the burden felt by nurses. Educational programmes, training interventions and measures to improve the management of delirium will require a substantial effort on the part of healthcare providers, but are necessary if the care of delirious patients is to improve. Further research into the effectiveness of these programmes is warranted.

REFERENCES

Available on Request
OBJECTIVES

To assess the sensitivity and specificity rates of Ultrasound Scanning (USS) of axilla in the assessment of pre-operative patients with breast cancer in our institution, and to compare our results with current standards in the literature.

METHODOLOGY

Retrospective review, charts of all breast cancer patients assessed in our hospital from July 2006 to April 2008 were obtained from hospital records and reviewed. All patients with pre-operative USS of the axilla and subsequent surgery, with post-operative histology were included. All patients with stage 4 disease were excluded from the study. Data collected on patients’ age, sex, staging, surgery performed, final histology post-operatively (especially lymph node involvement) and official USS axillae reports. Results of histology and USS axillae reports were compared, concordant or discordant cases recorded, and sensitivity/specificity rates determined.

RESULTS

A total of 96 patients were reviewed:

- Age range 36-95 years, average age: 60.95 years.
- Sex distribution: Males: 1(1%), Females 95 (99%)
- Disease stage at presentation: Stage 0 - 3%
  - Stage 1 - 29%
  - Stage 2 - 52%
  - Stage 3 - 16%
- Surgery: Breast-Conserving Surgery (Wide Local Excision (WLE), wire-guided WLE) - 53.1%
- Radical Surgery (Mastectomy) - 46.9%

USS axilla had a sensitivity rate of 60%, specificity rate of 91%, positive predictive value of 82.75, and negative predictive value of 76.11.

CONCLUSION

These results compare favourably with similar studies reported in other tertiary centres, and can be attributed to measures taken by the radiology department to minimise the false positive/negative rate of this diagnostic tool. USS axilla remains a useful adjunct in the pre-operative assessment of breast cancer patients and can help in planning of surgical treatment of these patients.
INTRODUCTION

Client satisfaction is a legitimate and important measure of quality of care. A client satisfaction survey was carried out by Limerick Community and Primary Care Physiotherapy Department in November 2007 to ensure that the principles of people-centredness, accountability, quality and efficiency are features of how services are planned and delivered.

OBJECTIVE

The survey offered clients an opportunity to express their satisfaction or dissatisfaction with the service.

METHODOLOGY

The dimensions of quality and aspects of satisfaction to be measured were based on the European Core Standards of Physiotherapy Practice (2002) and The Chartered Society of Physiotherapy, Core Standards of Practice (2005). They included environment, waiting times, accessibility, process of appointment making and interaction with staff. A postal questionnaire was developed with guidance from Customer Services, HSE West. A sample of 500 clients who were referred to physiotherapy in the period January to October 2007 were randomly selected and received a questionnaire by post. 180 replies were received.

RESULTS

The respondent profile indicated that overall, 67.3% were very satisfied with the physiotherapy they received, 28% were satisfied and 4.8% were in the range not sure to very dissatisfied, (See Figure1).

Figure 1 - “Overall, were you satisfied with the Physiotherapy you received?”
The length of time waiting for an appointment (Table 1) correlates with results from the documentation audit where 43% of referrals were a priority 1 and seen within 2 weeks of receipt of referral.

Table 1 - “How Long did you have to wait to see a Physiotherapist?”

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0 - 4 Weeks</td>
<td>83</td>
<td>46.1</td>
<td>49.1</td>
</tr>
<tr>
<td>5 Weeks - 3 Months</td>
<td>62</td>
<td>34.4</td>
<td>36.7</td>
</tr>
<tr>
<td>4 - 6 Months</td>
<td>13</td>
<td>7.2</td>
<td>7.7</td>
</tr>
<tr>
<td>7 - 12 Months</td>
<td>8</td>
<td>4.4</td>
<td>4.7</td>
</tr>
<tr>
<td>More than 12 Months</td>
<td>3</td>
<td>1.7</td>
<td>1.8</td>
</tr>
<tr>
<td>Total</td>
<td>169</td>
<td>93.9</td>
<td>100.0</td>
</tr>
<tr>
<td>Missing System</td>
<td>11</td>
<td>6.1</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>180</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

The length of time waiting to see a therapist was crosstabulated with satisfaction levels of physiotherapy received (See Figure 2).

Figure 2 – Length of wait/overall satisfaction with service

Over 90% of all respondents said that they felt involved in deciding about their treatment plan (See Figure 3).
Clients were also surveyed on their opinion of the physical environment of treatment facilities. Over 90% of respondents rated the facilities as good or excellent. At the time therapists worked out of 7 different facilities. Several comments from respondents on 2 identified facilities would suggest that this satisfaction rate is too high; “sessions were held in a corner of a hall with a curtain around”, “you are watching patients living there doing their therapy, ...they have no privacy” and “the facility is very open and a lot of through put to other facilities.” Since this survey the Physiotherapy Department has changed location and services are being provided from specific purpose clinics.

**CONCLUSIONS**

- Overall the feedback from clients is positive. Active client participation in goals setting and implementation is vital for physiotherapy intervention to be beneficial. The results did demonstrate that clients were involved in goal setting.
- There appeared to be no correlation between satisfaction levels for service received and length of time waiting for appointment. Future studies should investigate satisfaction levels with the length of time waiting for an appointment.
- This survey reflects the view of new clients accessing the service. One reason for this was to capture those individuals who do not attend their first appointment. However, it did not take into account long term service users e.g. clients with disability as they are rarely discharged from the physiotherapy service and therefore will not register as new patients. We would recommend that a similar survey is carried out to investigate this population’s views and opinions of the service.
REFERENCES

Available on request.

ACKNOWLEDGEMENTS

The authors wish to acknowledge the assistance of the following:-

The Éolas Office, Health Service Executive West, 31/33 Catherine St, Limerick.

Mr. Aidan Hickey, National Institute of Health Sciences, Health Service Executive West, St. Camillus’ Hospital, Shelbourne Road, Limerick.
INTRODUCTION

Within Gaelic football, injury incidence rates of 2.2 injuries\(^1\) and 1.78 injuries\(^2\) per player per year have been reported. PRICE (Protection, Rest, Ice, Compression, Elevation) is the recommended protocol for the management of acute soft tissue injuries.\(^3\) At present, no research has been undertaken within any sporting population relating to player knowledge of appropriate injury management.

OBJECTIVE

The purpose of this study, therefore, was to survey the knowledge of senior level Co. Clare ladies’ Gaelic football club players regarding acute soft tissue injury management. Secondary aims were to investigate, in this group, treatments employed following injury and their awareness of potentially harmful post injury practices.

METHODOLOGY

A self-completion group administered questionnaire exploring demographic, treatment and PRICE details was constructed. All 6 senior level Co. Clare ladies’ Gaelic football club teams were sampled, with 94 players volunteering to participate. Questionnaires were both administered and collected post matches by the researcher. Responses in each category were coded appropriately. Descriptive statistics were employed to analyse responses.

RESULTS

43.9% of respondents were aware of four or more of the PRICE components. See Figure 1.

Figure 1 - The Percentage of Respondents who Correctly Identified the Components of the PRICE Regime
Treatments employed by respondents included ice (61.8%), physiotherapy (59.2%) and rest (36.8%) (See Figure 2).

**Figure 2 - The Treatments Employed by Respondents in the Initial Stages Post Acute Soft Tissue Injury**

27.6% of participants would avoid three or more of the following post injury: alcohol, heat, vigorous massage and vigorous exercise. 86% would use ice immediately after injury, and it would be applied by players every one (54.4%) or two (22.2%) hours.

**CONCLUSIONS**

The PRICE regime is moderately well known by this population. Poor knowledge of potentially harmful post injury practices and recommended cryotherapy application exists. As the PRICE regime is regarded as the recommended post acute injury protocol, it is important to improve players’ knowledge and awareness of this management.

**REFERENCES**

Available on request.
INTRODUCTION

Down’s Syndrome (DS) with a 1.3 incidence per 1,000 live births in North America is a common cause of developmental disability. Children with DS have delays in development of motor function. The relatively high incidence of DS and the ability to make a diagnosis at an early age are factors that are conducive to the study of motor development in this population of children. Fundamental skills, including catching are an outgrowth of the rudimentary movement stage and they develop usually around the ages of 8 to 12 years in this population. This competency is vital for participation in sport in general. Hence, only through their mastery can more complex sport-specific skills be performed.

OBJECTIVE

The purpose of this study was to examine what effect Catching Practice has on the Motor Development of Children with DS aged between 8 and 12 years.

The setting was St. Clare’s School in Ennis, Co. Clare.

The statistical approach used was Spear Friedman ANOVA by ranks.

METHODOLOGY

5 children with DS were included in this study. The initial level of catching skill of each child was assessed by a pre-test; that includes a catching activity performed by a child to an extent he/she was capable of. After that, intervention of 4 weeks was carried out that includes group practices. It was administered by the class teacher who was trained for the specific interventions that was designed to enhance the catching skill. The post-test at the end of the intervention programme was then carried out to determine the effects of catching practice on motor skill development. The children were assessed through videotaping the pre, post and retention tests. Each child performed five catching attempts, scored on a checklist and marked by the supervisor. These catching attempts were performed using balls of two different sizes and were thrown in different directions: - 1) Overhead 2) Sideways 3) Underarm.

RESULTS

Results showed significant difference between pre and post scores (Figure 1, 2, 3, 4). The effects obtained by practice were maintained in retention.
CONCLUSIONS

Practice significantly improved learning of the fundamental motor skill of catching (post-test). The learning effect obtained by practice is significantly maintained (retention test).
INTRODUCTION

Surface Electromyography (sEMG) records muscle activity at rest or during exercise, however sEMG signals may be contaminated by external signals. It has therefore been suggested that muscle activity should be recorded in a faraday room (a room which has been shielded from external signals). However, there has been no published research to date into the effects of a faraday room on sEMG recordings during manual muscle testing.

OBJECTIVE

The primary aim of this study was to examine whether there was a difference in sEMG recording between a faraday room and a non-shielded research lab.

METHODOLOGY

17 subjects were recruited from the University of Limerick. Electrodes were placed on Tibialis Anterior and Vastus Lateralis muscles, in accordance with Surface Electromyography for the Non-Invasive Assessment of Muscles (SENIAM) Guidelines. All subjects performed Maximal Voluntary Isometric Contractions (MVIC) against static resistance. The resistance was applied for 5 seconds, and repeated 5 times. A hand-held dynamometer was used to record the torque. EMG was recorded at 333Hz using a ‘motion labs’ EMG system (CE certified). The EMG protocol was the same for both rooms, and electrodes stayed in position when subjects moved between rooms. ICC’s were used to examine the relationship between the sEMG measurements in both rooms. The torques, as well as mean and median sEMG frequency were compared using Wilcoxon’s signed rank.

RESULTS

sEMG measurements were highly correlated between the faraday room and the research lab (ICC between 0.60 and 0.98 for all parameters and muscles). There were no statistically significant differences found for either torque (Figure 1), mean frequency (figure 2) or median frequency (figure 3) for either muscle between the rooms (all 0.05).
Performing these muscle tests outside a Faraday room did not alter the characteristics of the sEMG signal. sEMG recording can be obtained without the use of a Faraday Room for large muscle, maximal contractions. Further research is required at higher frequencies and using more subtle muscle contractions.
INTRODUCTION

Multiple Sclerosis (MS) is a chronic demyelinating and degenerative disease of the Central Nervous System. Because of the widespread patterns of the lesions, the clinical manifestations of the disease are varied. A cause of Multiple Sclerosis has yet to be identified so treatments remain relatively ineffective. Thus, people with MS have a lifelong need for rehabilitation and interventions from allied health professionals. Recent evidence recommends that people with mild MS participate in exercise programmes consisting of both progressive resistance exercise and aerobic exercise. Literature also suggests that balance rehabilitation can be effective in people with moderate MS.

OBJECTIVES

The objectives of this study were:

1. To evaluate the feasibility and suitability of outcome measures for use in a larger scale study
2. To obtain preliminary data on the effects of one physiotherapy intervention on fitness and strength in people with mild MS (Group A) and another physiotherapy intervention on balance and mobility in people with moderate MS (Group B).

METHODOLOGY

Interventions took place for an hour a week for six weeks. A pre-post test single group research design was used.

Participants in Group A mobilised independently or with one stick. Seven females took part in the class which consisted of PRE for major muscle groups. Two to three sets of twelve repetitions of each exercise were completed. Advice was given about aerobic exercise to be completed independently at 65-75% Heart Rate Maximum twice a week. Measures of Handheld Dynamometry, the Modified Fatigue Impact Scale (M FIS), the Multiple Sclerosis Impact Scale (MSIS-29) and a Six Minute Walk including the Physiological Cost Index (PCI) were taken at baseline and six week follow-up.

Participants in Group B mobilised with at least bilateral aid outdoors, such as a rollator or two crutches. The intervention consisted of a circuit class of balance and strength exercises. Each exercise was modified and progressed according to the participants’ ability. Five females and one male with a mean age of 52.33 years took part in the class. The following outcome measures were assessed at baseline and at six weeks; Multiple Sclerosis Impact Scale-29 (M SIS-29), Berg Balance Scale (BBS), Modified Fatigue Impact Scale (M FIS), Distance and Speed of Walking over 2 minutes and the Dynamic Gait Index (DGI).

All data was analysed using SPSS 15.0 for Windows.
RESULTS

Participants in Group A completed 71% of the prescribed intervention. The change in Elbow Flexion strength was significant (mean change=21.36 N, P = .017). The physical component of the MSIS-29 questionnaire (mean change= 8.85, P=.19), the MFIS (mean change = 6.28, P=.268) and PCI (mean change = .251, P=.15) were clinically significant and approached statistical significance using Paired - Samples T Test. The other measures demonstrated a trend for improvement.

For Group B, the physical component of the MSIS-29 (mean change=15.67, P=0.006) and the BBS (mean change=7.17, P=0.002) showed statistically different change. The psychological component of the MSIS-29 (mean change 4.17, P=0.054) the MFIS (mean change=4.84, P=0.289) and distance walked (mean change=2.17, P=0.289) all approached statistical significance. Scores on the BBS improved by between 4 and 10 points, also showing clinical significance. All other measures showed a trend for improvement except the DGI.

CONCLUSION

This study provides preliminary data for group physiotherapy for people with mild and moderate MS. The outcome measures used were shown to be suitable, feasible and sensitive enough to detect change in just six weeks with the exception of the DGI which was not sensitive and did not show change for any participant. The results also show a positive treatment effect.

Apart from the DGI these outcome measures will now be used in a larger national study evaluating physiotherapy and exercise interventions for people with MS and the data obtained from this pilot will be used to calculate sample sizes.

FUNDING

The Irish Research Council for Science, Engineering and Technology has funded Maria Garrett to do this project. The Multiple Sclerosis Society of Ireland has funded Neasa Hogan.
INTRODUCTION

Falls and their consequences are prevalent and potentially debilitating events for older individuals. Amongst community dwelling elderly, it is estimated that a lifetime cumulative incidence of falls is between 25% and 40%.

Falls may expedite a myriad of physical and psychological complications as well as premature admission to residential care. Additionally, societal financial costs related to elderly falls can be substantial.

While there is evidence to support the efficacy of a multifactorial, multidisciplinary intervention to reduce falls in an elderly population, the effectiveness of “exercise only” falls prevention programmes remains ambiguous. A systematic review of the relevant literature found that while such programmes may have a positive impact on reducing risk factors, only 5 of 13 randomised controlled trials (RCTs) investigated showed a statistically significant positive effect on falls reduction. A review of the published literature since that time has shown continued equivocacy regarding the efficacy of such programmes in reducing falls.

OBJECTIVE

This study examined whether the programme conducted by the Physiotherapy Department in St. Camillus’ Hospital, Limerick was effective in improving risk factors for falls and reducing incidence of falls in an elderly population with mobility and balance difficulties. The appraisal of the programme was doubly justified by the paucity of conclusive evidence in this area, and the absence of a prior assessment of the specific programme conducted by St. Camillus’ Hospital.

METHODOLOGY

Eight subjects of similar functional ability (based on initial Elderly Mobility Scale values) participated in an 8-week exercise programme to address pre-existing problems with balance and mobility. The intervention programme consisted of a weekly 1-hour exercise class and was conducted by 3 physiotherapists and a care assistant. The class comprised a group warm-up and cool-down, as well as an activity circuit incorporating various stretching, strengthening and balance exercises. Additional functional elements such as carrying items and multi-tasking were also introduced. Subjects were provided with a home exercise plan on completion of the programme. Pre and post intervention assessment was performed using the EMS, Berg Balance Scale (BBS), Biodex Balance System (Biodex), the Short-Form 12 v.2 Health Status Questionnaire (SF-12v2) and a Falls Diary. Intervention effect was ascertained using paired t-tests for parametric data and Wilcoxon t-tests for non-parametric data. Statistical significance was set at p<0.05.
RESULTS

Eight subjects (1 male, 7 female) of average age 82.25 (79-89 years) were recruited (See Table 1).

Table 1 - Subject Details

<table>
<thead>
<tr>
<th>Subject</th>
<th>Age</th>
<th>Gender</th>
<th>EMS</th>
<th>Presenting Score</th>
<th>Class Complaint</th>
<th>Gait Aid Attendance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>85</td>
<td>Female</td>
<td>20</td>
<td>Parkinson’s Disease</td>
<td>8/8</td>
<td>No Aid</td>
</tr>
<tr>
<td>2</td>
<td>81</td>
<td>Female</td>
<td>18</td>
<td>Parkinson’s Disease</td>
<td>5/8</td>
<td>No Aid</td>
</tr>
<tr>
<td>3</td>
<td>82</td>
<td>Female</td>
<td>16</td>
<td>History of Falls</td>
<td>6/8</td>
<td>1 Walking Stick</td>
</tr>
<tr>
<td>4</td>
<td>82</td>
<td>Male</td>
<td>16</td>
<td>Cervical Surgery</td>
<td>7/8</td>
<td>Rollator Frame</td>
</tr>
<tr>
<td>5</td>
<td>79</td>
<td>Female</td>
<td>16</td>
<td>History of Falls</td>
<td>7/8</td>
<td>1 Stick</td>
</tr>
<tr>
<td>6</td>
<td>78</td>
<td>Female</td>
<td>18</td>
<td>History of Falls</td>
<td>3/8</td>
<td>No Aid</td>
</tr>
<tr>
<td>7</td>
<td>82</td>
<td>Female</td>
<td>20</td>
<td>Cerebellar Ataxia</td>
<td>7/8</td>
<td>3-Wheeled Walker</td>
</tr>
<tr>
<td>8</td>
<td>89</td>
<td>Female</td>
<td>16</td>
<td>History of Falls</td>
<td>8/8</td>
<td>1 Walking Stick</td>
</tr>
</tbody>
</table>

All subjects were outpatients of the physiotherapy department. Seven subjects completed the study which recorded improvements in all outcome measures with the exception of the Physical Health Summary (PHS) component of the SF-12v2. Improvements in the BBS and EMS were statistically significant (p = 0.011, p = 0.041 respectively). The BBS also showed evidence of a clinically significant improvement. Details of pre and post intervention values are shown in the Tables 2 and 3 below.

Table 2 - Paired Samples T-Tests (Parametric Data)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Paired Differences</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Std. Error Mean</th>
<th>95 % CI of the Difference Upper</th>
<th>95 % CI of the Difference Lower</th>
<th>t</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMS</td>
<td></td>
<td>-0.875</td>
<td>0.991</td>
<td>0.350</td>
<td>-1.704</td>
<td>-0.046</td>
<td>-2.497</td>
<td>0.041</td>
</tr>
<tr>
<td>BBS</td>
<td></td>
<td>-3.625</td>
<td>2.973</td>
<td>1.051</td>
<td>-6.111</td>
<td>-1.139</td>
<td>-3.449</td>
<td>0.011</td>
</tr>
<tr>
<td>PHS</td>
<td></td>
<td>3.000</td>
<td>4.928</td>
<td>1.742</td>
<td>-1.120</td>
<td>7.120</td>
<td>1.722</td>
<td>0.129</td>
</tr>
</tbody>
</table>

CI: Confidence Interval

Table 3 - Wilcoxon T-Tests (Non-Parametric Data)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Pre-test Median</th>
<th>Post-test Median</th>
<th>Z</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biodex</td>
<td>1.350</td>
<td>1.038</td>
<td>-0.726(a)</td>
<td>0.446</td>
</tr>
<tr>
<td>MHS</td>
<td>54.630</td>
<td>56.380</td>
<td>-0.841(b)</td>
<td>0.400</td>
</tr>
<tr>
<td>Falls</td>
<td>1.250</td>
<td>0.250</td>
<td>-1.414(a)</td>
<td>0.157</td>
</tr>
</tbody>
</table>

(a) - Based on positive ranks  (b) - Based on negative ranks
Attendance was approximately 80%, which compares quite favourably with empirical compliance in similar studies. Co-morbidity appeared to be the main reason for non-compliance.

CONCLUSIONS

The falls prevention program at St. Camillus’ Hospital, Limerick shows a positive trend towards reducing falls and improving fall risk factors in this elderly population. A future study with a larger population and more extensive follow-up is advocated.

REFERENCES

Available on request.
Clinical Research
Applied Technology

<table>
<thead>
<tr>
<th>TITLE</th>
<th>A Long-Term Fall Detection System Incorporated into a Custom Vest for the Elderly</th>
</tr>
</thead>
</table>
| AUTHORS | Bourke, A.K.,1 van de Ven, P.W.J.,1 Ó’Laighin, G.M.,2 Nelson, J.1
Department of Electronic and Computer Engineering, Faculty of Science and Engineering, University of Limerick1
Department of Electronic Engineering, National University of Ireland, Galway2 |

**INTRODUCTION**
Recent technological advances in wireless telecommunication combined with sensor miniaturization have facilitated the development of more affordable and wearable health-monitoring systems. Also, with the percentage of Europe’s population set to increase dramatically over the next 40 years,1 a severe burden will be put on the health services in each country in Europe. In order to reduce this load, greater emphasis will be put on technology to monitor the health of elderly people when it begins to deteriorate, thus allowing them to remain at home and carry on with life safely and as normal.

**OBJECTIVE**
Falls in the elderly are now a major problem for society. A serious consequence of falling is the “long-lie”.2 This is defined as remaining on the ground for and hour or more, following a fall.3 A fall detection system and algorithm, incorporated into a custom designed garment has been developed which will automatically detect falls and potentially reduce the incidence of the “long-lie”.

**METHODOLOGY**
The developed fall detection system consists of a tri-axial accelerometer, microcontroller, battery and Bluetooth module. This sensor is attached to a custom designed vest, designed to be worn by the elderly person under clothing. The fall detection algorithm was developed and incorporates both impact and posture detection capability. The vest was developed using feedback from elderly subjects donning, wearing and doffing a prototype vest and subsequently filling in a questionnaire. The re-designed vest and fall algorithm was tested in two clinical trials.

*Figure 1 - The Redesigned Vest (a) and the Fall-Sensor (b)*
Trial 1: Young healthy subjects performing normal activities of daily living (ADL) and falling onto crash mats, while wearing the vest and sensor.

Trial 2: The system was subsequently tested using 10 elderly subjects wearing the system over the course of 4 weeks, for 8 hours a day. Two teams of 5 elderly subjects wore the sensor system in turn for 2 weeks each.

**RESULTS**

Results from Trial 1 show that falls can be distinguished from normal activities with a sensitivity >90% and a specificity of >99%, from a total data set of 264 falls and 165 normal ADL. In Trial 2, over 833 hours of monitoring was performed over the course of the four weeks from the elderly subjects, during normal daily activity. In this time no actual falls were reported, however the system registered a total of the 42 fall alerts.

Further development of the system will include a more accurate fall detection algorithm, more comfortable sensor attachment method, a lighter and smaller sensor as well as mobility monitoring and energy expenditure measurement.

**CONCLUSION**

A fall detection system incorporated into a custom designed garment has been developed which will help reduce the incidence of the long-lie when falls occur in the elderly population.

**REFERENCES**

Available on request.

**FUNDING**

This research is being funded by the CAALYX (Complete Ambient Assisted Living Experiment) Project under the Sixth Framework Programme (IST-2006-045215).
INTRODUCTION

The population of Europe is “greying”. It is estimated that, by the year 2050, one in three Europeans will be aged sixty or over. With this ageing of the population it is anticipated that the demand for healthcare and consequently the cost will increase accordingly. In order to alleviate this pressure and more importantly to increase the quality of life for those involved, research is being performed into technology which will enable safe independent living of older adults in their own homes.

The Centre for Active Management of Lifelong Ageing (CAMLA), based at the Graduate Medical School, was established to support and foster research into all aspects of ageing. Currently within CAMLA, researchers from both a medical and engineering perspective have come together to explore ideas about how best to promote safe independent living in the older person. The Connected Health Implementation Pilot (CHIP) is a collaborative project being jointly led by researchers from the Graduate Medical School, the Wireless Access Research Group and the Biomedical Electronics Laboratory at the University of Limerick and General Practitioners from the local area. It aims to develop wearable sensor systems for ambulatory monitoring of physical activity, mobility and detecting falls.

OBJECTIVE

Previously, the waist has been investigated as a possible location for ambulatory monitoring of physical activity. However, the development of an accurate algorithm for monitoring of mobility patterns of older adults (65 years and older) has still to be fully explored. Thus the aim of this current study is to measure longitudinal, medio-lateral and anterior-posterior accelerations of the waist in order to develop accurate activity classification and physical activity measurement algorithms, for a wearable ambulatory monitoring device.

METHODOLOGY

A total of ten older healthy volunteers (65 years and older) are being recruited through advertisement in two community-based General Practices, one group of five volunteers based in an urban setting and a second group of five based in a rural setting. The trial protocol has been approved by the University of Limerick Research Ethics Committee. The study takes place in the volunteer’s own home. Each volunteer is visited by two researchers, one with a clinical background, who will manage the trial by scheduling the visits, assist in attaching the sensors, explain the protocol and be available to provide further assistance if required. The second researcher, with a technical background, performs the recording of the data and off-line data analysis. Each subject is fitted with a tri-axial accelerometer based sensor (weight 106g; size 10.4 by 6.5 by 1.9cm) using a waist belt and a modified phone carry-case. Volunteers are asked to perform two different activities of daily living (ADL) studies, a scripted ADL study and an unscripted ADL study.
The Scripted ADL study

In the scripted ADL study, subjects are asked to perform a specific set of activities. Each ADL is performed three times by each volunteer. The following ADLs are recorded (1) stand-sit-stand from a) armchair, b) kitchen chair, c) toilet seat, d) car seat, e) bed; (2) Stand-lie-stand from a bed; (3) Walk up and down stairs (if available); (4) walk ten metres.

The Unscripted ADL study

Following the scripted ADL study, subjects are fitted with an additional sensor, the RT3 research tracker (weight 65.2g; size 7.1 by 5.6 by 2.8cm) which provides an estimate of whole body energy expenditure. Subjects continue to wear both sensors for a maximum of eight daylight hours. During this time they are free to carry out their normal everyday activities. The sensor set is then collected later in the day and a short questionnaire is completed concerning the size, weight and any restrictions that the devices may have caused.

RESULTS

Currently data for both ADL trials have been recorded from five urban based volunteers. The recording procedure involving two researchers visiting the volunteer has been well received thus far. Volunteers appreciated the presence of both a clinician and a technical researcher. Overall acceptance of wearing the device was positive. None of the volunteers indicated that the device restricted their movement. However they did suggest making the device smaller and possibly changing to a wrist watch type device or pendant.

CONCLUSIONS

In conclusion recording of healthy older adults carrying out normal scripted and unscripted ADL has been performed. Feedback so far on the recording method, trial protocol and sensor design is positive. Analysis of the collected data will allow for the development of an activity and mobility monitoring system for older adults.

REFERENCES

Available on request.

FUNDING

This research is being funded by the CAALYX (Complete Ambient Assisted Living Experiment) project under the Sixth Framework Programme (IST-2006-045215).
INTRODUCTION

In the perioperative area, the period before and after surgery, it is essential to measure diagnostic parameters such as oxygen saturation, haemoglobin (HHb) concentration and pulse. The HHb concentration in human blood is an important parameter to evaluate the physiological condition. By determining the HHb concentration it is possible to observe imminent postoperative bleeding and autologous retransfusions. Currently, invasive methods are used to measure the HHb concentration which can be painful and stressful for the patient. For this purpose blood is taken and analyzed. The disadvantage of this method is the delay between the blood collection and its analysis, which does not permit a real-time patient monitoring in critical situations.

OBJECTIVES

The purpose of this research is the development of an optical wireless sensor for a non-invasive HHb concentration measurement. This non-invasive method allows pain free online patient monitoring with minimum risk of infection and facilitates real time data monitoring allowing immediate clinical reaction to the measured data.

METHODOLOGY

The absorption of whole blood in the visible and near infrared range is dominated by the different haemoglobin derivatives and the blood plasma that consists mainly of water. It is well known that pulsatile changes of blood volume in tissue can be observed by measuring the transmission or reflection of light through it. According to pulse oxymetry the wavelength choice is critical. During the measurement of haemoglobin the absorption should not be dependent on the oxygen saturation. That means that the measurement is only practicable at so called isosbestic points where the extinction coefficients of HHb and HbO2 are identical. One isosbestic point is known to exist around 810nm. According to the assumption that red blood cells are mainly filled with water, the absorption coefficient of blood is similar to a solution consisting HHb, HbO2 and H2O and the absorption of HHb and HbO2 is indistinguishable to the absorption of water (H2O) above 1200nm, it is necessary to select a second wavelength in this region above the diagnostic window.

Finally the determination of haemoglobin concentration will be performed at the wavelengths $\lambda_1 = 810$nm and $\lambda_2 = 1300$nm.
RESULTS

To date the theoretical background and fundamental aspects of the hardware design have been established. In the case of the latter a working system involving 3 LEDs (at 3 wavelengths), two photo detectors and the associated drive and detection amplifiers have been developed and mounted on a functional finger clip. The microcontroller (MSP430F1611) allows the sampling and digitising of the plethysmograms and establishes a communication via an RS232 interface to a PC which is needed for the visualisation of the PPG-Waves. Early experimental results recorded using a remote optical wearable finger clip is feasible.

CONCLUSION

Together with the Medical School of the University of Limerick, it is proposed to construct a dedicated lab-based blood stream model system based on the human circulation which is necessary for validation of the measurement method of haemoglobin concentration and the newly developed optical sensor system. This will constitute a nationally unique experimental test facility. With the help of the model a controlled variation of the blood parameter, haemoglobin concentration and oxygenation are feasible.

REFERENCES

Available on request.

PRESENTED

As a poster presentation at the 6th International Forum Life Science Automation (LSA) 2008 in Rostock, Germany on September 10th to 12th, 2008 by Mr Ulrich Timm.
INTRODUCTION

The emergence of antibiotic resistance is a serious concern worldwide for patients. Staphylococcus aureus is known to be responsible for a wide variety of clinical manifestations such as wound infection, pneumonia, septicaemia and endocarditis, with Beta-lactams as the drug of choice for therapy. However significant increases have been observed in the incidence of hospital-acquired methicillin-resistant Staphylococcus aureus (MRSA) in Ireland. During epidemiological investigations, samples taken from the environment have demonstrated that multi-resistant bacteria are present in the hospital environment, and that the immediate environment of the patient is sometimes heavily contaminated with a range of multi-resistant bacteria including MRSA. It has been proven that environmental contamination of the room occupied by a patient infected with MRSA was sufficient enough to contaminate the gloves of staff although no direct contact between the staff member and the patient occurred. Surfaces most commonly contaminated are the floor, bed frame, mattress, pillow and clothes worn by the infected individual. Our group is currently looking at the effect of Dielectric Barrier Discharge Plasma (DBD Plasma) for bacterial sterilisation of such surfaces and its possible role in infection control measures. Applications of plasmas include surface modification and ozone production.

OBJECTIVES

The objective of this study was to investigate the killing effect that DBD Plasma has on a methicillin-resistant Staphylococcus aureus strain.

METHODOLOGY

A methicillin resistant strain of Staphylococcus aureus which was previously isolated from a surgical wound was used in this experiment. This experiment was performed in triplicate. The strain was exposed to the DBD plasma stream at working power of 55% and at a distance of 25mm from the lower extremity of the plasma system, at time periods of 10, 30, 60 and 120 seconds. After treatment, all plates were incubated at 37°C overnight, at which point colony counts were performed in order to determine the level of bacterial inactivation resulting from plasma exposure.
RESULTS

Table 1 - Average Reduction for Staphylococcus aureus (Methicillin-Resistant Isolate) Round 1, 2 and 3

<table>
<thead>
<tr>
<th></th>
<th>Before Exposure (cfu/ml)</th>
<th>10 Second Exposure (cfu/ml)</th>
<th>30 Second Exposure (cfu/ml)</th>
<th>60 Second Exposure (cfu/ml)</th>
<th>120 Second Exposure (cfu/ml)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2.87*10^{-8}</td>
<td>1.41*10^{-4}</td>
<td>1.32*10^{-3}</td>
<td>1.17*10^{-2}</td>
<td>0</td>
</tr>
</tbody>
</table>

Table 2 - Log10 of the Average Reduction for Staphylococcus aureus (Methicillin-Resistant Isolate)

<table>
<thead>
<tr>
<th></th>
<th>Before Exposure (cfu/ml)</th>
<th>10 Second Exposure (cfu/ml)</th>
<th>30 Second Exposure (cfu/ml)</th>
<th>60 Second Exposure (cfu/ml)</th>
<th>120 Second Exposure (cfu/ml)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>8.4593925</td>
<td>4.1492191</td>
<td>3.1205739</td>
<td>2.1205739</td>
<td>0</td>
</tr>
</tbody>
</table>

Figure 1 - Graph Time (sec) v's Log10 Reduction of MRSA Isolate

CONCLUSION

These results demonstrate that DBD plasma can effectively reduce the bacterial numbers of a methicillin resistant S. aureus strain within the first 10 seconds and essentially sterilise the sample within 120 seconds. In the first 10 seconds there is approximately 4 log reduction in bacterial numbers, this reduction in numbers continues steadily for the following 110 seconds and by the 120 second mark there is a total reduction in the bacterial number. DBD plasma could be applied to hospital or food environments where high bacterial numbers are a concern for public health (See Figure 1).

REFERENCES

Available on request.
INTRODUCTION

Non-fermenting Gram-negative bacilli pose a significant problem in the clinical environment being the common cause of nosocomial infections. The major opportunistic pathogens from this group comprise; Pseudomonas aeruginosa, Acinetobacter baumannii, Stenotrophomonas maltophilia and Burkholderia cepacia. Ralstonia insidiosa is an aerobic, non-fermenting, gram-negative rod and is an organism isolated at infrequent times but which is of interest to our group. It has been identified as an opportunistic pathogen in nosocomial infections, especially among immunocompromised patients including cancer patients and cystic fibrosis sufferers. It is very similar to Ralstonia pickettii a growing nosocomial infectious threat and many R. insidiosa cases could be misidentified as R. pickettii.

METHODOLOGY

The 15 R. insidiosa strains used in this were isolated from waste-water (LMG21421), a clinical situation (ATCC 42129), laboratory purified water (ULM008 and ULM009) and industrial purified water (ULI 821, ULI 797, ULI 785, ULI 181, ULI 794, ULI 185, ULI 166, ULI 819, ULI 784, ULI 163, ULI 795). They were identified using a species specific PCR assay. In vitro antimicrobial susceptibility testing was performed by disc diffusion tests using eleven antibiotics (Table 1), according to the National Committee for Clinical Laboratory Standards on the fifteen strains of R. insidiosa. The NCCLS has not developed guidelines for the Ralstonia genus and interpretation of results for Pseudomonas and other non-Enterobacteriaceae criteria were used. The inoculum was prepared by adding isolated colonies of the microorganism from an overnight nutrient agar plate into 2 ml TSB. The suspension was adjusted to match the 0.5 McFarland turbidity standards. A sterile cotton swab was dipped into the adjusted suspension. The swab was rotated several times and pressed firmly on the inside wall of the tube above the fluid level to remove excess inoculum from the swab. The swab was streaked over the entire surface of the sterile Mueller Hinton Agar plate. This procedure was repeated by streaking two more times, rotating the plate approximately each time to ensure an even distribution of inoculum. The plates were allowed to dry for 5 minutes and then the antimicrobial disks were dispensed onto the surface of the inoculated agar plates using the Oxoid antibiotic disk dispenser. The plates were then incubated at 35°C for 16-18 hours.

Zones of inhibition were then measured to the nearest whole millimetre using Venier callipers (Junior). Zones diameters were interpreted as being Susceptible (S), Intermediate (I) or Resistant (R) according to NCCLS (M100-S11) 2001.
The antibiotics tested were Tic-Ticarcillin 75 µg/ml; Ctx-Cefotaxime 30µg/ml; Cn-Gentamicin 10µg/ml; Te-Tetracycline 30µg/ml; Cip-Ciprofloxacin 5µg/ml; Ofi-Ofloxacin 5µg/ml; SxT-Sulphamethoxazole/trimethoprim 23.75/1.25 µg/ml; C-Chloramphenicol 30µg/ml; Mez-Mezlocillin 75µg/ml; Feb-Cefepime 30µg/ml; Tor-Tobramycin 10µg/ml. Control strain: Pseudomonas aeruginosa ATCC 27853.

RESULTS

Non-fermentative Gram-negative rods are intrinsically resistant to many antibiotics and our results (Table 1) show that all the purchased culture collection strains of *R. insidiosa* were resistant to the Penicillin-Ticarcillin, the Aminoglycides-Gentamicin and Tobramycin, the Phenicol-Chloramphenicol and the Tetracycline-Tetracycline.

<table>
<thead>
<tr>
<th>Strain/Isolate No.</th>
<th>Antibiotic Resistance</th>
</tr>
</thead>
<tbody>
<tr>
<td>R. insidiosa LMG 21421</td>
<td>Cn, Te, Tor, Tic, C</td>
</tr>
<tr>
<td>R. insidiosa ATCC 42129</td>
<td>Cn, Te, Tor, Tic, C</td>
</tr>
<tr>
<td>ULI 821</td>
<td>Cn, Te, Tor, Tic, C</td>
</tr>
<tr>
<td>ULI 797</td>
<td>Susceptible to all</td>
</tr>
<tr>
<td>ULI 785</td>
<td>Cn, Te, Tor, Tic, C</td>
</tr>
<tr>
<td>ULI 181</td>
<td>Cn, Te, Tor, Tic, C</td>
</tr>
<tr>
<td>ULI 794</td>
<td>Cn, Te, Tor, Tic, Mez, Feb C</td>
</tr>
<tr>
<td>ULI 185</td>
<td>Cn, Te, Tor, Tic, Mez, C</td>
</tr>
<tr>
<td>ULI 166</td>
<td>Cn, Te, Tor, Tic, C</td>
</tr>
<tr>
<td>ULI 819</td>
<td>Cn, Tor, Tic, Mez, C</td>
</tr>
<tr>
<td>ULI 784</td>
<td>Cn, Te, Tor, Tic, C</td>
</tr>
<tr>
<td>ULI 163</td>
<td>Cn, Te, Tor, Tic, C</td>
</tr>
<tr>
<td>ULI 795</td>
<td>Cn, Te, Tor, Tic, C</td>
</tr>
<tr>
<td>ULM 008</td>
<td>Cn, Te, Tor, Tic, C</td>
</tr>
<tr>
<td>ULM 009</td>
<td>Cn, Te, Tor, Tic, C</td>
</tr>
</tbody>
</table>

Ten of the fifteen isolates showed resistance to Gentamicin, Tetracycline, Chloramphenicol, Ticarcillin and Tobramycin. Isolate ULI 185 showed resistance to six antibiotics Gentamicin, Tetracycline, Chloramphenicol, Ticarcillin, Mezlocillin and Tobramycin. Isolate ULI 794 showed resistance to seven antibiotics Gentamicin, Tetracycline, Chloramphenicol, Ticarcillin, Mezlocillin, Cefepime and Tobramycin. Isolate ULI 797 showed no resistance of any kind.
CONCLUSION

R. insidiosa is not a prevalent pathogen in hospital environments but is isolated on occasion. We can conclude that the R. insidiosa isolates in this study are multi-antibiotic resistant and there is a need to maintain active surveillance of resistance patterns among gram-negative bacilli.

REFERENCES

Available on request.
INTRODUCTION

Foodborne diseases are a growing health problem worldwide involving a wide spectrum of illnesses caused by microbial, viral or parasitic contaminants of food. One of the most frequently isolated bacterial foodborne pathogens are the Bacillus cereus group species which include: B. cereus, B. mycoides, B. pseudomycoide, B. weihenstephanensis, B. thuringiensis and B. anthracis. Growth of B. cereus, results in production of several highly active toxins therefore consumption of food containing >10^6 bacteria/g may result in emetic and diarrhoeal syndromes. The most common source of this bacterium is mixed food products, liquid milk, powdered milk and it is of particular concern in the baby formula industry.

OBJECTIVE

The purpose of the research is development of a portable/handheld biological affinity sensor to detect and monitor the microbial quality of food. Attention is focused on the Bacillus cereus group species. A DNA biosensor is constructed by immobilizing a designed microbial oligonucleotide sequence (probe) onto a transducer that is able to convert the biological events into a measurable signal. See Figure 1.

Figure 1 - Schematic Diagram of a DNA Biosensor
**METHODOLOGY**

The gene motB encodes an outer membrane protein in the *B. cereus* group spp. PCR primers from this gene (BCFomp1/BCRomp1) were designed to be used as a potential target for PCR bacterial identification and incorporated into the biosensor. Using those primers, 73 strains of *B. cereus* group species were tested (except *B. anthracis* strains). All screened *B. cereus* group strains showed positive results. The size of PCR product was 575 bp as expected. Minimum level of the detection with these primers is $10^3$ CFU/ml.

**RESULTS**

BCFomp1/BCRomp1 primer set is group specific and doesn’t react with DNA from other bacillus and non-bacillus species.

**CONCLUSION**

Traditional methods for detection and identification of *B. cereus* group species are based on conventional culturing techniques including homogenising the food sample, enriching the target organism using selective and differential plating, morphological evaluation of the micro-organism and Gram stain. Immunological (serological) tests (ELISA, RPLA immunoassays) and biochemical methods (*BioMérieux* API test kits) may also be carried out to ensure correct identification. These conventional methods are time consuming, therefore a rapid and reliable method for the identification of the *B. cereus* group spp., is required. Future work will include the design of unique DNA signatures for each member of the *Bacillus cereus* group spp. This will provide the opportunity for rapid, in situ tests that can replace lengthy laboratory assays. Based on these sensors, identification of such pathogens may be possible directly from the food source.

**REFERENCES**

Available on request.

**PRESENTED**

Part of this work was presented in poster format at the “SGM Conference: “Regulatory Mechanisms in Host-Pathogen Interactions” in the National University of Ireland Galway on March 27th and 28th, 2008.

**FUNDING**

We acknowledge funding from the SFI Research Frontiers programme 07/RFP/ENEF500.
**INTRODUCTION**

Salmonella is a major foodborne pathogen. Contaminated pork products are a significant cause of human Salmonella infection. Many studies have isolated Salmonella from pork sausages. In healthy non-immunocompromised individuals Salmonella infection is usually self-limiting and antibiotic therapy is generally not required. Antimicrobial therapy may be required in elderly and immunocompromised individuals or in cases of severe dehydration and bacteraemia. Antimicrobial drug resistance in non-typhoidal Salmonella is a considerable problem worldwide. In Europe 66% of Salmonella isolates in 2004 were resistant to at least one antimicrobial agent. The emergence of resistance to fluoroquinolones is extremely important as ciprofloxacin is the drug of choice in treating serious Salmonella infections. Nalidixic acid resistance is seen as a marker to reduced susceptibility to ciprofloxacin. The target of the Quinolone drug group is an enzyme called DNA gyrase. DNA gyrase is a topoisomerase II enzyme. Gyrase is a tetramer consisting of two A sub-units, gyrA and two B sub-units gyrB. Point mutations within the quinolone resistance determining regions (QRDR) of gyrA and gyrB confer resistance or reduced susceptibility to quinolones in Salmonella.

**OBJECTIVE**

- To examine the prevalence of Salmonella in pork sausages on sale in supermarkets and butchers’ shops in Limerick City.
- To examine Salmonella isolates for nalidixic acid resistance.
- To determine the sequence of the QRDR of gyrA for nalidixic acid resistance strains.

**METHODOLOGY**

Detection of Salmonella in sausages will be carried out using enrichment media according to the Health Protection Agency Standard Method. Salmonella isolates will be identified by gram stain, Salmonella Latex Test (Oxoid) and API20E (Bio-Merieux). To determine the minimum inhibitory concentrations of nalidixic acid for Salmonella strains CLSI guidelines will be followed. PCR will be used to confirm the presence of gyrA in nalidixic acid resistance strains. The QRDR of gyrA will be sequenced to determine if point mutations are present within the region.

**RESULTS**

Work on this project is ongoing. No results to report at time of going to print.
CONCLUSION

Pork is a very important vehicle for human Salmonella infection. In this study it is hoped to identify the health risks associated with the consumption of pork sausages on sale in the Limerick area and determine the extent of antibiotic resistance amongst Salmonella isolates detected in sausages on sale in the region.

REFERENCES

Available on request.
INTRODUCTION

Internationally, research has highlighted the negative impact on parents of caring for a child with an eating disorder. Parents of children with Anorexia Nervosa and Bulimia Nervosa have reported high levels of psychological distress, unmet needs and dissatisfaction with service provision.\(^1,2\)

OBJECTIVE

The current research aimed to explore parents’ experiences of caring for a daughter with an eating disorder in an Irish context. It sought to give a voice to parents in order to develop new understandings of their experiences leading to improvements in clinical practice and service provision for parents and their children.

METHODOLOGY

A qualitative approach using in-depth interviews was used to explore the experiences of six mothers and two fathers caring for a daughter with an eating disorder. The grounded theory approach to data collection and analysis uncovered seven core themes related to their experiences.

RESULTS

Emergent themes included awareness, understanding and acceptance of the eating disorder; burden of caring; emotional responses; coping responses; being proactive and experiences of services and professionals.

CONCLUSIONS

Themes highlight parents’ negative experiences of caring for their daughter, revealing that this is a demanding, burdensome and isolating process. Implications for clinical practice and service provision, with particular relevance to parents’ involvement in the treatment process, are discussed. The research calls for health professionals to consider the role parents and families may play in the treatment process. It urges professionals to develop collaborative partnerships with parents, and attitudinal changes to seeing parents as agents of change and recognise the positive impact they can have on treatment outcome.

REFERENCES

Available on request.
INTRODUCTION

The advent of deinstitutionalization heralded a shift in the focus of care in mental health into the community. Consequently, parents of adult children with schizophrenia have become the main caregivers.

OBJECTIVE

The design of this phenomenological study was exploratory and used a hermeneutic interpretative approach in order to understand and appreciate the lived experiences of parents living with adult children who have a diagnosis of schizophrenia.

METHODOLOGY

Audiotaped semi-structured interviews were conducted with six parents, narratives transcribed verbatim and analysed using Colaizzi’s method. The inclusion criteria were parents who were living with an adult child with schizophrenia for longer than two years.

RESULTS

This study elicited six dominant themes: psychological tsunami, intricacies of caregiving, loss, love, coping with enduring illness and an uncertain pathway. The findings of this Irish study are consistent with international and national literature on the topic.

CONCLUSION

The shift in the locus of care should be harvested positively by including parents and other caregivers as partners in the management of the schizophrenic illness, recognizing them as the greatest asset in the care of adult children with schizophrenia.

This qualitative study adds to the present body of knowledge advocating for support for parents living with their adult children with schizophrenia. It is imperative for mental health professionals to commit to embracing change that includes parents as partners in the care of their loved ones, being mindful also of their specific care needs. Further research is required into the needs of parents at critical junctures of the schizophrenic illness, particularly in relation to the provision of support structures, family interventions and alternative care options to ease the trauma for persons with schizophrenia and give respite to their parents.
Presented

As a Poster Presentation (prize-winner), at the Nursing and Midwifery, Planning and Development Unit Conference, “Transforming Care through Innovation and Quality,” in the University of Limerick on April 30th, 2008.
INTRODUCTION

Psychosis with first onset after the age of 60 is thought to affect 2-4% of older people and up to half will not respond fully to medication. While a psychological perspective has begun to emerge, the experience of living with late-onset psychosis (LOP) has not yet been considered.

OBJECTIVE

This study represents a preliminary attempt to explore the subjective experience and psychological features of older people living with LOP from their own perspective.

METHODOLOGY

Seven participants who met the criteria for late-onset psychosis were interviewed using a semi-structured interview schedule. Participants spoke about previous life experiences as well as the experience of developing and living with LOP. Interpretative phenomenological analysis (IPA) was used to identify common themes within their accounts.

RESULTS

Four themes emerged which reflected participants' subjective experiences of earlier life stages as well as their current experiences of LOP in the context of ageing in an Irish culture. Three interrelated themes described participants' experiences of social isolation, a solitary coping style and the experience of the self as ‘different’. A final theme reflected participants' attempts to explain and find meaning in their psychotic experiences.

CONCLUSIONS

Results support the view that the experience of LOP emerges in the context of psychosocial vulnerabilities combined with adversities associated with the experience of ageing.
INTRODUCTION

In one of the studies, it was reported that 40% of service users managed by Community Mental Health Teams (CMHTs) reported drug or alcohol misuse problems. Due to the increasing number of referrals with substance misuse issues to the Dromin House Day Hospital, Nenagh and with the publication of the ‘Vision for Change’, this audit was done.

OBJECTIVE

The objective of the audit is to find whether we have been moving in the direction of the ‘Vision for Change’ with regard to substance misuse issues, as recommended by the Expert Group on Mental Health Services. The recommendation of the ‘Vision for Change’ is that “CMHTs should cater for adults, only when the primary problem is a mental health problem.”

Existing set-up for patients with Alcohol and Drug Abuse in Nenagh

1. Those in the age group of 16 to 25 years with only alcohol and drug abuse are treated by the Community Drug and Alcohol Services.
2. There is no Community Drug and Alcohol service for those aged 26 years and above, with only alcohol dependence and no drug abuse problems. This group of patients are managed by the Community Mental Health Team in Nenagh at present.

METHODOLOGY

The data was collected manually from all the referrals including hospital consultations, to the Dromin House Day Hospital extending to a period from September 1st, 2005 to September 1st, 2006.

RESULTS

The following are the data for all the referrals including hospital consultations. In the above defined period, the total number of referrals including hospital consultations was 400, out of which the division, based on their diagnosis was as follows; -
Table - 1 Referral including Hospital Consultations based on their Diagnosis

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>No. of Patients</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patients with no Alcohol/Drug Misuse (No Sub Ms)</td>
<td>228</td>
<td>57%</td>
</tr>
<tr>
<td>Patients with Primary Mental Illness and co-morbid Alcohol/Drug Misuse (Pr.M &amp; Co)</td>
<td>28</td>
<td>7%</td>
</tr>
<tr>
<td>Patients with Primary Alcohol /Drug Misuse &amp; Co-morbid Mental Illness (Pr.Sb &amp; M)</td>
<td>69</td>
<td>17%</td>
</tr>
<tr>
<td>Patients with Only Alcohol dependence (Al. Only)</td>
<td>51</td>
<td>13%</td>
</tr>
<tr>
<td>Patients with Alcohol and Drug problems only, excluding those only with alcohol dependence (Al. &amp; Drugs)</td>
<td>24</td>
<td>6%</td>
</tr>
</tbody>
</table>

Figure 3 - Graphical Representation of the Referrals, Including Hospital Consultations Based on their Diagnosis

Patients with the above diagnosis were divided in two groups (16 to 25 years and 26 years and above). The data for the two groups are as follows:

Table - 2 Age Group Division of the Patients with Different Diagnosis

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>16 to 25 years</th>
<th>26 years+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patients with Only Alcohol Dependence</td>
<td>8 (2%)</td>
<td>38 (9.5%)</td>
</tr>
<tr>
<td>Patients with Alcohol and Drug problems only, excluding those with only Alcohol dependence</td>
<td>17 (4.25%)</td>
<td>7 (1.75%)</td>
</tr>
<tr>
<td>Patients with Primary Alcohol /Drug Misuse &amp; Co-Morbid Mental Illness</td>
<td>24 (6%)</td>
<td>45 (11.25%)</td>
</tr>
<tr>
<td>Others</td>
<td>261 (65.25%)</td>
<td></td>
</tr>
</tbody>
</table>

From the above, it is obvious that 9.5% of patients, who had only alcohol dependence (26 years and above) had to be managed by the CMHT in Nenagh, although they had no mental illness. All the other groups had appropriate services available to them.
CONCLUSION

It has been difficult to implement the ‘Vision for Change’ until now due to the absence of a community based service for patients aged 26 years and above, with only alcohol dependence. As a result, they continue to be cared by the CMHT in Nenagh and this puts additional strain on the already stretched resources. Furthermore, the policies for accepting referrals in the Community Drug and Alcohol Services across different HSE areas in the country varies widely. To realise the ‘Vision for Change’ in practise, there needs to exist a uniform service, all over the country for those with only Alcohol and/or Drug Abuse, irrespective of their age.

PRESENTED

Presented at the Dromin House Day Hospital, Nenagh in December 2006 by Dr. Narayanan Subramanian, NCHD and Mr Dónal Ryan, Addiction Counsellor to the Multidisciplinary Team Members of the North Tipperary Mental Health Services.

REFERENCES

Available on request.
INTRODUCTION

This study is a formative evaluation of two pilot programmes based on the principles of Rational Emotive Behaviour Therapy (REBT). The programmes were run in the National Learning Network (NLN) as part of a European Union-funded project called Work in Mind.

The first programme, Rethinking Your Future, was a psycho-educational group programme for service users with disabilities who are engaged in vocational training, to reduce irrational thinking and help address problems regarding employment. The second programme, Training of Trainers, aimed to prepare staff to work as facilitators for Rethinking Your Future, through training in REBT theory and psycho-educational practice.

OBJECTIVE

The evaluation aimed to inform NLN management about future development and implementation of the programmes.

METHODOLOGY

It adopted a utilisation-focused approach to evaluation and attempted to address needs in an applied context. It also adopted a practice-based evidence approach to investigate the naturalistic validity of the interventions in a clinical setting. It used a mixed-method evaluation. Quantitative measures included the Shortened General Attitude and Belief Scale,1 the Beck Depression Inventory, 2nd Edition2 and the Beck Anxiety Inventory.3 Qualitative data was collected via feedback forms and a focus group.

RESULTS

Findings indicated that Training of Trainers and Rethinking Your Future have good potential to meet their goals and may have impacted positively on participants’ irrational thinking. Feedback from staff and service users, and correspondence of findings with previous REBT evaluation studies, support this conclusion.
CONCLUSION

Findings point to a need for revision of the programmes, optimising useful aspects, changing less useful aspects and implementing suggestions for improvements put forward by trainers and participants. Recommendations have been made in light of the findings and presented for consideration by NLN.

REFERENCES

Available on Request

FUNDING

This research received funding from the Leonardo Da Vinci EU Funding Programme for Vocational Training Initiatives.
INTRODUCTION

A large number of Irish women are diagnosed with breast cancer each year and the health services are placed under increasing pressure to deal with all of the needs (physical and psychological) of breast cancer patients. Structured written emotional expression (EE) and benefit-finding (BF) interventions, based on a method designed by Pennebaker and Beall,¹ have recently been associated in correlational research with positive physical and psychological outcomes in relation to stressful life experiences. Stanton et al.² compared an EE (writing about deepest thoughts and feelings relating to cancer) to a BF (writing about positive thoughts and feelings relating to cancer) and a control (C) condition (writing about facts relating to cancer) among women living with breast cancer. Stanton et al.² also explored the relationships between cancer-related avoidance and the different writing conditions. Stanton et al.² tentatively suggested that written EE and BF interventions aid positive adjustment (psychological and physical) to living with breast cancer.

OBJECTIVES

The aim of the current study was to assess the impact of three different writing conditions (EE, BF, C) on the physical and psychological health of women who had completed treatment for breast cancer. The study was a partial replication of Stanton et al’s² work in this area. Further, to the authors’ knowledge no studies of this nature have been carried out in Ireland to date.

The objectives of this study were to attempt to answer the following research questions:

• Are there significant associations between written EE and/or written BF about one’s experience of breast cancer and enhanced physical health-related outcomes (i.e., medical appointments for cancer-related morbidities, self-reported physical symptoms) and psychological well-being (i.e., health-related quality of life, positive and negative affect) relative to a control condition in which participants write solely about the facts of their breast cancer experience?

• Are there significant associations between those who have lower cancer-related avoidance scores and higher physical and psychological well-being outcome scores, and conversely between those who have higher cancer-related avoidance scores and lower physical and psychological well-being outcome scores?
METHODOLOGY

The participants were 61 women who were over 18 years, had a diagnosis of breast cancer and who had completed their primary medical treatment for breast cancer (i.e., surgery, chemotherapy, radiotherapy). Participants were assigned randomly to write over three 20-minute sessions about (1) their deepest thoughts and feelings regarding breast cancer (EE; n = 20); (2) positive thoughts and feelings regarding their experience with breast cancer (BF; n = 21); or (3) facts of their breast cancer experience (C; n = 20). Psychological (i.e., negative and positive affect, quality of life) and physical (i.e., perceived somatic symptoms and medical appointments for cancer-related morbidities) outcomes were assessed before and after the intervention and at three-month follow-up. Whether outcomes varied as a function of participants’ cancer-related avoidance was also assessed. SPSS 15.0 was used for descriptive and inferential statistical analyses.

RESULTS

The findings suggested that the ability to express emotions surrounding one’s cancer experience and to generate benefits accrued from the experience are potential effective ingredients for enhancing physical and psychological well-being after breast cancer diagnosis and treatment. The positive outcomes related to induced EE and BF writing interventions were apparent even three months after involvement in the study. Further, the results suggested that the level of benefits evident after the experimental writing interventions was related to participants’ levels of avoidant-style coping. There was a correlation between avoidant coping style and poorer health outcomes.

Recommendations

The following recommendations were made based on the findings of this study:

1. More resources should be made available within the Irish health services to set up and develop psycho-oncology departments
2. Cost-effective structured EE and/or BF writing interventions may be used on an individual or group basis, in isolation or in combination with therapy, within psycho-oncology departments
CONCLUSION

Overall, findings tentatively support the hypothesis that induced written expression of one’s deepest thoughts and feelings (EE) or written expression of any positives gleaned from the cancer experience (BF) are associated with some improvements in physical and psychological well-being. Further, the results suggested that the level of benefits evident after the experimental writing interventions was related to participants’ levels of avoidant-style coping. In general, the results of the present study corroborate the findings of previous research, particularly Stanton et al’s study.

REFERENCES

Available on request.
INTRODUCTION

The occurrence of overweight and obesity in both adults and children has increased over the past two decades, and is described by the World Health Organisation\textsuperscript{1} as a global epidemic. Physical activity is widely recognised as key to effective management of overweight and obesity problems,\textsuperscript{2} and indeed for children it is seen as an important factor in reducing the risk of chronic disease in adulthood.\textsuperscript{3,4,5,6}

The current recommendation in Ireland for young people (5-18 years) is that they should participate in physical activity of moderate intensity for at least one hour each day.\textsuperscript{7} This is reflected in the recommendations of the Centre for Disease Control and Prevention,\textsuperscript{8} and the National Association of Sport and Physical Education (NASPE).\textsuperscript{9}

OBJECTIVE

The current study examined whether or not children, aged 7 to 9 years, were currently participating in sufficient physical activity to meet NASPE recommendations (2004): -

- Recommendation 1 - At least 60 minutes, and up to several hours, of physical activity on all, or most days of the week, accumulation should include moderate and vigorous physical activity;
- Recommendation 2 - Several bouts of physical activity lasting 15 minutes or more each day.

METHODOLOGY

Participants involved in this study were 7 to 9 year old children (N = 87) from three participating rural primary schools in Limerick. Participants were asked to wear a Polar Team System heart rate monitor on four days (three week days and one weekend day). It is recommended in the literature that a minimum of three days monitoring is required to measure habitual physical activity using heart rate monitors,\textsuperscript{10} other authors consider three days plus one weekend day necessary.\textsuperscript{11,12} Heart rates (beats per minute (bpm)) were recorded at 5-second intervals throughout each day. Each monitor could store files to a maximum duration of 11 hours and 18 minutes (679 minutes).

RESULTS

Although it was attempted to record four full days of data for all participants this proved difficult with children of such a young age; there were cases where data was missing due to non-compliance, due to participants being absent from school, due to monitor failure, or due to withdrawal from participation.
Thus results are shown for students who had two, three, or four full days data available for analysis; N = 65, 52% male (n = 34) and 48% female (n = 31). Data was considered across three intensity zones: 1) light to vigorous physical activity (LVPA; ≥120 bpm), 2) moderate to vigorous physical activity (MVPA; ≥ 140 bpm), and 3) vigorous physical activity (VPA; ≥ 160 bpm). The mean and standard deviation of accumulated minutes of LVPA, MVPA and VPA on weekdays and weekends are given in Figure 1 below. The Wilcoxon signed ranks test showed no significant difference between weekday and weekend mean accumulated minutes of LVPA, MVPA, and VPA, similarly gender differences between weekday and weekend activity, and across the intensity zones, were inconsistent.

**Figure 1- Comparison of Accumulated Minutes (mean ± SD) within each HR Zone for Weekday (n = 63, days = 157) and Weekend (n =27, days = 27)**

55% of participants accumulated 60 minutes or more of light intensity activity (≥ 120 bpm) on all days monitored and 8% of participants participated in 3 or more bouts of light intensity activity (lasting 15 minutes or longer) on all days. 8% of participants accumulated 60 minutes or more of moderate intensity activity (≥ 140 bpm) on all days monitored, no participant participated in more than two bouts of moderate intensity activity on all days. 35% of participants accumulated 30 minutes or more of moderate intensity activity on all days.

**CONCLUSIONS**

Our results indicate that very few children (aged 7-9 years) are currently participating in sufficient physical activity for health benefits, as recommended by NASPE.⁹ Though the number of days involved in this assessment is a limiting factor, the possible future health implications for this population suggests that further research into the area is warranted. Although it is clear that an increase in physical activity levels for this 7-9 year old population is desirable, caution must be taken when prescribing interventions or strategies based solely on current guidelines; childrens’ current levels of physical activity must be taken into account so that practical goals may be set. This is in line with the report of the Surgeon General on Physical Activity and Health,¹³ where it was advised that previously sedentary people of any age embarking on physical activity programmes should start with short durations of moderate intensity, and gradually increase until the recommended goal is reached.
REFERENCES

Available on request.

PRESENTED

Presented at the PEPAYS Research Forum at the University of Limerick on June 15th, 2007 by Dr. Sarah Jane Belton.
INTRODUCTION

Mens' health is an area in which increasing attention has been focused over the last number of years in Ireland. Both the National Health Strategy 'Quality and Fairness: A Health System for You' and the National Health Promotion Strategy highlight it as an area where action is required. A National Mens' Health Policy has been prepared and is awaiting publication. A number of research reports have been published on the status of mens' health. These reports have identified key areas of concern relating to mens' health, most notably higher mortality rates and risky behaviours when compared with women and a reluctance to seek help when faced with a health concern.

OBJECTIVE

Despite such concerns specific to mens' health, men continue to have limited contact with GPs, are reluctant primary care users and often seek help late in the course of an illness. It has been argued internationally that mens' health is under-researched from a clinical and health promotion perspective. While available Irish research has elicited mens' attitudes towards their own health and accessing health services, it has not determined the factors that men take into account when assessing their own health status, the criteria men use to decide whether or not to seek formal health care, or the factors that inform mens' perception of what constitutes an acceptable threshold for seeking help. This study aimed to explore these aspects of mens' health.

METHODOLOGY

A qualitative methodology was used to illuminate the research question. This incorporated two phases. The first involved 18 semi-structured interviews with males, followed by a second which entailed two focus groups with females (n=20) and three focus groups with males (n=26). Potential research participants were sourced throughout Ireland via purposive/snowball sampling. Data were gathered between November 2007 and February 2008. The principle of theoretical saturation was applied. The focus groups and interviews were recorded and transcribed verbatim. Thematic coding was employed for data analysis.

RESULTS

General health awareness was perceived by participants to have improved. Health consciousness and perception of vulnerability increased with age, as did willingness to access health and preventive health services. Health was primarily assessed by physical fitness and absence of disease/illness. Perceived severity of the symptom was the primary trigger to attend the GP although persistent symptoms and prompting by a significant other were also important. Men experienced structural, psychological and social barriers to help seeking. Those with long term girlfriends/wives tended to rely on them for advice and/or support for discussion of sensitive issues. Those who did discuss health issues with friends did so on a relatively superficial level and thus lacked supportive structures.
CONCLUSIONS

The results of this study indicate that mens’ attitudes and behaviours to seeking help with regard to health issues are multifaceted. Health service providers and health professionals should consider these when designing, planning and implementing mens’ health programmes/services. Gender mainstreaming should be incorporated into national policy making. Future research should consider female attitudes and behaviours towards help seeking and male attitudes towards and understanding of screening programmes.

REFERENCES

Available on request.

PRESENTED

As a poster presentation at the Faculty of Public Health Medicine Summer Meeting in the Royal College of Physicians, Kildare Street, Dublin on May 27th and 28th, 2008.

As a poster presentation at the National University of Ireland, Galway, Health Promotion Conference on June 19th and 20th, 2008.

This research was undertaken in part fulfilment of a Masters in Arts in Health Education/Promotion in the University of Limerick.
INTRODUCTION

This study evaluates the effectiveness of the Carlow/Kilkenny drop-in service in terms of parental support. Other outcomes are explored including satisfaction levels, parental empowerment and impact on mainstream service.

METHODOLOGY

The method used was a researcher-designed non-experimental self-report postal questionnaire. The questionnaire explored the objectives of the service, with particular emphasis on the degree of support received by parents.

RESULTS

The findings indicate that the overwhelming majority of participants (n=33, 91%) did receive emotional support as a result of attending the drop-in service and were satisfied with the overall service. Three quarters of participants felt able to discuss what to do next. The majority felt able to take a more active parenting role and put into practice changes discussed with the psychologist. They were also satisfied with the information and advice received. For those parents whose difficulty was addressed, the improvement was maintained. A large proportion reported not needing to use the mainstream service suggesting the drop-in may be providing a preventive support service. However, a large proportion, (60%), of parents reported that their child’s difficulty was not addressed by the consultation and 44% of this group did not go on to access the mainstream.

CONCLUSION

Conclusive evidence was found in this evaluation that participants felt emotionally supported and many also received informational support they were satisfied with. The service empowered an overwhelming majority of parents/carer to take a more active role in managing their child’s behaviour. For many, these positive changes were maintained. For those whose child’s difficulty was not addressed, the reasons are likely to be complex and related to organisational factors. The service is therefore meeting its aim of providing parental support. Further exploration of the findings relating to addressing the child’s difficulty is required. Regarding other aims of the service, including providing prevention/early intervention, the findings tentatively suggest this may be the case and warrant further investigation.
INTRODUCTION

The most common form of violence against women is domestic violence. The various statistics show that a woman is more likely to be attacked and beaten, even killed, by her partner or former partner than by any other person.

International research indicates that domestic violence is a serious and widespread problem around the world occurring across all sections of society regardless of age, gender, race, sexuality, wealth and geography.

The extent of domestic abuse in Ireland has been highlighted by several studies. The findings of Kelleher and O’Connor’s study illustrate that the prevalence of violence against women in the home is extensive, with 1 in 5 Irish women surveyed, having experienced at least one form of violence at some point in their lives by a current or former partner.

Statistics reveal that being female places women at significantly increased risk of all types of violence/abuse. In Ireland, women are over twice as likely as men to have experienced severe physical abuse, seven times more likely to have experienced sexual abuse, and almost three times more likely to have experienced severe emotional abuse.

Furthermore, the impact, and consequences of domestic abuse for both women and their children are serious, far-reaching and devastating, including physical, emotional, psychological, social and financial sequelae.

OBJECTIVE

Although the prevalence and impact of domestic abuse on women’s emotional and physical well-being has been the subject of extensive research, there is an apparent lack of studies exploring Irish women’s lived experiences of domestic abuse using an exclusively qualitative methodology, from a feminist perspective. The present study seeks to address this apparent deficit in the literature.

METHODOLOGY

A qualitative approach, guided and informed by principles of Grounded Theory, was used to examine the complex, multifaceted nature of the phenomena of domestic abuse.

Through women’s own accounts, the qualitative method was used to gain insight into their experiences of living with, leaving and ultimately surviving domestic abuse at the hands of an intimate male partner. Purposive sampling was used to recruit a total of 6 women from a well-established voluntary sector organization in the Mid-West of Ireland, offering refuge and outreach support services to women and children subjected to domestic abuse.
Data collection took place in the form of individual, in-depth, semi-structured interviews between the author and each participant that ran for between 1 and 1 ½ hours duration. The women's physical safety and comfort was ensured by conducting interviews in a private room at the participating service.

RESULTS

The findings highlighted that many women's experiences of domestic abuse in adult intimate relationships were built on a history of violence and abuse as children. Women described initial incidents of abuse in terms of 'seeing another side' to their partner. The onset of abuse frequently engendered intense feelings of upset, shock, fear, terror and confusion and a desire to forget what had happened. The intensity of these emotions often precluded women from reporting the abuse, and seeking help. Women's reactions to abuse were also found to be mediated by their experiences in their family of origin.

Women experienced a range of abusive behaviours. The impact of abuse was insidious and ongoing in the lives of women and their children. Women felt very alone, helpless and hopeless in the face of ongoing abuse. For some women, these feelings were further exacerbated by a lack of support, and apparent tolerance and/or outright condoning of abuse by family and friends. Some women became suicidal. Others had thoughts of killing their abuser, believing it to be their only means of escape.

Women described different 'turning points' that contributed to their decision to stay in, or leave the abusive relationship. Women's voices highlighted the emotional aftermath of leaving abuse, and described the initial post-separation period as the “Darkest Times”. Finally, women talked about “Moving On” as the final phase of recovery from abuse, highlighting a range of internal and external factors that contributed to their survival.

Qualitative data was organised into seven core themes, which sought to represent the areas of women's experience that most frequently emerged from the data. A tentative model was also developed to provide a graphical depiction of the inter-relationships between the seven core categories that emerged from the women's narratives:

CONCLUSIONS

The present study represents the first known attempt to explore the reality of Irish women's lived experiences of domestic abuse at the hands of an intimate male partner, using an exclusively qualitative methodology. The findings have arguably extended the current knowledge base of domestic abuse in Ireland. They also confirm that the effects of domestic abuse persist long after the relationship itself is terminated.
INTRODUCTION

Warfarin is an oral anticoagulant that needs active management to ensure therapeutic range. Initial management is often carried out as an inpatient, though not requiring inpatient facilities. This mismatch, results in financial costs which could be directed more efficaciously. The extent of this has previously been unknown.

OBJECTIVE

In this study we aim to calculate the potential number of bed nights which may be saved among those being warfarinised as inpatients and examine associated factors.

METHODOLOGY

A 6 week prospective audit of inpatients receiving the oral anticoagulant warfarin, at Cork University Hospital, was carried out. The study period was from June 11th, 2007 to July 20th, 2007. Data was collected from each patient’s drug kardex, medical record files and the apex laboratory inquiry system. The indications for OAT (oral anticoagulation therapy), the patients INR results and therapeutic intervals were analysed. The level of potentially avoidable inpatient nights in those receiving warfarin in hospital were calculated and the potential cost savings quantified. Potential bed nights were defined as patients remaining in hospital for the purpose of warfarinisation, while receiving subtherapeutic or therapeutic warfarin (being titred up to therapeutic levels) and co-administered covering low molecular weight heparin. The average cost of €638 was taken as the per night hospital stay cost. Ethical approval was granted from the Ethical Committee of the Cork Teaching Hospitals, Cork, Ireland.

RESULTS

A total of 158 patients were included in the audit. There were 94 men (59.4%) and 64 women (40.6%). The mean age was 67.8 years, with a median age of 70 years. Atrial Fibrillation (43%, n=70), followed by aortic valve replacement (15%, n=23) and pulmonary emboli (11%, n=18) were the commonest reasons for prescribing warfarin. 54% had previously been prescribed warfarin prior to current admission. It was confirmed that there are potentially avoidable nights in patients receiving oral anticoagulant therapy.

The majority of this group were those being commenced on warfarin for the first time (p=0.00002), in the specialities of Cardiology, Cardiothoracic surgery and Care of the Elderly. The potential number of bed nights to be saved is 13 per week for the hospital. These were predominantly weekday nights. The estimated cost of avoidable inpatient warfarinisation was approximately €8,300 per week.
CONCLUSIONS

With rising costs and the increasing demands for acute hospital beds, alterations to inpatient management for this group of patients should be considered. Alternatives include increasing the size of current anticoagulation clinics, introduction of POCT (point of care testing) devices and increased GP management. POCT can be justified based upon Gardiner et al, who showed that 87% of patients find self testing straightforward, 87% were confident in the result they obtained using the devices and 77% preferred self testing.¹

REFERENCES

Available on request.
INTRODUCTION

Worldwide, the hours worked by doctors are causing grave concern. The long hours doctors work is problematic in terms of sleep deprivation and fatigue but also because working in a hospital involves working in a demanding, stressful environment in which there is a necessity to make critical decisions within a limited time frame. This combination of sleep deprivation and stressful environment means it is hardly surprising that, as various studies have shown, medical accidents are by no means rare. For instance, an estimated 44,000 - 98,000 patients die in hospitals in the United States each year as a result of medical errors, numbers far in excess of deaths due to motor vehicle accidents, breast cancer, and AIDS.1 Most preventable incidents result directly or indirectly from human error. How much of this is due to doctors’ fatigue is difficult to measure. However, there can be little doubt that it is a major factor in fatal and non-fatal medical errors.2

Consequently, working time directives have been introduced in many countries in an attempt to regulate doctors’ working hours. Here in Ireland, under the EU Working Time Directive (EUWTD), junior doctors should not be working more than 56 hours a week. Reports from Irish Health3 however, indicate that most junior doctors are working in excess of 70 hours a week, with some working over 100 hours a week. A main cause behind these exorbitant hours is that junior doctors are required to work on-call shifts whereby they work their normal day shift, continue working all through the night, and work their normal day shift again the following day. Such a shift is approximately 34 hours long, with little or no sleep. Much research on sleep deprivation and the human circadian rhythm indicates the danger of working such hours, in terms of decreased human performance. Yet doctors, whose work impacts on the health and lives of patients, are required to work these long hours, even when they are illegal in light of the EUWTD. Thus, there is a significant need for research in this area as it is critical that we examine how working such long hours may impact on doctors’ performance and so too on patient care. It is of further importance given the apparent lack of Irish studies investigating this vital area. This lack of research is surprising given that Ireland is one of the countries struggling to align itself with the EUWTD, and that medical emigration from Ireland is much higher than in other countries such as the UK, with working conditions being cited as one of the main reasons for leaving, resulting in a medical “brain drain” in Ireland.4

OBJECTIVE

This study therefore aims to objectively examine how working such long hours may impact on doctors’ performance - an area with potentially huge and severe consequences.
METHODOLOGY

A within subjects design was used so that any extraneous variation in terms of individual differences was eliminated. Participants were tested twice, one when they were rested, and once immediately after an on-call shift in order to ascertain if working an on-call shift resulted in decreased performance. The areas examined were cognitive functioning, clinical decision making and stress levels.

Participants: 30 doctors from 6 different hospitals took part in this study. 18 were Senior House Officers, 11 were Interns and one was a Registrar - thus the three different levels of junior doctor were included in the study. The mean age of the group was 26.1 years (S.D. = 1.71; age range = 23-30 years). 17 of the participants were female while 13 were male.

Tests/Materials: Cognitive functioning was tested using the Global Assessment Battery, a computerised battery of cognitive tests that assesses memory, executive function, visual spatial perception, verbal function, attention, information processing speed and motor skills. This battery of tests offers an unbiased, standardised and accurate tool for measuring cognitive function. Clinical decision making was tested using Key Features Problems (KFPs). KFPs are based on the concept of critical steps or key features in decision making and provide a flexible approach to testing clinical decision making skills with demonstrated reliability and validity. Stress levels were measured using the Perceived Stress Scale (PSS), a standardised instrument with demonstrated validity and reliability.

Procedure: Participants were tested in each of these areas twice, once when rested, and once immediately after an on-call shift. Alternate forms of the tests were used for the Global Assessment Battery and KFPs, thus participants did not complete the same test twice. Participants were timed when completing the KFPs in order to make it more realistic. Hours worked and hours slept were also recorded.

RESULTS

It was found that cognitive functioning was significantly worse post-call than when rested. The cognitive areas most affected (i.e. that had statistically significant differences across conditions) were attention, information processing speed and motor skills. However decreases in performance were also found in memory, executive function and verbal function. It was also found that clinical decision making was significantly less accurate when post-call than when rested. Furthermore, participants took significantly longer to complete clinical problems when post-call than when rested. Finally, it was found that participants had significantly higher stress levels when post-call than when rested. The average number of hours worked in an on-call shift was 32.75, with the average number of hours slept being 2.61 hours.
CONCLUSION

It appears that working an on-call shift results in significant decreases in doctors' cognitive functioning and clinical decision making, whilst also increasing their stress levels. Such effects have a detrimental impact on doctors' performance as important cognitive modalities such as attention, memory, information processing speed, motor skills and executive function, which is responsible for higher order cognitive processes including error monitoring and decision-making, are impaired. Consequently, patient safety is compromised. Similarly, impaired clinical decision making puts patient safety in jeopardy as misdiagnoses may be made, the wrong treatments advised, etc. At the same time, increased stress levels have been found to be related to medical errors. Furthermore, increased stress levels have a negative effect on doctors' own health, with stress being related to heart disease, increased blood pressure, and many other illnesses. Of course, any human would be at risk of impaired cognitive functioning after working 30+ hours consecutively. Indeed, no other profession would tolerate such working hours. Yet it is doctors, whose work impacts on the health and lives of others, who are being forced to work these exorbitant hours.

Consequently, many doctors are leaving Ireland in search of better, fairer working conditions. Working these long hours results in impaired cognitive functioning and clinical decision making, and increased stress levels, compromising patient care, as well as doctors' own health. Steps must be taken immediately to reduce doctors' working hours, particularly when on-call, for the good of both patients and doctors.

REFERENCES

Available on request.
INTRODUCTION

In an effort to understand the factors that impinge on labour mobility in the health and social care sector in Ireland, an exploratory study was undertaken involving key organisational stakeholders and individual practitioners in the Health and Social Care environment.

METHODOLOGY

A qualitative design was employed, involving a series of face to face and telephone based semi-structured interviews. Purposive sampling was employed. Four interviews were undertaken with representatives from the Irish Nurses’ Organisation, the Health Service Executive, the Department of Health and Children as well as the Association of Social Workers. A series of individual interviews were undertaken with five health care professionals who had relocated to Ireland, including a non-consultant hospital based Doctor, three hospital based nurses and a speech and language therapist, two were men and three women. Two had relocated from the UK, two from Germany and one from the Netherlands. All of the face to face interviews were audio recorded with consent, except in one case where the participant wished that only written notes would be used. Notes were taken during all the interviews. Individual practitioners were sent copies of the transcripts of their interviews to verify accuracy.

Data analysis was guided by Burnard’s Framework. The data was analysed looking at emerging categories and subcategories.

RESULTS

Data emerged in relation to reasons for work mobility, the factors that support mobility and the factors that inhibit it. The reasons for moving to Ireland were primarily personal, professional or economic. Likewise the factors facilitating movement included having established contacts in the country, organisational support and the attractiveness of educational structures.

The challenges involved in relocating included the recruitment process itself, organisational support structures, professional recognition, language and social integration. The findings are discussed in terms of health and social policy.
CONCLUSION

Labour mobility provides opportunities for skill, knowledge and personnel exchange. It fosters greater cultural understanding and awareness. It is a key policy objective across the EU. In order to facilitate such movement, the factors that promote and inhibit freedom of movement within the health and social care setting need to be addressed.

PRESENTED

At the International Centre for Nursing Ethics Conference “Nursing Ethics and Health Care Policy - Bridging Local, National and International Perspectives” at Yale University School of Nursing, USA, on July 18th and 19th, 2008 by Dr. Denis Ryan.
INTRODUCTION

Nursing and ‘middle nursing management’ level practice is changing. Traditional ‘people management’ functions are no longer the only roles fulfilled by nurses at this level and this has posed challenges for post holders, organisations and the profession alike. Examination of role and functions at this level of practice in nursing is essential if middle level posts are to have meaning and continued relevance.

OBJECTIVE

To describe and explore the role of Nurses at Assistant Director of Nursing (ADON) level in Mental Health Services.

METHODOLOGY

A mixed method approach in two phases using both survey and focus group approaches was employed. Phase one was based on a survey questionnaire study administered to all nurses at ADON level in Irish Mental Health services (n = 200). Phase two employed focus group interviews (n = 20) undertaken with a purposeful sample of volunteers in two sites nationally. The statistical package (SPSS™ Version 13) was used to analyse the quantitative data and the qualitative data was analysed using a thematic analysis approach.

RESULTS

The overall results revealed a number of contradictions. While quantitative findings suggested generally high levels of job satisfaction, nonetheless, respondents paradoxically reported feelings of not being well understood outside Mental Health Services. The profile of nurses at this level suggests a highly qualified cohort with high levels of job stability and high levels of job satisfaction. Competencies in key domains of practice were generally rated highly, with the poorest competencies emerging in areas of ‘transformational’ management. Themes that emerged from the focus group data related to respondent scope of practice, vertical as well as horizontal and organisational relationships, professional and organizational value, the levels and nature of influence associated with the role and the future of middle manager levels.
CONCLUSION

The findings suggest that there are a number of paradoxical positions and contradictions that require further exploration.

There is a need for greater role clarity and issues of ambiguity need to be addressed. They also suggest that support mechanisms need to be identified and implemented to enhance the transformational management competencies of nurses at this level as well as clear delineation of responsibility and accountability.

PRESENTED

At the European Festival of Psychiatric Nursing - The Age of Dialogue in Malta on November 6th, 2008 by Dr. Denis Ryan.
INTRODUCTION

There is growing recognition internationally that conventional approaches to the management of chronic illness are not adequately meeting the needs of people with such conditions. This concern is also shared in Ireland and a pilot programme to provide an alternative community based approach was established in Callan, Co. Kilkenny, Ireland for such service users in 2003.

OBJECTIVE

An evaluation of an Integrated Care approach with the aim of exploring the components of the service which contributed to its functioning.

METHODOLOGY

The study was based on a pluralistic design. A mixed methods approach was adopted, relying primarily on focus groups and semi-structured interviews. All key stakeholders were included in the data collection, including members of the multidisciplinary team; members of the ‘governance group’ of the service; ‘service users’, ‘concerned persons’ as well as referring agents. Data analysis was informed by Burnard’s Framework.

RESULTS

An emergent model of service provision for people with chronic illness is presented. The model suggests that all stakeholders base their perceptions of services on prior experiences. These comparative experiences contribute to the generation and maintenance of their own expectancies. In terms of new services these expectancies are met, exceeded or indeed not met, but are always a point of reference for stakeholders. These expectancies form an underpinning context for the therapeutic experiences encountered within the service. Likewise, the ethos of a service underpins the therapeutic approach and outcomes of a service. Both of these prerequisites contribute to the therapeutic milieu. All in combination contribute to the effectiveness of the service. The service users are central to the model, within the context of a partnership approach cognisant of community needs, the contribution of service providers and the policy context.
CONCLUSION

As chronic illness management evolves as a major issue for health care providers, the model of effective service provision which has been piloted in this service should be extended to other community based sites and reviewed.

PRESENTED

At the 8th Annual Integrated Care Conference in Gothenburg, Sweden, on March 6th, 2008 by Dr. Denis Ryan.
INTRODUCTION

The changing nature of work, with an increase in ambiguity and uncertainty and a greater need for accommodation in relationships at work means that trust is now gaining importance in organisational research.\textsuperscript{1,2} This is a particularly important issue in the context of healthcare\textsuperscript{3,4} as this sector is experiencing many changes and challenges. The successful management of change without the dilution of quality of care requires trust and commitment from employees at all levels.\textsuperscript{5} However, there is little empirical research to date on the area of trust in the healthcare sector, particularly in Ireland.

OBJECTIVE

This study aims to redress this gap somewhat by adopting a multilevel approach when exploring trust in the healthcare sector. We explore the relationship between both employee trust in supervisory and senior management and employee and organizational outcomes (employee well-being, commitment and tenure intent). Although related variables, we argue that trust in senior management and trust in supervision may lead to different outcomes. This study explores the consequences of employee trust in both supervisory management and senior management in the healthcare sector, particularly in the intellectual disability (ID) sector. It explores the relationship between employee trust in supervisory and senior management and organisational commitment, tenure intent and employee well-being.

METHODOLOGY

600 questionnaires were distributed to all employees in a healthcare organization. Data were gathered from respondents who worked in a number of different locations, across a wide variety of disciplines (e.g. administration, occupational therapy, social work etc.) and at all levels of the organisation. The data was analysed using advanced regression techniques.

RESULTS

The findings in this paper indicate that trust in both levels of management are positively related to commitment, tenure intent and employee well-being. However, there was a stronger relationship between trust in senior management and organizational outcomes (tenure intent and commitment) than between trust in supervisory management and organizational outcomes. There was a stronger relationship between trust in supervisory management and more proximal outcomes (e.g. employee well-being and stress). This may be because supervisors tend to be the first point of contact for most employees and the most visible layer of management therefore their ability to deal with issues facing employees and their perceived effectiveness would be expected to have a direct effect on employee well-being.
CONCLUSION

The healthcare sector in Ireland is going through fundamental change and unrest and faces many challenges. This study suggests that the level of trust between employees and management plays a pivotal role in determining how the employee feels about the organisation overall and their general well-being on a day-to-day basis. Trust in one constituency does not mean trust in another and each may lead to different important outcomes. It is important that management are aware of the importance of developing and maintaining employee-management trust relations at all levels of management if they are to successfully achieve their goals.

REFERENCES

Available on request.

PRESENTED

Presented at the Academy of Management Conference, Atlanta, USA on August 17th, 2006 by Dr. Sarah McCurtain and Dr. Juliet MacMahon.
INTRODUCTION

Downey-Ennis et al. remarked that ‘the implementation of any quality initiative should embrace a participatory management style, address the issue of changing attitudes and culture, employee involvement and empowerment together with investment in training, development and learning. To date, limited research attention has been given to the challenges involved in operating such practices in working contexts such as healthcare'. Meanwhile, despite attempts made by the National Cancer Forum to implement national quality assurance standards of best practice for symptomatic breast disease services (2000, 2006), Irish women have one of the worst death rates from breast cancer in OECD countries, behind only Denmark and Hungary. According to the EUROCARE group, the differences in survival of cancer patients are not only due to clinical factors (e.g. tumour stage and biology), but, moreover, factors related to the governance of healthcare expenditure on cancer services that is in line with EU best practice standards in breast clinical practice. Contextualised in the circumstances surrounding the breast cancer misdiagnoses, the reports indicated systemic weaknesses of governance, communication and management, on the basis that none of the standards for care, laid down in the O’Higgins reports, were properly implemented at the time of the misdiagnoses. Dominant findings disclosed numerous deficiencies, predominantly in the following areas of best practice in breast clinical practice: teamwork; leadership, communication and management; performance appraisal and management, with an emphasis on training and development; and recruitment and selection. This is significant, taking heed of the fact that ‘it is the “softer” issues of managing the quality dynamic that are coming to the fore in healthcare organisations.

OBJECTIVE

Hence, the purpose of this study is to examine healthcare quality improvements in the acute hospital setting of breast cancer care, through an examination of a number of strategic human resource management (SHRM) practices. This study will be guided by the following research question: Does the application of SHRM practices result in improved performance among breast cancer care teams when applied to the acute hospital setting of symptomatic breast disease services in Ireland?

METHODOLOGY

Contextualised in Ireland’s acute hospital setting of symptomatic breast disease services, this study will undertake two methods of analysis:

Method 1: Modelled on the methodology used in West et al.’s UK studies, the basic procedure to sample and collect data on the impact of a system of HR policies and practices on healthcare outcomes in the acute hospital setting of symptomatic breast disease services in Ireland will be as follows: upon identification of the human resource management directors in each acute hospital setting of symptomatic breast disease services, a closed,
self-completion questionnaire survey of SHRM practices used in each acute hospital setting will be administered. The purpose of this procedure is to solicit descriptions of the extent and sophistication of the SHRM practices used in five specific areas: teamwork; leadership, communication and management; performance appraisal and management, with an emphasis on training and development; and recruitment and selection. The above findings will then be matched with objective indices of hospital performance in each acute hospital setting. In relation to staff, job satisfaction, staff absenteeism and turnover, incidence of medical malpractice, team innovation, and spend per patient. With regard to breast cancer patient outcomes, patient waiting times for particular treatments, length of patient stay, levels of readmission and inpatient mortality. In order to measure inpatient mortality, while taking into account the differing types/ status of Irish hospitals and their respective symptomatic breast disease services, the Hospital In-Patient Enquiry Scheme (HIPE) Index will be used in accordance with individual hospital data on request. A further index of hospital performance investigated will be patient satisfaction: an index examined under survey analysis. Data analysis will be carried out using SPSS.

Method 2: Multiple case study research will be carried out across the acute hospital settings of symptomatic breast disease services. Individual in-depth interviews will be conducted with the breast cancer surgeon, radiologist, pathologist and nurse in each multidisciplinary breast cancer team. The purpose of this research method is to contribute further to understanding how HR policies and practices translate into healthcare outcomes. Specifically, it is to identify the mediating mechanisms of the relationship between HRM systems and patient mortality, through assessing the perceptions and experiences of HR policies and practices from team individuals along with measures of satisfaction and commitment. The rationale of this approach is to determine which aspects of HRM systems affect most powerfully the integration of professional contributions to patient care in the diagnosis and treatment of symptomatic breast disease. Data analysis will be carried out using NVivo.

RESULTS

The proposed outcome is to determine if there is a benefit to utilising SHRM practices in the acute hospital setting with regard to symptomatic breast disease services in Ireland. Considering the present shortage of hospitals exemplifying national cancer control standards of best practice, this study may assist healthcare professionals in understanding how to improve in the diagnosis and treatment of breast cancer patients. Moreover, the findings may translate to the hospital sector as a whole, which could significantly improve the effectiveness of resource allocation within the health service. Specifically, this study could: -

1. Estimate the potential healthcare impact of utilizing high performance HR policies and practices
2. Identify HR policies and practices - or ‘bundles’ of HR practices’ that are most beneficial
Findings could have important implications for informing and guiding management practice in the hospital sector. As argued by Levine⁸ and Pfeiffer,⁹ through the provision of structures that create and sustain positive levels of the aforementioned SHRM practices (to be investigated), employees should be provided with the required skills, information, motivation and latitude, resulting in a work force that performs at a higher level and hence becomes a source of sustainable organisational success. Furthermore, this proposed study will contribute to alleviating the scarcity of studies done on an international scale, hence building on nascent applications in healthcare.

REFERENCES

Available on request.

FUNDING

The main author has been awarded the Government of Ireland Scholarship for this study by The Irish Research Council for the Humanities and Social Sciences.
INTRODUCTION

This research is an analysis of the health sector in the Irish economy. The main areas of research include; the evolution of the health sector's history, current structure, financial structure and trends in staffing. This report identifies some of the main problems of the health sector as structural weakness, mismanagement of finances and staffing. The consequences of these characteristics are also analysed. These are poor hygiene, long waiting lists and poor performance in accident and emergency departments. As an example of structural and managerial weakness in the health sector, the PPARS human resource system is examined.

OBJECTIVE

This report aims to show that, there is a lack of accountability, lack of control and lack of information flow in the health sector. This project highlights the necessity of implementing the Government reports. Though improvement is slow, it is possible. This study will attempt to give an analysis of problems within the Irish health sector.

METHODOLOGY

This report is based entirely on secondary research. This was achieved through analysis of the various Government reports published by the Department of Health and Children and the HSE. The Internet, particularly the websites of the Department of Health and Children, the HSE, the OECD and the Department of Finance were of use. Books such as Wren’s “Unhealthy State” and newspaper articles were used. The limitations encountered by the author were largely due to the constraints of the vastness of the topic. A diligent focus therefore had to be pursued. As the problems in the health sector are numerous and complex it was for this reason that specific aspects like PPARS were chosen. The relevance of information frequently changed as the health sector is a continually evolving area. The available data was sparse and not always up to date. The author found that the Department of Health and Children and the Department of Finance were unforthcoming with requested information and statistics. This hindered the gathering of data to a point.

RESULTS

From the main areas of the research the following was discovered:-
There are many factors that have influenced the state of healthcare in Ireland today. The influence of the church, the changes in the 60’s and the “era of the cuts” during the 80’s, are some of the more important factors. The creation of the HSE in 2005 has made the delegation of tasks much more efficient.

The Department’s primary role now, is to support the Minister for Health and Children in the assessment of policies for the health service in Ireland.
The Government funds Ireland’s health sector primarily through tax. This is comparable to other health sectors heavily funded by tax among OECD countries such as Denmark. Capital and current expenditures have been on the increase since 2004 through 2006 with the bulk of capital expenditure being spent on buildings and equipment for the HSE. The bulk of current expenditure is being spent on salaries and administration costs. Acute hospital programmes receive a lot of funding whereas childcare projects receive far less. Ireland spends the least on health as a percentage of GDP in comparison with other OECD countries. Also although there is an increase in expenditure each year, spending relative to GNP and GDP remains stagnant.

There has been a 34.4% increase in employment in the health sector from 1997-2005. 39.3% of the workforce is concentrated in the eastern region of the country. The rest of the health sector is sparsely engaged. The majority of the health sector is made up of nursing staff with management coming in second and medical/dental professions ranking at 7% employment density. There are 101,978 people employed.

The desire of the Department of Health to get accurate information on the pay and recruitment of staff in the sector meant that a very complex project was unnecessarily rushed. The PPARS system could have led to the aforementioned benefits but instead escalating costs and missed deadlines have cost €195 million. Orlikowski & Gash\(^1\) found that an important aspect of using technology is to know enough about it as to manipulate it effectively. The main problem with PPARS is that the users did not fully understand the system. If PPARS is to be implemented properly it needs to be integrated slowly and in conjunction with the endorsement of staff. Successful implementation could see increases in efficiency in the management of human resources in the health sector but as of now there is no indication of this happening.

\(^{1}\) Orlikowski, W., & Gash, J. (1994).

**Figure 1 - PPARS Initial Estimate and Final Cost**

![Graph showing the comparison between initial budgeted estimate and final cost for PPARS. The initial estimate was €9.14 million, while the final cost was €195 million.](image-url)
CONCLUSIONS

This research set out to analyse the health sector in the Irish economy. The study begins with an overview of the history of the health sector and its current structure. The pressure from Catholic Church and the recession of the 1980’s were factors that contributed to the problems in the health sector.

Managerial and structural problems in the health sector have evolved from the legally autonomous and fractured nature of the former health boards as well as their historical origin in the local government system. Significant variations existed between the organisational structures, cultures and processes of the agencies which have caused fragmentation of management in the health sector. The creation of the HSE in 2005 has yet to alleviate these problems though it is a step in the right direction. Close to €13 billion is being allocated to healthcare yet Ireland still has a hugely problematic system. Ireland spends the least on health as a percentage of GDP in comparison with other OECD countries. Though there are increases in expenditure each year, spending relative to GNP and GDP remain stagnant. This study shows the Irish health sector is primarily funded by tax. There has been a 34.4% increase in employment in the health sector from 1997 to 2005. There are currently 101,978 people employed in one of the largest areas of the public sectors and yet allocation of staff is still a problem.

Consultants are delegating their work to junior doctors who are overworked and do not have sufficient experience. With the introduction of the E.U. directive, junior doctors’ hours will be reduced. To compensate, the Hanly Report advocates a consultant-provided service by 2009.

The Brennan and Prospectus reports suggest that there is a structural and managerial vacuum in the health sector. This structural weakness and mismanagement of finances is characterised by lack of accountability, lack of central control and lack of information as to where funding is going. This has lead to a healthcare system synonymous with long waiting lists, poor hygiene and under-performing A&E departments. The study examined PPARS in detail as it is a good example of the weaknesses in the health sector. The desire of the Department of Health to get accurate information on the pay and recruitment of staff in the sector meant that a complex project was unnecessarily rushed. Deloitte also hindered the termination of the project. Successful implementation could see increases in efficiency in the management of human resources in the health sector but this has not materialised. The author believes the health sector in Ireland is a structurally complex organisation. The problems are due to poor structure and lack of accountability within management. There needs to be an introduction of proper management philosophy and a simplifying of structure if the health sector can progress to the standard the Irish people deserve.

REFERENCES

References available on request.
Professor Tom Pierce Consultant Physician at Mid-Western Regional Hospital recently gave a valedictory address on his experiences in medicine over forty years on July 9th at the Sylvester O’Halloran Postgraduate Centre. Tom has served for nearly thirty years at the Mid-Western Regional Hospital and has made major contributions to the development of the hospital and its facilities. He also has contributed nationally on a number of committees and training bodies. He has been a tireless clinical teacher to undergraduates right through to specialist registrars and has attracted and inspired hundreds of young doctors over the years. In recognition of these achievements he was honoured with the title of Honorary Clinical Professor of Medicine by University College Cork two years ago. There was a great attendance at his presentation and they were not disappointed. Younger doctors were amazed to hear of the practices and demands of medicine in Dublin in the 1960’s and of Tom’s professional adventures. He was allowed only one day’s leave to get married! He recounted his training and halcyon days as senior clinician and academic in California. A guiding thread was ethical dilemmas and the importance of listening to and kindness to patients. He emphasised the importance of a sabbatical year to refresh perspective and purpose. He also recounted his recent misfortunate health experiences and the lessons to be learned from the “doctor as patient”. Tom will continue as locum physician and will continue to contribute to the hospital and conferences with his usual vigour.

Dr O’Hare, Chairman of the Department of Medicine presenting a special award for Outstanding Teacher to Professor Tom Pierce on behalf of his colleagues for his ongoing contribution to clinical teaching and postgraduate training.
Integrated Joint Pillar Discharge Co-ordinator for Nenagh Hospital

An Integrated Joint Pillar Discharge Co-ordinator has been appointed to MWRH Nenagh and North Tipperary/East Limerick PCCC since August 2008. This is a response to a necessity for ongoing changes across health services with the aim of simplifying the patient journey.

The role is designed to cover all ages and situations requiring a particular focus on timely and appropriate discharge facilitation. International literature suggests that there are two types of discharge. 80% are classified as simple discharges that occur within a reasonable time frame and 20% are identified as complex discharges that place the greatest demand on both primary and secondary care. To address complex discharges a multidisciplinary approach to the provision of services after discharge is now viewed as best practice.

The introduction of a Discharge Co-ordinator will provide solutions to the problems concerned with continuity of care between hospitals and community care. The flattening of these structures into one pillar will enhance the service delivery across both areas.

In addition to the introduction of this role, discharge planning has been identified as a priority area within nursing services for the past year. In June, staff participated in a Discharge Planning Masterclass which was delivered by Ms. Mary Rose Day, College Lecturer, UCC. The topics addressed included Discharge Planning Awareness, Context of Discharge Planning from a National Perspective, Best Practice and Current Research on barriers to Discharge Planning. This proved to be a very informative day and was represented by a good cross section of staff from Acute Services and PCCC.

It is the combination of these activities which has resulted in the recent results Nenagh Hospital achieved in the 2008 Acute Hospital Bed Review. In 2008 ‘evidence of discharge planning’ was rated at 98%. This was an increase of 64% from 34% in 2007.

It is our intention in North Tipperary/East Limerick to embrace this new initiative and work towards an efficient streamlined service that will impact positively on the patient journey.

The HSE services in North Tipperary and East Limerick are jointly committed to this development. If you would like further details about our activities, please contact Colette Cowan, A/Director of Nursing, St. Joseph’s Hospital, Nenagh.
HSE WEST (LIMERICK, CLARE AND NORTH TIPPERARY)
DCU DIABETES MODULE IN PARTNERSHIP WITH THE CENTRE OF NURSE AND MIDWIFERY EDUCATION

First Students' Celebration of Achievement, 28th August 2008

The module entitled ‘Nursing Management of the Individual with Diabetes’ which is accredited by Dublin City University (DCU) was delivered for the first time through the Centre of Nurse and Midwifery Education in the Mid-Western Regional Hospital Limerick in February 2008 with the first students graduating this summer.

This stand alone module was developed by DCU in partnership with the HSE and is now delivered through a number of Centres of Nurse & Midwifery Education (CNME) across the country.

The module is accredited by the Faculty of Science and Health DCU and is pitched at level 8 on the National Qualifications Authority Framework. The aim of the module is to enable Nurses and Midwives to enhance, develop and extend their knowledge and skills in the area of diabetes. It is open to Nurses across Primary and Secondary care and is delivered using local experts in the field of diabetes.

A celebration of achievement ceremony was held on August 28th to celebrate the launch of this programme and to mark the huge success of the programme. In addition to completing this module Nurses on the programme were required to complete a Practice Contract, an innovative tool devised in HSE West (Limerick, Clare and North Tipperary) to assist students to reflect on and evaluate their current nursing practice and to focus on the change/s necessary to implement improvements in patient care. This module has achieved its aim in enabling Nurses and Midwives to improve patient care by extending their knowledge and skills through education and is an excellent example of working across boundaries in a multi-disciplinary approach. Education is the key element in tackling Ireland’s explosion of chronic diseases and is directly improving the health of the population in line with the HSE Transformation Programme. There are believed to be 250,000 people with diabetes in Ireland with a third of these believed to be undiagnosed. The CODEIRE study (Cost Of Diabetes-EIRE) calculated that diabetes is currently costing the health service €580m each year and this figure is set to rise as prevalence increases. The majority of this money is for hospitalization and treatment of complications of the patient with diabetes. The focus therefore is early detection, close monitoring of these patients and reduction in complications and subsequent hospital admissions. This can be achieved through education. The second cohort of students commenced the course in September 2008.
A number of staff members from the Community Hospital of the Assumption, Thurles, received their Clinical Leadership Qualification on June 19th, 2008 in the Centre for Nurse Education, Dooradoyle, Limerick.

L. to R. Cora Lunn, Project Co-ordinator of Clinical Leadership Programme, NMPDU; Geraldine Russell, CNM II, Community Hospital of the Assumption, Thurles; Mavis Long, CNM I, Community Hospital of the Assumption, Thurles; Geraldine Cunningham, Head of the Royal College of Nursing Learning and Development Institute, UK; Antoinette Ruth, CNM II, Community Hospital of the Assumption, Thurles; Kathleen MacLellan, Head of Professional Development, National Council of Nursing and Midwifery, Dublin

**“STEADY ON” - FALLS PREVENTION AND MANAGEMENT**

The Physiotherapy Department at St. Joseph’s Hospital in Ennis have recently launched a new initiative aimed at falls prevention and management.

All participants must be over 65 and have medical clearance from their Consultant or GP to attend.

The “Steady On” programme involves initial individual assessment by a Chartered Physiotherapist, which includes an examination of balance, lower limb strength and gait. We are also assessing individuals’ fear of falling and carrying out the SF-36 as a quality of life measure. After the initial assessment participants attend the physiotherapy gym once a week for the next 10 weeks. The weekly sessions consist of an hour of specific exercises followed by a half hour information session on a topic related to falls. Speakers involved include Physiotherapy staff, Occupational Therapist, Pharmacist, Podiatrist and Community Welfare Officer.

Once the exercise sessions are completed the baseline tests are administered again.

Participants continue with a structured home exercise programme and monitor any falls with a Falls Diary. They will be contacted by phone once a month for three months and will be reassessed one year after their initial assessment to monitor their progress.

The feedback from the first participants who recently completed their ten weeks of exercise and information has been very positive.
NEW FACULTY OF EDUCATION AND HEALTH SCIENCES AT UL

The Faculty of Education and Health Sciences (EHS) is an exciting development at the University of Limerick. The Faculty was newly created in January 2008 as part of a substantive academic restructuring at the University. This has resulted in bringing together in a new Faculty a number of related disciplines in the Department of Education and Professional Studies, Department of Physical Education and Sports Sciences, Department of Psychology, Department of Nursing and Midwifery, Department of Occupational Therapy, Department of Physiotherapy, Department of Speech and Language Therapy and the Graduate Medical School.

The EHS Faculty is a unique national grouping of eight academic departments that include disciplines concerned with education and health. The Faculty includes two of the newest departments at the University of Limerick: Graduate Medical School and Department of Psychology. It also houses two of the oldest departments on campus: Department of Physical Education and Sport Sciences and Department of Education and Professional Studies. Four additional departments were established since 1996: Department of Nursing and Midwifery, Department of Occupational Therapy, Department of Speech and Language Therapy and Department of Physiotherapy. The Faculty is committed to building its research profile and addressing key national and international research priorities around health and education. We have new staff and staff completing doctoral degrees as well as several well-established researchers whose research is known and respected by national and international peers. The Faculty continue to seek committed and hardworking postgraduate research students who share research interests around faculty expertise. There are a number of research agendas around inter-professional learning, teacher education, action research, health and health promotion, science of coaching and sport performance and social psychology.

This is an exciting time for the Faculty of Education and Health Sciences. There is an energy and optimism among faculty and staff as the new structure presents opportunities for research collaborations and synergies across departments. Together we can address some of society’s problems by taking an interdisciplinary approach to complex human, educational, social, medical and health challenges.

For more information on the new Faculty of Education and Health Sciences go to:-
http://www2.ul.ie/web/WWW/Faculties/Education%20%26%20Health%20Sciences

Professor Mary O’Sullivan, Dean of the newly formed Faculty of Education and Health Sciences at UL
Researchers discussing interdisciplinary research issues at the Faculty of Education and Health Sciences Research Fair in March 2008
Dr. Deirdre McGrath, Senior Lecturer and Head of the Clinical Skills Education Unit of the Graduate Medical School in UL, was conferred with a Fellowship of the Royal College of Physicians of Ireland in October.

Born in Limerick City, Dr. McGrath qualified from University College Cork Medical School in 1991. She undertook the initial few years of her clinical training at the Cork University and Mercy University Hospitals in Cork City. She then moved to the UK where she embarked upon research for the Interstitial Lung Disease Unit, National Heart and Lung Institute, Royal Brompton Hospital and the Clinical Genomic Unit of the Imperial College of Science Technology and Medicine. During that time she obtained a large repertoire of publications in the area of Interstitial and Granulomatous lung disease. She was awarded her MD degree by University College London during this period.

Thereafter she was attached to the highly specialized Intensive Care Unit and the Sleep and Non-Invasive Ventilation Firm at the Royal Brompton Hospital where she developed a strong interest in all aspects of ventilation.

Dr. McGrath was appointed to the position of Consultant/Honorary Senior Lecturer in General and Thoracic Medicine at St. George’s Hospital and St. George’s University of London in April 2003. There she acted as Lead Clinician for Sleep and Non-Invasive Ventilation within the Chest Care Unit. Her role as Honorary Senior Lecturer to the Medical School involved undergraduate teaching to 5-year medical students and also acting as module convenor for the Life Support (Cardio/Respiratory) module of the 4-year Graduate Entry Programme (GEP). In recognition of her professional standing Dr. McGrath was awarded the Fellowship of the Royal College of Physicians of London in 2007.

Dr. McGrath took up her post as Senior Lecturer and Head of the Clinical Skills Education Unit at the Graduate Medical School in the University of Limerick (UL) in Oct 2007. Here she plays a key role in the development of the Clinical and Communication Skills curriculum. Dr. McGrath also chairs the Assessment and Course Evaluation (ACE) Committee at the Graduate Medical School.
APPOINTMENT OF PROFESSOR NIGEL LAWES TO THE GRADUATE MEDICAL SCHOOL AT THE UNIVERSITY OF LIMERICK

Nigel Lawes recently joined the Graduate Medical School at the University of Limerick as the Head of Teaching and Research in Anatomy. Following a short clinical career as a junior doctor and a brief spell as a clinical scientist working for the Medical Research Council at the Institute of Neurology, Queen Square, London, Nigel returned to academic life as a lecturer in Anatomy at Sheffield University where he remained for eighteen years. Nigel subsequently spent seven years teaching neuroscience to physiotherapy students at the University of East London and then moved to St. George’s University of London where he taught on several degree courses, mainly on the two medical courses. One of these involved the traditional didactic style of medical course where students are told what to learn. The other medical course at St. George’s was a problem-based course where students had to decide what they need to know to solve clinical problems. It was at this point in his career that he became convinced that learning in order to solve problems produced a far more useful and usable grasp of essential knowledge. This belief in the value of Problem Based Learning (PBL) was the motivation for his coming to the UL Graduate Medical School which he has found to be a flexible and dynamic Medical School with a great readiness to explore innovative ideas. Professor Lawes has spent much of the past twenty years delivering short Neuroscience courses to qualified physiotherapists who he believes have helped him to appreciate the value of linking academic knowledge to clinical practice and focusing on what is clinically useful, rather than on what interests academics. Nigel has already become a valued faculty member at the UL Graduate Medical School. Welcome Nigel.

THE USE OF MICRODIALYSIS IN INTENSIVE CARE AND SURGERY, OCTOBER 8th-9th, 2008, BARCELONA, SPAIN.

A group of eleven clinical and biomedical researchers from Limerick recently attended a course on clinical microdialysis hosted by L'Hospital Clínic de Barcelona and Vall d’Hebron University Hospital. The two-day course covered the use of microdialysis in neurointensive care, general intensive care, reconstructive surgery/microsurgical flaps, hepatic and intestinal surgery and tight glucose control (TGC) with intravenous monitoring.

Microdialysis offers a unique possibility to monitor tissue and organ chemistry and is rapidly making its way into both clinical practice and medical research.
Taking a short break during the course on clinical microdialysis—Exploring Tissue Chemistry—in L'Hospital Clinic de Barcelona are: Front: Dr. Elizabeth Guihen (Graduate Medical School UL), Mr. Anthony Callanan (MSSI, UL), Dr. Deirdre McGrath (Graduate Medical School, UL), Dr. Hanne Birke (Organizer, Aarhus Kommunehospital, Denmark) and Professor Phil Jakeman (PESS, UL). Back: Professor William O’Connor (Graduate Medical School, UL), Professor Urban Ungerstedt (Organizer, Karolinska Institute, Stockholm, Sweden), Dr. John Cook (Mid-Western Regional Hospital), Mr. William McCormack (PESS, UL), Mr. Mark Dixon (Centre for Pre-hospital Research, Graduate Medical School, UL), Dr. Bart Ramsay (Mid-Western Regional Hospital), Dr. Kashif Ahmad (St. Vincent’s Hospital, Dublin) and Mrs. Mary Gamble (Graduate Medical School, UL).

The course was attended by over 70 delegates representing 12 nationalities and was both stimulating and highly informative with many world experts in the field gathered to enhance knowledge and understanding of current practice in clinical microdialysis.

Following the course a number of national and international research collaborations using clinical microdialysis in muscle and skin tissue have been established as part of a University of Limerick Graduate Medical School initiative to create a centre of excellence in translational research.

For further information please contact:

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NEWS FROM THE DEPARTMENT OF PHYSIOTHERAPY, UL

Anne Connor, Amanda Connell, and Karen McCreegh (Department of Physiotherapy, UL) pictured at the European Region of the World Congress of Physical Therapy 2nd Congress on “Life Long Learning, Developing the Profession” in Stockholm recently. The Department presented eight abstracts at the Conference, all concerned with innovative curriculum developments in the UL BSc Physiotherapy programme. These were very well received by physiotherapy educators from across Europe.
Aisling Roche recently graduated with an MSc by research and thesis from the Department of Physiotherapy in UL and is the first such student from the Department to do so. Her thesis is entitled “Functional Electrical Stimulation (FES) for the Rehabilitation of Drop-Foot Post-Stroke” and was supervised primarily by Dr. Susan Coote, Department of Physiotherapy UL and also Professor Gearóid Ó Laighin, Department of Engineering, NUIG. The research was funded by the Irish Research Council for Science Engineering and Technology (IRCSET) under the Embark Initiative.

The “Getting the Balance Right” Programme project is a collaboration between the University of Limerick, Physiotherapy Department and the Multiple Sclerosis (MS) Society of Ireland. The project was launched on June 24th in the MS Care Centre in Dublin by John Moloney TD, Minister for Equality, Disability and Mental Health. The programme is co-ordinated by Aidan Larkin and aims to deliver physical activity programmes to people with MS nationally, and to evaluate the effect of these as part of a series of research trials. Each person with MS will be assessed by a Chartered Physiotherapist at the start of the study, and randomised to a treatment arm. Participants are stratified according to their mobility level, with different treatment options and research questions for each mobility level group.

Maria Garrett and Neasa Hogan, PhD students in the Physiotherapy Department lead the research for strands A and B, those with minor mobility difficulties, and those needing a bilateral walking aid respectively. The research study aims to compare Physiotherapy intervention with control, Yoga and fitness instructor led classes and to examine in detail the traits that accompany an improvement in function, ability and quality of life. It is anticipated that this data will be used to increase the evidence base for Physiotherapy interventions in MS, and inform the development of services for this population at primary care level. Marie O’Donnell an MSc student in the Physiotherapy Department leads the strand C research for those people with MS who rely on a wheelchair for mobility or are bed-bound. This research aims to assess if a series of 10 Physiotherapy sessions has a greater effect if delivered on a concentrated or weekly basis.

The research team at UL led by Dr. Susan Coote have assessed over 500 people for the trials to date and preliminary data will be presented at MS Ireland’s Conference in October. The overwhelming support for the research project by people with MS nationally means that the numbers needed to power the randomised controlled trials have already been exceeded and we look forward to presenting the results at a later date.
DOCTORAL PROGRAMME IN CLINICAL PSYCHOLOGY, UL

The first cohort of Clinical Psychologists to complete the Doctoral Programme in Clinical Psychology at the University of Limerick will graduate in January 2009. The ten successful graduates have been sponsored by the Health Service Executive West and the Brothers of Charity Services, Tipperary and have engaged in education, training and research over three years. During that time, they have spent 3,000 hours on clinical placements; 1,200 in academic work and 1,000 hours in research activity and have contributed to the empirical knowledge base of clinical psychology through the production of doctoral theses and research projects. This successful partnership between the University of Limerick and the Health Service Executive continues with a further 32 postgraduates now enrolled on the programme.

MAKING LIGHT WORK OF LUNG PRESSURE MEASUREMENTS

Professor Elfed Lewis, Department of Electronic and Computer Engineering and Director of the Optical Fibre Sensors Research Centre (www.ofsrc.ul.ie), University of Limerick was recently awarded a Fulbright Scholarship to undertake a research project entitled “Miniature Optical Fibre Pressure Sensor for Biomedical Applications.” The work is in conjunction with The University of Central Florida (UCF), (Orlando), the M.D. Anderson Cancer Centre (Orlando), and the University of Florida, Gainesville, Florida. The prime focus of this research is to investigate the use of optical fibre sensors for the measurement of lung pressure, but discussions have also triggered interest in using optical fibre sensors for monitoring gamma ray radiation dose for cancer treatment. Initial results show that both sets of sensors are capable of providing experimental data which had previously not been available, but are critical for accurate delivery of radiation dose to the correct location and quantifying the accumulated radiation dose to patients. Professor Lewis is a Fellow of the Institute of Engineers and Technologists (IET), Institute of Physics (Inst. P) and British Computer Society (BCS) and is a Senior Member of Institute of Electrical and Electronic Engineers (IEEE).
The 7th National Haemovigilance Office (NHO) and Irish Blood Transfusion Service (IBTS) Conference “Haemovigilance-Supporting Quality Transfusion Practice” was held in the Castletroy Park Hotel, Limerick on October 14th and 15th, 2008.

The event commenced on Tuesday afternoon 14th October, 2008 with a Root Cause Analysis workshop organised by the Clinical Indemnity Scheme (CIS), examining ways of applying Root Cause Analysis techniques to errors when reporting. The workshop was delivered by Ms. Ann Duffy and Ms. Ann Marie Oglesby (Clinical Risk Advisors, CIS), through a series of interesting presentations and group work. Seventy people attended, primarily Hospital based Haemovigilance Officers, (HVO) and the event was very successful with good participation and very favourable feedback. The NHO thanks Ann and Anne Marie for arranging this event.

The main conference covered a range of topics which generated much interest and lively discussion during the different question and answer sessions, chaired by Dr. Maeve Leahy, Consultant Haematologist, Limerick Regional Hospital, Ms. Antoinette English, HVO, St. John’s Hospital Limerick and Ms. Mary O’Riordan, HVO, Kerry General Hospital.

The keynote speakers were Dr. Jonathon Wallis, Consultant Haematologist, Freeman Hospital, Newcastle, UK who presented on **Electronic Crossmatch** and Mr Tony Davies of the UK National Blood Service/Serious Hazards of Transfusion (SHOT) on **Risks of Transfusion in Paediatrics, Lessons to be Learned**. Other clinical presentations included **Massive Transfusion Guidelines** by Dr Joan O’Riordan Consultant Haematologist, IBTS, **Anti-D Guidelines**, Dr. Joan Fitzgerald, Consultant Haematologist, IBTS and **Respiratory Complication of Blood Transfusion**, Dr. Emer Lawlor, Director, NHO.

Regulatory topics included presentations on **Serious Adverse Reactions and Serious Adverse Events** from the 2007 NHO Annual Report by Ms. Roisin Brady and Ms. Jackie Sweeney, NHO and **Serious Adverse Events (Laboratory Errors)** by Ms. Sheila Joyce, Chief Medical Scientist Mid-Western Regional Hospital Limerick and **Traceability – Findings from a ‘Bag and Tag’ trial at Munster Regional Transfusion Centre (MRTC)** by Dr. Joan Power Regional Director MRTC, IBTS and an **Update on Regulatory Requirements** was given by Ms. Marie O’Mahony, Irish National Accreditation Board (INAB).

Presentations on educational initiatives undertaken by NHO included **Advances in Haemovigilance Education in Ireland**, by M.s. Marcia Kirwan NHO summarising the partnership project running since 2005 between Dublin City University (DCU) and the IBTS, describing the exciting new initiatives for the future, including postgraduate opportunities (level 9) leading to the MSc in Healthcare/Nursing Practice. M.s. Marina Cronin, NHO presented on **Competencies for Hospital Based Haemovigilance Officers**, on the assessment framework developed in collaboration with hospital based HVO.
In conjunction with the NHO Annual Conference, a Poster Competition was also held, giving hospital HVOs an opportunity to showcase their work. Mr. Andrew Kelly, IBTS Chief Executive presented the prize and commended the high standard of posters displayed. The winning entry ‘Positive Patient Identification’ was submitted by Ms. Geraldine Peelo and Ms. Nora O’Mahony of Haemovigilance in Naas General Hospital illustrating the work of the an interdisciplinary Positive Patient Identification Committee within the hospital who aimed to standardise the identity band in use and to achieve hospital-wide cultural change in relation to positive patient identification.

The event attracted in excess of 170 delegates drawn from medical, nursing and scientific backgrounds throughout Ireland and abroad. Presentations are available on www.giveblood.ie

From the evaluations, comments and feedback received, all attending were positive about the event with general agreement that it was an ideal opportunity to network and develop contacts with others working in the area of Haemovigilance. Some of the suggestions received will help with the design of the next programme for future conferences, and others will be included at IBTS Hospital Liaison Days.

The NHO team thanks all involved in making arrangements for this event, especially IBTS colleagues and those working in Haemovigilance in Limerick hospitals for their advice and guidance. Those who contributed of their time and efforts in chairing the sessions and by presenting are also thanked for their support in making this event so successful. A special word of thanks is also due to the Management and Staff of the Castletroy Park Hotel.
Comhrá, an Irish word meaning conversation and dialogue is the title for this conference. It draws together the philosophy of reflection and dialogue embedded within the Irish tradition which is rich, inclusive and inspirational.

The 15th International Reflective Practice conference will be hosted from June 24th to 26th, 2009 by the Department of Nursing and Midwifery at the University of Limerick, Ireland. Christopher Johns, a world expert in reflective practice, is the convenor for this conference, bringing together a community of reflective practitioners engaging in dialogue.

**Keynote Speakers**
Professor Chris Johns (University of Bedfordshire, England)  
Professor Jean Watson (University of Colorado, USA)  
Dr. Anne Marie Ryan (An Bord Altranais, Ireland)  
Professor Brendan Kenneally (Trinity College, Dublin)

**Symposium:** Developing a Reflective Curriculum  
Chair: Professor Melanie Jasper (University of Swansea, Wales)

You are invited to join us at this reflective practice conference.  
The conference committee will welcome all abstracts with a reflective practice nature; however particular attention will be given to those within the conference theme:  
1. Reflection as a means of dialogue and engagement  
2. Transforming and leading practice through reflective dialogue  
3. Fostering learning through the use of reflection in professional educational programmes  
4. Innovations that promote the facilitation of reflection  
The abstract must be submitted through the website before 11th January 2009.

**All details of the conference can be accessed at our Website:** [www.nm.ul.ie/conference](http://www.nm.ul.ie/conference)  
**Email Address:** comhra@ul.ie
INaugural Gastroenterology Information Day HSE West (St. Joseph’s Hospital, Nenagh)

The Inaugural Gastroenterology Information Day organised by the Gastroenterology Team at St Joseph’s Hospital Nenagh took place on September 23rd, 2008 in The Abbey Court Hotel, Nenagh, Co. Tipperary. It was decided to hold a study day to broaden the general nurses’ knowledge on the specialist area of gastroenterology. The organizers were fortunate to have obtained funding for this event from The National Council of Nursing and Midwifery.

The primary aim of the day was to empower nurses to deliver quality driven patient focused care to patients with gastro-intestinal disorders both in the community and the acute hospital setting and ultimately transform care through education drawing on evidence-based practice. Over 80 nurses from different general nursing backgrounds from across the country attended the conference on the day. The conference programme focused on four key areas in Gastroenterology including Inflammatory Bowel Disease (IBD), Laparoscopic Surgery and Stoma care of the patient with IBD, Medical and Nursing management of Hepatitis and Advances in Endoscopy.

Speakers at the conference included international, national and local speakers and they provided a variety of lectures on interesting gastroenterological topics. These were patient focused presentations which complimented each other with each topic linking in perfectly, knitting all the information together.

The conference was opened by Ms. Colette Cowan, A/Director of Nursing Nenagh. Ms. Cowan spoke on Leadership in Nursing and the Transformation Programme. She discussed the integration of services in Nenagh between the acute and primary sector.

Ms. Niamh Hogan, a Gastroenterology Nurse from Nenagh then spoke on the nursing management of the patient with IBD. Using case studies on two patients with IBD she described the specialist nurses’ role in their care and demonstrated that by providing appropriate support and prompt intervention through advice and treatment over the telephone, patients could be safely and effectively managed in the community.

Dr. Manus Moloney, Consultant Gastroenterologist at the MWRH Nenagh and Limerick then spoke on the medical management of patients with IBD. This talk focused on the aetiology, epidemiology and medical treatments for both Crohn’s disease and Ulcerative Colitis using endoscopic images to describe the distressing effects of these diseases.

From the surgical perspective, Mr. Paul Neary, Consultant Colorectal Surgeon AMNCH, Tallaght described the highly technical and innovative role of laparoscopic surgery in the patient with colorectal conditions. He captivated the audience with video clips of these procedures.

Karen Smith, a nurse Endoscopist from Sheffield Hospitals Trust in the UK delivered an interesting and stimulating presentation on the clinical effectiveness of the nurse Endoscopist working as an independent practitioner and the evolving and challenging role of providing a nurse-led endoscopy service in her hospital.
The afternoon session was opened by Dr. Maeve Skelly, a Consultant Gastroenterologist in the MWRH Limerick. Dr. Skelly provided an overview of the incidence and prevalence of Hepatitis and the medical management of this condition. As the participants at the conference were from a variety of nursing backgrounds they were very interested in this relevant and informative presentation.

The Hepatology Unit in St Luke’s Hospital Kilkenny was represented by Ms. Pauline Carroll and Ms. Noreen Maher. They described how their service has evolved over the last ten years providing a Regional service for all Hepatology patients in the South East. The patients are managed by a consultant, nurse specialist and a nurse counsellor. They used case studies to demonstrate the patients’ journey through their Unit.

Dr. Garry Courtney, Consultant Gastroenterologist St Luke’s Hospital Kilkenny spoke about the advances in Endoscopy over the last number of years and how these procedures can make a significant difference in both diagnostic and therapeutic management of patients with gastroenterological conditions. Again he used video clips to demonstrate these highly technical and skilful procedures.

The final speaker on the day was Ms. Mary Ahern, a Stoma Care Nurse Specialist from the MWRH Limerick. Mary described the role of the stoma care nurse specialist in the management of patients following colorectal surgery for Inflammatory Bowel Disease. She provided practical tips and advice to the audience on managing a stoma.

At the end of the day participants were asked to complete an evaluation form of the conference and 82% found the conference overall to be excellent. 87% of participants rated the conference as an excellent opportunity for learning. There was an open forum for participants to discuss various issues relating to the topics presented and ensured plenty of lively discussions with the speakers.

The Gastroenterology Nurse would like to acknowledge the National Council for Nursing and Midwifery for funding this conference, Marie Casey and Mairéad Cowan at the Nursing and Midwifery Planning and Development Unit Limerick and the assistance and support of the A/Director of Nursing, Ms Colette Cowan for her invaluable support and guidance in organizing this event. For further information please contact Niamh Hogan, Gastroenterology Nurse, MWRH, (St Joseph’s) Nenagh niamh.hogan@hse.ie
CONTINUING PROFESSIONAL DEVELOPMENT FOR CLINICAL THERAPISTS AT THE UNIVERSITY OF LIMERICK

The Department of Clinical Therapies at the University of Limerick offers a taught Postgraduate Diploma/Masters in Clinical Therapies (Physiotherapy/ Speech and Language Therapy/ Occupational Therapy). The programme is open to qualified Physiotherapists, Speech and Language Therapists and Occupational Therapists only. Six modules, including two core* modules, must be completed for the award of PGDip in Clinical Therapies. Clinicians who obtain a 2.1 honours degree in the PGDip in Clinical Therapies can then progress to the MSc in Clinical Therapies.

Both multidisciplinary and unidisciplinary modules are on offer each semester. These include; Evidence Based Practice*, Research Methods for clinical therapists*, Ageing Health and Society, Researching Health and Illness, Aphasia: Models to Management, School Age Developmental Language Disorders, Neuromusculoskeletal Physiotherapy (Spinal), Neuromusculoskeletal Physiotherapy (Peripheral), Neurological Rehabilitation, Management of Developmental Speech Disorders, The Science of Occupation, Advances in Rheumatology, Exercise and Occupation for Health, Educating in the Professional Context, Pain Management, Independent Learning Module, Developmental Disability. For clinicians who are unable or do not wish to complete the entire PGDip/MSc in Clinical Therapies, any module on the programme can be taken as a ‘Link-in Occasional’ module for continuing professional development purposes.

Further information on the programme and all modules is available on the department websites www.physiotherapy.ul.ie, www.slt.ul.ie and www.occupationaltherapy.ul.ie or by contacting the Acting Course Director Kieran O’Sullivan (email kieran.osullivan@ul.ie or telephone 061-234119).

TRAINING IN CHILD EMOTIONAL AND MENTAL HEALTH

The evidence in relation to the life-long significance of early experiences is no longer disputed and the evidence is stark that child emotional and mental health problems are emerging as a main threat to the health and well-being of children, young people and populations. They are common and have a significant negative impact on the child, family and society at large. International studies suggest that up to 20% of children have psychological problems, half of whom have associated impairment and require intervention. (Child Emotional and Mental Health: A Review of Evidence, HSE, December 2006). The prevalence of mental health issues in Irish children and young people has been established in the Clonmel Study (Martin & Carr, 2005) where in the overall population, 17% of 2-6 year olds screened positive for mental health problems, while children from socio-economically deprived areas had an even higher prevalence.

The need for a health service policy response to this evidence was indicated in A Vision for Change – Report of the Expert Group on Mental Health Policy (2005), which identified 0-5 years as a critical life stage and recommended that training and education programmes should be put in place to develop capacity and expertise at national
and local levels for evidence-based prevention of mental health disorders and promotion of mental health. Under the auspices of the former Programme of Action for Children, an Evidence Review was undertaken in 2005-’06 and the report published in December 2006. Following that work, a Curriculum Development Group* was established by the HSE and this group developed a Training Programme for Public Health Nurses and Doctors in relation to Child Emotional and Mental Health. The training programme was successfully piloted in HSE West (Donegal), in urban and rural areas, in September-October 2007 and launched by Mr Seamus Mannion, Assistant National Director, Childrens’ Services, at the Researching Childrens’ Worlds Conference in February, 2008.

**NATIONAL CHILD HEALTH TRAINING PROGRAMME**

This training programme is one module of 9 in an overall standardised, quality assured training programme in Child Health for Public Health Nurses and Doctors which has been delivered throughout the HSE over a 4 year period. The other training modules provide training in health promotion, food and nutrition, newborn metabolic screening, medical assessment, assessment for growth, development, vision and hearing. (All modules can be viewed at - http://hsenet.hse.ie/Library/HSE_Publications/?importUrl=http://localhost:82/eng/Publications/Children_and_Young_People/). The training programme has as its overall aim the enhancement of professional expertise through evidence and knowledge updates, reflection, discussion and skills development.

Similar to the roll out of the other training modules, the intention is that this 12 hour training programme will now be disseminated to all 4 HSE regions and delivered to community health professionals working in the statutory Child Screening and Surveillance Programme.

The tutors for this training programme have expertise in Child and Adolescent Psychiatry (3hours – 1 training session) and Child and Adolescent Psychology (9 hours – 3 training sessions) and the training is co-ordinated by the Regional Child Health Training and Development Officer. To support the dissemination of the training, 2 National Workshops for potential tutors were run in May, 2008. Similar workshops will be provided as need arises.

**ROLE OF THE CHILD HEALTH SCREENING AND SURVEILLANCE SERVICE**

The statutory Universal Child Health Screening and Surveillance Service is provided to the entire population of children and their families in the Republic of Ireland. While the determinants of child health are economic, relational and societal, an evidence-based approach to this early years work has the potential to maximise positive health outcomes for children and their families, with follow-on social and economic benefits for their communities and the nation. Contact with such large numbers of children has allowed the health professionals involved to develop a high level of expertise in a wide range of areas of child health.
Aims of the Training Modules in Child Mental and Emotional Health

- Knowledge updates on the evidence base in relation to infant and child emotional and mental health issues
- Skills development in observation and assessment in relation to child mental health
- Skills development in interventions with children and parents
- Knowledge updates on early childhood psychiatric disorders and referral criteria
- Knowledge update on interventions which follow from referral to a specialist service

Programme Content

The 4 domains of Child Emotional and Mental Health are the framework on which the content of each session is built. These domains are also the framework on which skills development training in observation and assessment takes place during the sessions.
## Programme Outline

### Session 1
**Introduction**
- Summary of Evidence
- Domains of assessment framework.
- Core competencies in observation and assessment
- Domains of assessment framework.
- Core competencies in observation and assessment

### Session 2
**Issues and Interventions in Child Mental Health**
- Attachment
- Parenting
- Emotional Regulation
- Referral criteria

### Session 3
**Issues and Interventions cont’d**
- Feeding
- Sleeping Difficulties
- Toileting
- Behaviour Problems and Temper Tantrums
- Referral criteria

### Session 4
**Early Childhood Mental Health Disorders**
- Attention Deficit Hyperactivity Disorder
- Autism
- Anxiety
- Depression
- Oppositional and Conduct Disorders.
- Referral criteria

Resources for tutors are provided in a Trainer’s Pack which contains:
- Child Emotional and Mental Health Training Manual
- Detailed Session Notes
- DVD of pilot phase sessions
- CD Rom of presentations
- Worksheets

**For further information please contact:** Finola Downes, Children Services, Office of the CEO, 1st Floor, 1 Upper Hartstone Street, Limerick. 061-310437. Finola.Downes@hse.ie

*Curriculum Development Group: Child Emotional and Mental Health Training*

Ms. Bernie Walsh, Senior Clinical Psychologist, HSE West  
Professor Fiona McNicholas, Consultant Child and Adolescent Psychiatrist, Our Lady’s Hospital for Sick Children, Crumlin and UCD  
Ms. Catherine Maguire, Senior Clinical Psychologist, Infant Mental Health Specialist, HSE South  
Dr. Christine McMaster, (Chair to January 2007), Child and Adolescent Health Development Officer, HSE West & HSE Population Health Directorate  
Ms. Teresa Cawley, Regional Training and Development Officer (Child Health, HSE West)  
Dr. Clare O’Sullivan, Principal Medical Officer, HSE South  
Ms. Mari O’Donovan, Child and Adolescent Health Training and Development Officer, HSE South  
Ms Theresa Lynch, Child and Adolescent Health Training and Development Officer, HSE South  
Mr. Dave Kenny, PKA Training Associates  
Ms. Carmel Cummins, (Chair) Training & Development Officer, HSE Children’s Services, Office of the CEO  
Ms. Finola Downes, HSE Children’s Services, Office of the CEO (Administrative Support)
Learning from Partnership in the Health Services

This report reviews Workplace Partnership Initiatives in 6 selected sites in the health service, i.e. Galway University Hospitals (GUH); the National Maternity Hospital, Holles Street, Dublin (NMH); Clonakilty Community Hospital, Co. Cork; Regina House Residential Home for Older People, Kilrush, Co. Clare; Louth County Hospital, Dundalk (LCH), Co. Louth and the Joint Department of Surgery in Our Lady of Lourdes Hospital, Drogheda (OLL) and Louth County Hospital, Dundalk, Co. Louth.

Its Terms of Reference were:

- To produce a review that would capture the story of the projects, outline their processes and outcomes and document how they were mainstreamed
- To work directly with the Health Services National Partnership Forum (HSNPF) working group to formulate the framework for the review

The review used direct consultation with staff in the 6 sites as its main approach, supplemented by literature review of relevant documents. The process included structured interviews and focus groups with the key people involved in the initiatives, and also those affected by the outcomes of the initiatives.

The findings from the review indicate that mainstreaming of the partnership approach is happening, at different paces across the health service. The positive outcomes from Partnership initiatives are being used as resources for change and innovation in various ways; through adoption of specific initiatives in other sites, through transfer of skills and processes acquired during the projects – especially problem solving and innovation – across participating organisations, and the establishment of systemic collaborative approaches in organisations. Projects with a more concrete outcome e.g. changing work practices, seemed to be easier to assess; if they were successful, observers assumed that the Partnership process was also effective and worth trying out in another setting.

All the case studies had improvements to service and patient care as their core purpose. They also had strong leaders (from unions and management) who had a clear vision of the benefits that a Partnership approach could bring, and they stuck to the approach through good times and bad. Partnership initiatives benefited from the active support of senior opinion formers and decision-makers locally.

HSNPF facilitators played different roles, and used a variety of skills, as the projects unfolded. Their knowledge and understanding of the projects, and their good working relationships with the Partnership group leaders, made this possible.

Implementing the Partnership initiatives was not all ‘plain sailing’; those involved sometimes had to live with the scepticism and cynicism of colleagues at the initial stages of the project.

Comparison of the findings with international experience suggests that the much of the learning from them is not isolated or unique, but is common to the experiences in other health systems. There is also much to be learned from the differences encountered.
Regina House, Kilrush, Co. Clare is one of the case studies available. This case study of a realignment of work practices is an example of a “whole systems” approach, which was instigated by concerns for improved patient care, and enhancement of job satisfaction in the organisation. It entailed a restructuring of roles and responsibilities for nurses and support staff across the unit and the development of new dedicated multidisciplinary teams working in different areas in the residential unit. It resulted in a radical reorientation of the way nursing and support staff worked together and it also led to better levels of job satisfaction.

More details of all the case studies are available from the Health Services National Partnership Forum office, 3rd Floor, Block 2, Phoenix House, Conygham Rd, Dublin 8 or on the website [www.hsnpf.ie](http://www.hsnpf.ie)
Health Research Board (HRB)

Funding in 2009.
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* Please specify other

Is this research completed? □ or □ ongoing?  (please tick one box)

What date did this research begin on?  __________________________________________________________________________

What is the actual or prospective end date for this research?  __________________________________________________________________________

Title of Research:  ________________________________________________________________

______________________________________________________________________________

Author(s):  ________________________________________________________________

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Your abstract should reflect the following suggested headings:  
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Has this research led to further research activity? If yes, please give details.  _______________

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Has this abstract been previously Published?

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If “yes”, please state when, where and by whom (please provide title Mr, Ms, Dr. etc.)  _______________
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Please e-mail your abstract and this completed form to: c.kennedy@nihs.ie

For Further information please contact:
Catherine Kennedy
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National Institute of Health Sciences
Health Service Executive West
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  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 ¹ placed after the first name initial, the second author by superscript ² etc.
6. In the Location Section, list the place where each author was based when they carried out the research. Place superscript ¹ 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 text of the Abstract to an overall limit of 1 A4 page.
   Abstracts which are longer than this may not be accepted for publication.
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:

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St. Camillus’ Hospital,
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t. 061-483975 m. 086-3812926
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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.

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• Abstract
  A summary of the piece of research providing brief descriptions of the background, rationale, methodology, results and conclusion. This can all be included in one segment of text without the use of any subheadings.

• Source of the Abstract
  Full Details of the name of publication, volume, issues, year, page range.

• Keywords
  Main terms covered by the research.

• Presented (if appropriate)
  Listing meeting name, location, date, name and title of speaker.

• Funding (if appropriate)
  Indicating any sources of funding / sponsorship received which author(s) wish to have acknowledged.

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4. Type the title in bold-face.
5. List all authors (last name, first name initial) under Title, indicating main author by superscript¹ placed after the first name initial, the second author by superscript² etc.
6. In the Location Section, list the place where each author was based when they carried out the research. Place superscript¹ after the location of the main author and number other locations according to the order of the authors in the previous list.
7. In the text of the abstract use standard abbreviations and symbols and define each abbreviation when it is used for the first time.
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• Non-Invasive Optical Measurement of the Haemoglobin Concentration in Human Blood

• The Effects of Long Working Hours on Doctors’ Cognitive Functioning, Clinical Decision Making and Stress Levels in Irish Hospitals

• Cervical Spine Injury Assessment among Non-Consultant Hospital Doctors

• Physiotherapy and Exercise for People with Mild and Moderate Multiple Sclerosis

• Effect of Dielectric Barrier Discharge Plasma on Methicillin Resistant Staphylococcus Aureus